#### The Great Grid Upgrade

Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4)

# Preliminary environmental information report (PEIR)

Volume 2, Part 2, Appendix 2.7.B Cultural Heritage Baseline May 2025

## nationalgrid

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## 2.7.B Cultural Heritage Baseline

#### 2.7.B.1 Zone 1: Lincolnshire Coast and Marshes

#### Introduction

- 2.7.B.1.1 Full detail of assets can be found in Volume 2, Part 2, Appendix 2.7.C: Cultural Heritage Gazetteer and shown on Volume 3, Part 2, Figure 7-2 Heritage Assets and Volume 3, Part 2, Figure 7-3 LiDAR Interpretation. Asset numbers provided throughout this chapter are either numbers from the Historic Environment Record (e.g. MLI125181), from WSP analysis of LiDAR (e.g. WSP\_ID\_150) or from the National Heritage List for England (e.g. NHLE101917).
- 2.7.B.1.2 This baseline information considers the 500m study area around the Projects.

#### Geology

- 2.7.B.1.3 The geology of the study area (see **Volume 3, Part 2, Figure 7-1**) comprises Cretaceous Chalk, which underlies most of the area, with later Quaternary sand, gravel, and clay deposits which were laid down following glacial activity. Soils in Zone 1 comprise bands of tidal flat deposits of clay and silt, till, sand and gravels and a small area of peat north of the village of Willoughby (Ref 2.7.B.1). These soils are fertile and loamy and slowly permeable which can seasonally become waterlogged. Prior to large-scale drainage and enclosure in the 18th and 19th centuries, much of Zone 1 would have been marsh, which would indicate that the preferred location for settlement would be on 'islands' of high ground. This is borne out in the locations of historic settlements along and adjacent to the route of Zone 1.
- 2.7.B.1.4 The topography through Zone 1 is relatively flat at around 10 m Above Ordnance Datum (AOD) throughout, with heights of 3 m along the Lincolnshire coastline rising to a maximum height of approximately 30 m AOD around Gunby Hall. The Steeping River traverses the southern portion of Zone 1, with other water courses being a series of drains, the most prominent of which is Main Drain (depicted as such on historic Ordnance Survey mapping) which runs west to east close to the settlement of Cumberworth.

#### Prehistoric

- 2.7.B.1.5 Evidence suggests there has been intermittent phases of occupation throughout the prehistoric period from as early as the Upper Palaeolithic (c.40,000BC 10,000BC). There are 29 recorded prehistoric heritage assets within the Zone 1 study area, 26 listed in the HER and 3 identified through LiDAR analysis. Of these, there are three paleochannels (WSP\_ID\_529, WSP\_ID\_379, WSP\_ID\_374), two ring ditch barrows (MLI97890, MLI42930) and an enclosure (MLI97857). There are also 15 find spots of artefacts across Zone 1. These are discussed in further detail below.
- 2.7.B.1.6 The earliest known recorded evidence within the study area for Zone 1 is a Creswellian flint core (MLI97878) that dates to the late Upper Palaeolithic. This is located within the draft Order Limits at Welton le Marsh. The only find of Mesolithic date (c.10,000 BC to 4,000 BC) is a large flint flake (MLI97892), located during

fieldwalking, 115 m west of the draft Order Limits. Dating of this artefact is tentative and could also be of Neolithic date. Within these early prehistoric periods, it is likely that the landscape was used for the hunting and gathering of animals and fish and the gathering of plant foods with base camps and field camps (Ref 2.7.B.2). No camps are recorded in the study area.

- 2.7.B.1.7 Between the Mesolithic and Neolithic periods, it is widely accepted that a transition occurred from transitory populations to a more sedentary agricultural society as people formed permanent settlements near to natural resources. This is reflected in higher numbers of recorded finds of Neolithic date (4,000 BC to 2,200 BC) within the study area for Zone 1. These include two scrapers (MLI97955, MLI97956) and four flint flakes (MLI97955). There are also a range of finds identified across the study area for Zone 1 that are tentatively dated to between the early Neolithic and the late Bronze Age (4,000 BC-700 BC). These include 32 flakes (MLI97960, MLI97893 MLI97963, MLI97966 MLI97891, MLI97955, MLI97959 MLI97961 have multiple flakes whereas, MLI97894, MLI97974, MLI97960, MLI97893, MLI97963, MLI97965, MLI97969, MLI97970, MLI97970, MLI97974), a knife (MLI97894), two axes (MLI42173, MLI41999), and a perforated stone hammer head (MLI42173). Aside from the artefactual evidence, no tangible archaeological remains representative of human activity are currently known.
- 2.7.B.1.8 The Neolithic period is characterised by the introduction of large permanent monuments such as cursuses and cairns (Ref 2.7.B.3) which are often well preserved due to their large size. Despite this there are none known within Zone 1. The prehistoric artefact records in Zone 1 are likely to represent residual finds recovered from ploughsoil and as such little contextual information can be surmised; however, the range of these artefacts is suggestive of a range of prehistoric activity in the Zone 1 study area including tool manufacture, hunting, and food production.
- 2.7.B.1.9 Evidence for Bronze Age activity within Zone 1 is largely evidenced by the presence of numerous funerary monuments dating to this period, including buried remains of a round barrow north of Willoughby (MLI97890), approximately 70 m north west of the draft Order Limits, and of a barrow cemetery (MLI42930) containing at least 11 barrows, partly located within the draft Order Limits near Bonthorpe, which are laid out in an arc that appear to be a western extension to the scheduled Butterbump barrow cemetery (NHLE 1003615, MLI43597), a group of seven round barrows that has produced middle Bronze Age pottery and flints, two cremation urns, and a cremation. The extent of the barrow cemetery is within 550 m, to the east, of the draft Order Limits at its closest point. Analysis of LiDAR imagery, undertaken for the Projects, has led to the identification of a further two possible barrows surviving as very low earthworks in this area, one of which is located within the draft Order Limits (WSP ID 375). Analysis of LiDAR has also led to the identification of a low subcircular mound in agricultural land southeast of Huttoft which has been tentatively ascribed as a prehistoric barrow (WSP\_ID\_520). Aerial photographs of cropmarks representing buried archaeological remains of prehistoric enclosures (MLI97857), 390 m west of the draft Order Limits, have been tentatively dated to between the early Bronze Age and the late Iron Age (800 BC-43 AD). Without further archaeological investigation, no further clarity can be provided on the dating of this feature. Artefactual evidence dating to the Bronze Age comprises a faceted socketed axe head (MLI41999). Taken together, the evidence indicates that parts of Zone 1 were actively used during the Bronze Age and that it was a ceremonial landscape. Bronze Age ceremonial landscapes were often open with long ranging views and free

from settlements (Ref 2.7.B.4) therefore people would likely have lived beyond the study area.

- 2.7.B.1.10 There are no recorded HER entries specifically relating to Iron Age activity within the study area for Zone 1, although possible late prehistoric settlement activity in the form of linear and curvilinear enclosures has been identified approximately 325 m southeast of the draft Order Limits through geophysical surveys of the Glebe Field within the grounds of Gunby Hall (MLI115969; ELI12329; (Ref 2.7.B.5). Although currently undated, the morphology of these features suggests Iron Age activity. It should be noted that these remains are located on a spur of higher ground within the local landscape, which is consistent with known historic settlements from other periods in the wider landscape.
- 2.7.B.1.11 Research has shown a relatively dense pattern of settlement in the Iron Age in the Lincolnshire Wolds which borders Zone 1 to the northwest (Ref 2.7.B.6), which may account for the relative lack of late prehistoric settlement within this Zone. The geology, soils and historic landscape character of Zone 1 together imply that this Zone may have been the focus of other activity during late prehistory, such as salt workings and grazing lands. River valleys were preferred locations for Iron Age communities, they would use the valley floors and flood plains for grazing and settled on the high points on the valley slopes (Ref 2.7.B.7). It should be noted that no evidence for salt workings is currently known in Zone 1. It is also possible that the lack of HER evidence for Bronze Age or Iron Age activity in Zone 1 is the result of a relative lack of archaeological investigation in comparison to work undertaken in the Lincolnshire Wolds.
- 2.7.B.1.12 There was intermittent occupation in Zone 1 throughout the Upper Palaeolithic to the Iron Age. Across the period there are 27 recorded heritage assets, which largely date between the Neolithic and Bronze Age including ring ditch barrows and enclosures. The earliest known heritage asset is a Creswellian flint core (MLI97878) from the late Upper Palaeolithic. Mesolithic and Neolithic finds suggest a transition from a transitory population to a sedentary agricultural society. Bronze Age activity is marked by funerary monuments and barrow cemeteries, indicating a ceremonial landscape. There are no specific Iron Age heritage assets, but a possible settlement (MLI115969) from this period has been identified near Gunby Hall (NHLE1000979/MLI43408). The lack of evidence for some periods may be due to limited archaeological investigation compared to the Lincolnshire Wolds.

#### Roman (43 AD to 410)

- 2.7.B.1.13 There are 15 heritage assets dated to the Roman period within the Zone 1 study area. Eleven of these are recorded in the HER, and four are listed by the Portable Antiquity Scheme (PAS). These include a section of Roman road (ELI1042/ MLI42944), an urn (MLI41495), six coins (MLI40281, MLI41992, MLI42233), and pottery (MLI42080, MLI97877, MLI97964, MLI97967, MLI97971, MLI41493).
- 2.7.B.1.14 The Roman road connecting Lincoln and Burgh-le-Marsh (Margary 27 MLI42944) (Ref 2.7.B.8) crosses the draft Order Limits northeast of Candlesby and roughly matches the route of the modern A1028-A158.
- 2.7.B.1.15 The coins found within the 500 m study area for Zone 1 indicate Romano-British activity in the study area between AD 138 and 423. The earliest coins (MLI41992) date to the reign of Antoninus Pius, who was emperor between AD 138 to 161. A gold solidus (MLI40281) from the reign of Honorius (AD 384 423) was found within the draft Order Limits. The solidus is rare and was virtually uncirculated. The other

three coins (MLI42233) were found on the site of Great Steeping Airfield and were made of bronze and are currently undated.

- 2.7.B.1.16 Recorded Romano-British pottery in the 500 m study area largely consists of isolated sherds and scatters found in ploughsoil through fieldwalking (MLI97877, MLI97964, MLI97967, MLI97971, MLI42080, MLI41493). Of particular note is the discovery of a folder beaker (MLI41493) within the draft Order Limits which implies domestic activity in the area.
- 2.7.B.1.17 Whilst there is no known evidence of permanent Romano-British settlement within the study area for Zone 1, the road, coins and pottery demonstrate that there was movement through and use of the study area during this period, particularly between AD 138 and 423. Numerous cropmarks within the Lincolnshire Wolds have been assigned as representative of Romano-British settlement remains. Most of these are defined by rectilinear enclosures containing one or more roundhouses and set within larger rectilinear enclosures believed to be contemporary field systems. Beyond the study area, excavations at Burgh-le-Marsh, 3.2 km south of the draft Order Limits, has yielded evidence of two farms, field systems and salt production, and has the highest density of Roman settlement activity in the region. It is also the terminus of the Roman road discussed above (Margary 27 MLI42944) (Ref 2.7.B.9), suggesting it would have been an important settlement in Lincolnshire that may have been a trading hub and could have had administrative control as a terminal settlement.
- 2.7.B.1.18 As is the case in the later prehistoric periods, it is therefore possible from current evidence that the focus for settlement remained within the Lincolnshire Wolds (Ref 2.7.B.10), with the Lincolnshire marshes more likely to have been used as grazing grounds and activities such as salt extraction sites.
- 2.7.B.1.19 There are four Roman PAS finds in Zone 1. These include a brooch (PAS1139478), a spindle whorl (PAS1138492), a sherd of Samian ware (PAS1137010), and a fragment of a vessel's rim (PAS38489).
- 2.7.B.1.20 Zone 1 contains coins and pottery finds suggest domestic activity between AD 138 and 423. Cropmarks in the study area may represent Romano-British settlements, and excavations at Burgh-le-Marsh have revealed farms, field systems, and salt production, highlighting its importance as a trading hub. The Lincolnshire marshes were likely used for grazing and salt extraction.

#### Early medieval (AD 410–1066)

- 2.7.B.1.21 There are 13 early medieval heritage assets recorded within the Zone 1 study area. Nine of these are listed in the HER and four are PAS finds.
- 2.7.B.1.22 Evidence for settlement and land-use in the early medieval period is confined to earlier origins of medieval period settlements and an isolated burial. There are three settlements with early medieval phases of occupation in the study area, two, Orby (MLI43701) and Welton Le Marsh (MLI88720), slightly overlap the draft Order Limits and the other settlement is at Huttoft (MLI43299) which at its closest point is situated 195 m to the southeast of the draft Order Limits.
- 2.7.B.1.23 The settlement of Orby (MLI43701) was first mentioned in the Domesday Book as *Heresbi* but did not have a recorded population. This has been noted to happen in two circumstances; either when the settlement is a large town or if it has been abandoned (Ref 2.7.B.11). There is evidence of continued occupation throughout the succeeding periods, so it was likely a large settlement. The suffix *bi* in Old English

means 'barn' (1.12). The only early medieval assets associated with the settlement are boundary features identified during trial trenching (ELI1501) that date to the 10th century. As the settlement has continued to be in use the lack of original early medieval fabric can be attributed to its redevelopment.

- 2.7.B.1.24 Welton Le Marsh (MLI88720) was first documented in the Domesday Book as *Waletone*. There are three entries, and each one is combined with Bootby (*Bodebi*). It had a minimum population of 28 and there was a mill within the land. The name Welton originates from Old English and means 'farmstead/village with a spring' (Ref 2.7.B.13). A scatter of 32 items of early medieval date, including 8th century coins (MLI97870), was found through metal detecting surveys within the draft Order Limits. There is limited information in the HER entry, but the location of the discoveries entails they could be associated with the community at Welton Le Marsh.
- 2.7.B.1.25 Based on excavations to the west of the medieval church, and place-name evidence, the core of the early medieval settlement at Huttoft (MLI43299) was likely focused on the more elevated parts of the landscape. The name Huttoft is derived from the Old English hoh meaning 'a heel, a spur of land', and Old Danish, meaning 'a house and outbuildings, a curtilage, a messuage' (Ref 2.7.B.14). Trial trenching (ELI174) to the west of the church at Alford Road discovered animal bones, mainly of cattle, eight sherds of early Anglo-Saxon pottery and a piece of copper alloy working slag, in addition to a ditch containing late ninth to tenth century pottery (Ref 2.7.B.15). Part of an early medieval road was identified during a watching brief (ELI4061) at Church Lane, which also revealed early medieval and medieval pottery including cooking pots and jugs. Although these were recovered from modern deposits, it is likely these modern deposits truncated earlier features (Ref 2.7.B.16). A watching brief (ELI2005) at the primary school identified several gullies and ditches (MLI81697) on two separate alignments which evidences how the settlement developed from the early medieval through to the post-medieval. Dating of pottery found during excavations in Hufftoft suggests that there was a community there from the 5th century to the 7th century. Scandinavian raids across the eastern coast of Britain in the 8th century may have resulted in the settlement being abandoned (Ref 2.7.B.17), before being reoccupied in the medieval period.
- 2.7.B.1.26 Other historic settlements which partially intersect with the study area for Zone 1, such as Anderby, Gunby and Thurlby and Farlesthorpe, have old Norse place-name elements ('-by', and '-thorpe), which suggest occupation from the 9th century onwards, although there is currently no archaeological evidence to corroborate this. It is accepted that most of Lincolnshire, including Lincoln itself, fell under Viking rule from the end of the 9th century (Ref 2.7.B.18), although again, it is likely that the Lincolnshire Wolds was the focus for most of the settlements, with villages within and close to the study area for Zone 1 being outliers, perhaps associated with salt production within the coastal marshes.
- 2.7.B.1.27 The remains of a human and their armour (MLI42184) was discovered 200 m west of the draft Order Limits, which are of probable early medieval date (Ref 2.7.B.19). The associated finds include pieces of armour, swords, and shields, but the HER does not provide further details.
- 2.7.B.1.28 The field, north of Bonthorpe, in which a metal detectorist found early medieval finds (MLI40282) including bronze tweezers and pins overlaps the draft Order Limits. These are chance finds and do not relate to any settlements. There are four other chance finds have been identified by PAS. These include a stirrup strap mount

(PAS227591), a pin (PAS36686), a strap end (PAS36691), and a piece of silver (PAS38488).

2.7.B.1.29 The Zone 1 study area contains seven early medieval heritage assets, including settlements at Orby (MLI43701), Huttoft (MLI43299), and Welton Le Marsh (MLI88720), and an isolated burial (MLI42184). Other settlements with Norse place-name elements indicate 9th-century occupation, likely linked to Viking rule. An early medieval burial with armour was found near the draft Order Limits, and chance finds of early medieval items were discovered north of Bonthorpe.

#### Medieval (AD 1066 – 1540)

- 2.7.B.1.30 There are 157 heritage assets HER entries relating to medieval activity within the Zone 1 study area. 75 of these are recorded in the HER, 46 were listed by PAS, and 36 were identified through LiDAR analysis. Evidence shows there was an active population during the medieval period across the study area for Zone 1. This is likely to have been primarily an agrarian economy, although it is likely that salt production also took place, despite a lack of known data to prove this.
- 2.7.B.1.31 As is discussed above, medieval settlements can often be traced back to the early medieval period, including Orby (MLI43701), Huttoft (MLI43299) and Welton Le Marsh (MLI88720). Pottery evidence from Huttoft suggests a decrease of activity between 8th and 13th centuries; however, it is possible that at least part of the settlement continued to be occupied throughout this period.
- 2.7.B.1.32 The remains of these villages include tofts, and ponds, and are often surrounded by the partial remains of former open fields, characterised by blocks of surviving ridge and furrow (for example MLI88746; MLI97833). Together, these show that there was a change of land use throughout the period, and that more of the landscape was being brought into arable use by settled communities. It should be noted that, based on current evidence, it is likely that large parts of the landscape within the study area for Zone 1 remained as marsh, which was most likely used for grazing and salt working. Salt production was a major industry in Lincolnshire as it was reliant on the sea. It was highly value in the medieval period for its use as a preservative (Ref 2.7.B.18).
- 2.7.B.1.33 From the later medieval period onwards, it is well documented that many villages were abandoned as landlords converted their land from arable to pastoral as sheep and wool production was more profitable. Pastoral farming also requires a smaller workforce in comparison to arable farming and therefore inhabitants moved elsewhere for work (Ref 2.7.B.21). There are four deserted medieval villages within the study area for Zone 1. These are:
  - Bonthorpe (MLI84121) partially within the draft Order Limits;
  - Hanby (MLI42176) 250 m west of the draft Order Limits;
  - Thurlby (MLI41486) partially within draft Order Limits; and
  - Gunby (MLI42189), 100 m east of the draft Order Limits.
- 2.7.B.1.34 These sites survive as a mix of upstanding earthwork remains and buried deposits. An earthwork survey within the grounds of Gunby Hall revealed a coherent pattern of hollow-ways (tracks), with tofts and crofts (domestic enclosures associated with dwellings) surviving as ditches and shallow depressions (Ref 2.7.B.22). Bonthorpe and Hanby are similarly comprised of a series of surviving earthworks, as is Thurlby.

However, the latter contains three post-medieval farms which remain in use. It is not clear whether these farms represent unbroken continuity from the medieval village. LiDAR analysis across the study area has identified features of the medieval landscape that no longer exist including 27 field boundaries, three areas of ridge and furrow (WSP\_ID\_517, WSP\_ID\_321, WSP\_ID\_320), three enclosures (WSP\_ID\_528, WSP\_ID\_353, WSP\_ID\_344), and three extraction pits (WSP\_ID\_518, WSP\_ID\_380, WSP\_ID\_371).

- 2.7.B.1.35 Manors allowed for the control of the landscape and for the self-sufficiency of a lord and his peasants. Structures associated with manors include stock houses, barn, mills, and orchards (Ref 2.7.B.20). Moated sites are also associated with manors. Three are recorded in the study area, at Thurlby (MLI41476), Bilsby (MLI41485), and Monksthorpe (MLI42234). These reflect the increase of conflict in the period, and whilst the houses are no longer extant, the moats remain as prominent earthworks. Conflict in Lincolnshire during the medieval period may have led to the need for these defensive moated sites. Whilst there are none that are known within the study area the presence of moats indicates that there was a perceived threat to landowners. The function and purpose of moated sites may have changed over time, from military origins to status symbols and physical representations of power centres (Ref 2.7.B.23). This implies moated sites were focal and conspicuous features in the wider landscape.
- 2.7.B.1.36 It is not recorded who owned the manors at Thurlby or Bilsby but the moat and mansion at Monksthorpe (MLI42234), located approximately 50 m from the draft Order Limits, was constructed in 1318 by the monks of the scheduled Bardney Abbey (NHLE 1008315), located 34 km west of the draft Order Limits. The distance of the manor from its associated abbey shows the wide influence that abbeys had on the medieval landscape.
- 2.7.B.1.37 The closest example of this type of religious building to the study area for Zone 1 is the scheduled Hagnaby Abbey (NHLE 1011454/ MLI43593). Its land is centred 5 km north of the draft Order Limits. The abbey was founded between 1175-76 by the Premonstratensians canons who had come from Welbeck Abbey in Nottinghamshire. It was originally a priory until 1250 when it became an abbey and was used as such until its dissolution in 1536. There are extensive fishponds and grassed foundations visible on the site. Another site related to religious use of the area includes a series of cropmarks to the south of Candlesby (MLI88093). These may relate to the village's second medieval church, as two churches are recorded in the village in the Domesday Book (Ref 2.7.B.24) but the location of only one of them is known (Ref 2.7.B.25).
- 2.7.B.1.38 Sea banks were built in Lincolnshire during medieval period, such as at Anderby (MLI88782) and east of Huttoft (MLI88784), to protect settlements and agriculture against flooding, which form evidence of further human intervention on the landscape during this period.
- 2.7.B.1.39 There are 46 medieval PAS chance finds that have been identified which include multiple coins (PAS1170086, PAS1170063, PAS1163180, PAS1138456, PAS1079375, PAS1045487, PAS1035272, PAS938971, PAS938966, PAS227594, PAS221003, PAS931603, PAS914317, PAS914252), and rings (PAS1132001, PAS722065, PAS597668, PAS249840, PAS220844).
- 2.7.B.1.40 The medieval period in the Zone 1 study area saw an active agrarian population, with evidence of settlements dating back to the early medieval period. Villages such as Orby, Huttoft, and Welton Le Marsh show changes in land use, with more areas

being converted to arable farming. Salt production was also a significant industry in the zone, despite limited know evidence. Many villages were abandoned in the later medieval period as landlords shifted from arable to pastoral farming. Manors and moated sites reflect the period's social structure and conflicts. Religious sites like Hagnaby Abbey (NHLE 1011454/ MLI43593) highlight the influence of the church on medieval populations. Sea banks were constructed to protect against flooding, indicating further human intervention in the landscape.

#### Post-medieval (AD 1540-1900)

- 2.7.B.1.41 The post-medieval period in the study area for Zone 1 is characterised by increasingly intensive arable farming and small-scale industry, and the introduction of the Great Northern Railway allowed for produce to be distributed across the country. Changes in land ownership and agricultural regimes led to the rise in high status residences set within large areas of private parkland.
- 2.7.B.1.42 There are 182 post-medieval heritage assets within the study area for Zone 1, including 32 post-medieval listed buildings, of which one is Grade I, four are Grade II\* and 28 are Grade II listed. The Grade I listed Gunby Hall (MLI43408 NHLE 1063656) is within a Grade II Registered Park and Garden (RPG) (NHLE1000979/ MLI43408). One hundred and thirty-eight assets were noted in the HER, 26 were recorded by PAS, and 18 were identified through LiDAR analysis.
- 2.7.B.1.43 LiDAR analysis has identified 12 field boundaries, drainage activity (WSP\_ID\_516), parkland features (WSP\_ID\_355, WSP\_ID\_356), an enclosure (WSP\_ID\_351), and three areas of ridge and furrow (WSP\_ID\_377, WSP\_ID\_378, WSP\_ID\_354).
- 2.7.B.1.44 The medieval moated sites discussed above continued in use into the post-medieval period, although the medieval buildings have been replaced with later post-medieval buildings. For example, Moat House in Bilsby (MLI43491) is a Grade II listed mid-17th century brick-built farmhouse within a former homestead moat.
- 2.7.B.1.45 Within the post-medieval other country homes were established. The Grade I listed Gunby Hall (MLI43408 NHLE 1063656 335 m east of the draft Order Limits) was built in about 1700 for Sir William Massingberd. The hall is built on the land formerly occupied by the deserted Gunby medieval village (MLI42189) and the earthworks of this village survive within the parkland. The Grade II\* St Peter's Church (NHLE 1359687) is surrounded by the parkland but is not within it. The construction of the hall and development of the surrounding parkland (NHLE1000979/ MLI43408), which abuts the draft Order Limits, is likely to have coincided with the abandonment of the medieval village of Gunby, which in 1600 was recorded as containing 15 tenants (Ref 2.7.B.22). Gunby Hall has formal gardens which are surrounded by park land (NHLE 1000979). It should also be noted that occupation around the hall can be dated back to at least the later prehistoric (MLI115969). The hall and gardens have undergone various alterations including the enlargement of its pond in 1807, and a terrace that was added in 1900. The surrounding gardens and parkland are a Grade II Registered Park and Garden (RPG) which contains nine other associated listed buildings, two Grade II\* (NHLE 1359687, NHLE 1063657) and seven which are Grade II listed. The Grade II listed buildings within the parkland include the coach house (NHLE1204923/ MLI93282) and pigeoncote (NHLE1063658/ MLI93112) The RPG is located immediately adjacent to the draft Order Limits. National Trust are the current owners of the 1,500 acre estate (Ref 2.7.B.26).
- 2.7.B.1.46 The Grade II Candlesby Hall (NHLE 1063654), and its parkland (MLI92418), was built in 1782 on the west of the Gunby estate. The HER records the parkland as

extending into the draft Order Limits, although this portion is currently arable. An undated trackway (MLI97855) has been identified on aerial photographs, 10 m west of the draft Order Limits at its closest point. The 1887 county map, which is the earliest publicly available map of the area, does not have the trackway marked on it but its orientation leads to Candlesby Hall (NHLE 1063654).

- 2.7.B.1.47 The post-medieval landscape continued to develop in agricultural use, and there are 88 agricultural sites recorded on the HER across the study area for Zone 1 dating to this period. Much of the former marsh which had characterised the landscape since the prehistoric was drained in the 18th and 19th century to allow for planned enclosures. This led to the establishment of numerous new farms being in isolated locations. Across the draft Order Limits there are nine farmsteads (MLI116592, MLI116593, MLI116594, MLI118890, MLI118922, MLI118931, MLI119791, MLI119977, MLI120007). Four of these (MLI116594, MLI118890, MLI118931, MLI120007) are still extant to some extent but have been either redeveloped (MLI116594) or lost parts of their traditional fabric (MLI118890, MLI118931, MLI120007). The agricultural industry in Lincolnshire included the production of rapeseed and processing of barley for beer (Ref 2.7.B.27). The HER records that some farms have lost over 50% of the traditional material due to modern development including intensive farming and the diversification of what is being produced (Ref 2.7.B.27). Some grains were processed locally, as evidenced by a malt house (MLI116149) within the draft Order Limits, although this is no longer extant. Limestone guarrying has also taken place in the study area as evidenced by spoil heaps near Candlesby (MLI42186 175 m west of the draft Order Limits) which supplied the country's building stone industry (Ref 2.7.B.28).
- 2.7.B.1.48 The railways that were constructed during the 1800s allowed for the crops farmed within the study area of Zone 1 to be transported across the country. The local population wanted a railway to be built but it was rejected by parliament (Ref 2.7.B.29). Instead, the Alford to Sutton tramway (MLI43675, beyond the study area for Zone 1) was opened in 1884 but the trams were slow and unreliable, and it was not able to compete with the Great Northern Railway which was later constructed in 1886. The Mumby Road Railway Station (MLI43413, approximately 230 m west of the draft Order Limits) was on the Willoughby to Sutton branch of the Great Northern Railway. It had a brick weigh bridge hut which would have allowed the goods to be weighed and costed before it was stored in the large wooden goods shed. Lincolnshire's main industry related to supplying food and raw materials to London and the industrial districts across the west and northwest of England as facilitated by the Great Central Railway (Ref 2.7.B.27). The tramway closed in 1889, and the railway station closed in 1970. Earthworks relating to the railway embankment remain extant and have been recorded through LiDAR survey (WSP ID 386), with the site of the former station now occupied by modern buildings.
- 2.7.B.1.49 Numerous listed buildings dating to the post- medieval period are recorded in settlements with origins in the medieval period, including Willoughby (NHLE 1204980) and Anderby (NHLE 1147120). These are representative of the development of historic settlements in and close to the study area for Zone 1. The Grade II\* listed Baptist chapel at Monksthorpe (NHLE 1223592; MLI42235, 150 m west) is a rare surviving example of a purpose-built early Baptist structure and has one of the two known external baptism fonts (MLI42236 Grade II\* listed NHLE 1267243).

- 2.7.B.1.50 There are 26 PAS finds in the Zone 1 study area. These include a toy (PAS1162808), a pipe-tamper (PAS1171345), and five coins (PAS1162512, PAS1162110, PAS1162091, PAS1066933, PAS227596).
- 2.7.B.1.51 During the post-medieval period, agricultural development continued with the establishment of new farms following the drainage of marshlands. The Great Northern Railway, constructed in the 1800s, allowed these crops to be transported across the country. This period also saw the rise of country houses within large private parklands, such as the Grade I listed Gunby Hall (MLI43408 NHLE 1063656) in the Gunby Hall RPG (NHLE1000979/ MLI43408). There are 31 other listed buildings from this period, many of which are located in settlements with medieval origins.

#### Modern (1901-present)

- 2.7.B.1.52 There are ten modern heritage assets within Zone 1. Five of these are noted in the HER and five have been identified through LiDAR analysis. The landscape in the modern period continued as largely a mix of arable and meadowland, with settlement being dispersed (Ref 2.7.B.30 and Ref 2.7.B.31).
- 2.7.B.1.53 The Lincolnshire HER entries are all related to World War II. Prior to this, the agricultural use of the landscape continued, with little in the way of development within the study area. As part of Britain's anti-invasion defence pillboxes were built along the east coastal region, one of which is located approximately 195 m east of the draft Order Limits and is still extant (MLI125954). These defences were required to protect the airfields in the region. Despite being a defensive landscape at this time Lincolnshire was not subject to a high density of bombing raids as it was largely rural and settlement was dispersed (Ref 2.7.B.32).
- 2.7.B.1.54 The draft Order Limits passes through the site of RAF Spilsby (MLI88704). It was originally proposed to be built at Gunby Hall, but Field Marshal Sir Archibald Massingberd of Gunby Hall successfully appealed against this. It was instead built two miles to the southwest, and the draft Order Limits crosses this north to south. It opened in September 1943 and was used as a bomber station; the first operational sorties (combat mission) took place the following month. After the war it was used as a practice school from October 1945 until November 1946 when it was abandoned. The US Air Force was later based there between 1955 and 1958 and extended the runway by 1,590 feet during the Korean War. In the 1970s the runways were dismantled, and the aggregate was used in the construction of the Humber Bridge. LiDAR analysis has identified a number of features associated with this base in the form of a linear mound (WSP\_ID\_327), a linear bank (WSP\_ID\_326), a linear bank and ditch (WSP\_ID\_324), and two irregular surfaces (WSP\_ID\_328 and WSP\_ID\_325).
- 2.7.B.1.55 There have been thirteen recorded airplane crashes in the landscape, the first being in 1918 and the last being in 1944 (Ref 2.7.B.32). Only one crash was during World War I, the other twelve were during World War II. No locations of these crashes were recorded in the Zetica report, but four were associated with RAF Spilsby. Churchyards across the region contain many graves of crew lost on operations during World War II (Ref 2.7.B.27).
- 2.7.B.1.56 Gunby Hall (NHLE1063656/MLI43408, NHLE1000979/ MLI43408) which had been established as private a residence in the post-medieval period has been open to public visitors under the management of the National Trust since 1944. Two cottages

and the rectory in the RPG have been converted into short stay rentals (Ref 2.7.B 1.33).

- 2.7.B.1.57 In the 1990s, major drainage works were undertaken. Visible remains of this in the landscape include an earthwork mound (MLI90835, partly within the draft Order Limits), 100 m west of the coastline.
- 2.7.B.1.58 Development of the agricultural landscape in the modern period can be seen in the form of removal of 19th century field boundaries to create larger enclosed arable fields. This is evident within the draft Order Limits south of Huttoft and north of Anderby. Many of these removed boundaries survive as low earthworks which have been recorded through LiDAR interpretation (for example WSP\_ID\_511; WSP\_ID\_513).
- 2.7.B.1.59 The Zone 1 modern landscape can be characterised by arable and meadowland and dispersed settlements. During World War II, the area saw the construction of antiinvasion defences, including pillboxes (MLI125954), to protect regional airfields. RAF Spilsby (MLI88704), initially proposed at Gunby Hall, was built nearby and used as a bomber station during the war, later serving various military purposes until its runways were dismantled in the 1970s. The broader region experienced thirteen airplane crashes, mostly during World War II, with many crew graves in local churchyards. Gunby Hall (NHLE1063656/MLI43408, NHLE1000979/ MLI43408), now managed by the National Trust, has been open to the public since 1944. Major drainage works in the 1990s and the removal of 19th-century field boundaries for larger arable fields have also shaped the modern landscape.

#### Undated

- 2.7.B.1.60 There are 17 HER entries within Zone 1 of uncertain date, along with a number of features identified from analysis of LiDAR. Eight of these are boundaries, trackways or enclosures that exist as cropmarks (MLI84118, MLI84122, MLI84136, MLI87954, MLI88095, MLI97706, MLI88096, MLI88386). These are likely to be post-medieval or earlier in date, but without further investigation their dating remains unclear.
- 2.7.B.1.61 A peat deposit (MLI97879) is recorded 160 m west of the draft Order Limits. This was identified through the Humber Wetlands Project (Ref 2.7.B.34). The dating of this deposit is unclear and could date to any point from the prehistoric to the post-medieval period.
- 2.7.B.1.62 Lincolnshire HER records a series of earthworks immediately south of Willoughby as 'Dam Close' (MLI42004), located 250 m north of the draft Order Limits. These have been variously interpreted as the remains of a Danish Camp, a Roman Camp, and most recently as a medieval feature. No archaeological investigation has been undertaken so the dating and function of these features remains unknown.
- 2.7.B.1.63 LiDAR survey undertaken for the Projects has led to the identification of numerous linear earthworks relating to boundaries of unknown date. Evidence within Zone 1 can be seen south of Huttoft (for example WSP\_ID\_521; WSP\_ID\_526) and west of Hasthorpe (WSP\_ID\_362; WSP\_ID\_360). In addition, numerous sub-circular depressions are recorded throughout Zone 1 in the draft Order Limits. These have been tentatively identified as extraction pits of unknown date, as most are located upon bands of clay or gravel within Zone 1 (WSP\_ID\_363; WSP\_ID\_380; WSP\_ID\_518).

#### 2.7.B.2 Zone 2: The Eastern Fens

#### Introduction

2.7.B.2.1 Full detail of assets can be found in Volume 2, Part 2, Appendix 2.7.C: Cultural Heritage Gazetteer and shown on Volume 3, Part 2, Figure 7-2 Heritage Assets and Volume 3, Part 2, Figure 7-3 LiDAR Interpretation. Asset numbers provided throughout this chapter are either numbers from the Historic Environment Record (e.g. MLI125181), from WSP analysis of LiDAR (e.g. WSP\_ID\_150) or from the National Heritage List for England (e.g. NHLE101917).

#### Geology

- 2.7.B.2.2 Zone 2 is part of the wider Fens National Character Area (NCA), characterised as a distinctive human-influenced wetland landscape lying to the west of the Wash. Formally constituting the largest wetland area in England, the area is notable for its large, flat, open landscape with extensive vistas to level horizons (Ref 2.7.B.35). It has been extensively modified through drainage schemes, with a network of drains across open fields, exerting a strong influence on the rectilinear landscape pattern. The drainage network creates local enclosures and a slightly raised landform, which in turn supports the road network skirting the edges of large, drained fields.
- 2.7.B.2.3 The geology of Zone 2 consists of bedrock Jurassic Clays overlain by rich, fertile Quaternary era calcareous and silty soils (alluvium) over the coastal and central Fens, and by dark, friable Fen peat further inland (Ref 2.7.B.1).
- 2.7.B.2.4 The topography through Zone 2 is flat at around 2 m AOD throughout, dropping to 0 m in the northern area of the zone and sloping to a maximum height of approximately 3 m AOD west of Boston. The draft Order Limits largely follows the route of the water courses in the area including Bell Water Drain Bank and Hobhole Bank, with the River Witham flowing to the southwest.
- 2.7.B.2.5 The area is crossed by roddons, which are raised banks of laminated silt or shell marl indicating the previous course of a diverted or drained watercourse. Roddons were attractive for settlement, as higher parts of an otherwise fenland landscape.

#### Prehistoric

- 2.7.B.2.6 There are currently nine known heritage assets that date to the prehistoric period within the Zone 2 500 m study area. Six of these are listed in the HER and two have been identified as palaeochannels during LiDAR analysis (WSP\_ID\_262, WSP\_ID\_260). They date to between the Mesolithic (10,000-4,000 BC) and Bronze Age (2,600-700 BC). There is also an undated oval-shaped enclosure (MLI90823) located 400 m southeast of the draft Order Limit which, based on its form, may date to the prehistoric. Evidence for multiple palaeochannels identified on LiDAR and satellite imagery, coupled with the relative lack of HER entries relating to prehistoric activity, suggests that activity in the prehistoric was limited as the area was marshy fenland, and used for intermittent activity related to resource gathering or hunting.
- 2.7.B.2.7 The archaeology of the study area would have been eroded and displaced due to the ice sheets, the last of which left around 12,000 BC (Ref.2.7.B.36).The coastline was altered drastically throughout the early prehistoric. During the Mesolithic Zone 2 were connected to mainland Europe via Doggerland, a lowland plain (Ref.2.7.B.37). The

sea level began to rise from around 6,500-6,000 BC and the study area was flooded by around 3,500 BC (Ref.2.7.B.37).

- 2.7.B.2.8 During the Palaeolithic (1,000,000-10,000 BC) and Mesolithic, the Fenland basin provided a well-wooded environment with now extinct river systems. Populations favoured the junctions of the basin, and the slightly raised surroundings as it provided safety and access to natural resources (Ref 2.7.B.2). Prehistoric settlement would likely be on the slightly raised areas in the landscape that are occupied by historic settlements such as Sibsey (Ref.2.7.B.38). Midville is a high point in the landscape and is where all of the prehistoric heritage assets in the 500 m study area were identified. There is a flint working site that dates to the later Mesolithic (MLI84488, 120 m east the draft Order Limits). It is not known if this was related to a settlement or was used just for in situ flint working (Ref.2.7.B.39). Environmental evidence suggests the site was located within a wooded area.
- 2.7.B.2.9 The palaeochannels identified through LiDAR analysis indicate that the study area was not dry enough for permanent settlement throughout the Neolithic (4,000-2,200 BC), Bronze Age, or Iron Age (800-43 BC). Residual finds that date to the Neolithic include an arrowhead (MLI41089, 95 m east) and axe (MLI41085, 400 m west the draft Order Limits). There is also a flint scatter that contains a mix of late Neolithic and early Bronze Age find spots (MLI41090, 450 m north), perhaps indicative of intermittent but repeated use of a high point in the landscape. Bronze Age find spots include a barbed and tanged arrowhead (MLI41086) and an unlooped palstave (MLI41083, 410 m northeast the draft Order Limits). These find spots indicate occasional use in the landscape and probably represent casual loss during activities such as hunting. There is no evidence of Iron Age date.
- 2.7.B.2.10 The area was likely used for salt production throughout the later prehistoric (Ref 2.7.B.40 and Ref 2.7.B.41). While there are no known salterns that date to the later prehistoric periods in Zone 2, a Roman saltern (MLI42229) may have had earlier origins.
- 2.7.B.2.11 It is likely that the study area was used only intermittently for hunting activity or activities such as salt working, and that settlement was located elsewhere.

#### Roman (43 AD to 410)

- 2.7.B.2.12 There are nine heritage assets within the 500 m study area that date to the Roman period. Eight of these are recorded in the HER and one is a PAS find. These include settlement evidence (e.g. MLI12624, MLI12705, MLI13294), a saltern (MLI42229), potential flood defences (MLI81135), and find spots (MLI12624, MLI90364, MLI12624). The PAS has recorded lead working debris (PAS510829) 375 m east of the draft Order Limits. There are no Roman roads in close proximity to the draft Order Limit. The closest is Margary 27 (MLI42944) which is 5.7 km northeast of Zone 2 and connected Lincoln to Burgh-le-Marsh. The settlement and enclosures in the study area that date to the Roman period show that it was an agricultural landscape.
- 2.7.B.2.13 The study area would have been an agricultural landscape as it was away from both the roads and the known major settlements. Romans also took advantage of water as a form of transport, both marine and inland (Ref 2.7.B.42). They improved waterways across Britain, including the River Witham which flows across the draft Order Limit near Boston to allow for better navigation (Ref 2.7.B.42). Potential evidence of flood defence can be near Wyberton where four ditches (MLI81135, 470 m east of the draft Order Limits at its closest point) have been dug in a low-lying area of mudflats where paleochannels would have flood and made the area

uninhabitable during winter months (Lincolnshire County Council, 2021f). These may have improved drainage.

- 2.7.B.2.14 The extensive clearance of woodland began during the Roman period which maximised agricultural land (Ref 2.7.B.43). Any settlement would be focused on the higher islands as the study area was a saltmarsh during this period (Ref.2.7.B.38). Notwithstanding this, farmsteads (MLI12624, MLI12605, MLI12605, MLI13294), settlement features (MLI90822) and enclosures (MLI12705, MLI12705) are recorded in the study area, mostly from cropmark evidence, although some sites have been confirmed by limited evaluation excavation. Finds included mortaria (MLI12624) and pottery was also located (MLI12624). A single sherd of Samian ware (MLI90364) that was recovered during works on a drain, 110 m south of the draft Order Limit.
- 2.7.B.2.15 There are two cropmarks that due to their form suggest a Roman date. However, a medieval date cannot be discounted for either. One appears to be settlement features (MLI90822) and are overlapped by the draft Order Limit. The heritage asset comprises a possible trackway, as well as toft and croft like enclosures and pits. The other cropmarks are of a small square enclosure (MLI41091) which the draft Order Limit also passes over.
- 2.7.B.2.16 A no longer extant saltern (MLI42229, 375 m west of the draft Order Limits) was identified near Little Steeping in the north of the zone which may have been established following the woodland clearance of the area.
- 2.7.B.2.17 The inundation of the fens towards the end of the Roman period (Ref.2.7.B.38) may have eroded heritage assets from this period.
- 2.7.B.2.18 The evidence indicates an increased level of activity within the Roman period, as land was either reclaimed or utilised for the first time. The focus of activity appears to be on the higher areas of ground, and further evidence is likely to be related to the identified settlements, including associated agricultural activity.

#### Early medieval (AD 410–1066)

- 2.7.B.2.19 There are no heritage assets that date to the early medieval period within the 500 m study area. The Historic Landscape Characterisation of the study area suggests that it was unlikely for there to be any settlement during this period, the closest being at Sibsey, which is 1.8 km east (Ref.2.7.B.38). There is no evidence that the Roman settlements continued to be occupied through to the early medieval period, which likely due to flooding that occurred in this area towards the end of the Roman period (Ref.2.7.B.38). It is unclear if subsequent drying of the area was caused by human activity or if it was naturally occurring (Ref 2.7.B.44). Activity during the early medieval period would have included seasonal use of the fens for grazing and salt production (Ref.2.7.B.38). Despite the land being dry and more hospitable than previous periods there is no known physical evidence dating to the early medieval in the study area.
- 2.7.B.2.20 Place-name evidence of known early medieval settlements beyond the study area suggest the lack of activity is because of presence of a defensive system along the eastern coastline. Names include the Old English 'tot' which means 'look out place' and 'burh' which means 'fortress' (Ref.2.7.B.37). There is a local legend (MLI86276) that Danish raiders were active in the area in around 860 AD. There is no evidence but the mound close to Hubberts Bridge (MLI86276, 540 m south) is considered to have been the site of their fort.

#### Medieval (AD 1066 - 1540)

- 2.7.B.2.21 There are 42 heritage assets that date to the medieval period within the 500 m study area. Nine of these were listed in the HER; these include the remains of a settlement (MLI97841), a chapel and hermitage (MLI42767) and seven field systems (MLI115957, MLI97732, MLI88896, MLI88901, MLI97839, MLI98767, MLI125837). There are 22 assets that were identified during LiDAR analysis. There were 16 roddons, five field boundaries that predate historic mapping (WSP\_ID\_300, WSP\_ID\_301, WSP\_ID\_303, WSP\_ID\_304, WSP\_ID\_305), and one area of ridge and furrow (WSP\_ID\_275). There are eleven PAS find spots which include four buckles (PAS284561, PAS160335, PAS160331, PAS160328), and a coin (PAS284560) from the reign of Henry IV.
- 2.7.B.2.22 Nucleated settlements with communal open strip field systems were the most common settlement pattern across the region in the medieval period (Ref 2.7.B.20). Despite this, the Lincolnshire fenland's field systems were less regular, and settlement was dispersed and more thinly populated. The study area is fenland which was used as pastoral or meadow land (Ref 2.7.B.20). Sheep husbandry was important as wool was a major economic driver between the 12th and 14th century as it funded the construction of the churches and cathedrals (Ref 2.7.B.43). A chapel and hermitage (MLI42767, 310 m northwest) were documented in 1399 when a license was granted for celebration (Ref 2.7.B.45) which would have allowed a public event to be held there. They were named 'Northdike Briggs' and located at what is now called 'Bar Bridge'. Place-name evidence suggests that this was the location of a northern embankment and there was a bridge nearby.
- 2.7.B.2.23 Dispersed settlement was common in this landscape (Ref 2.7.B.20). The Domesday Book records nearby settlements at modern Little Steeping (Ref 2.7.B.46), the remains (MLI97841) of which are 460 m northwest of the draft Order Limit. It was listed under two owners, Count Alan, and Ivo Tallboys, and its main resource was meadowland. There are three other field systems in the study area, one is in Frithville (MLI115957, 115 m northwest of the draft Order Limits). The other two are undated, one near Boston (MLI13100 80 m east of the draft Order Limits) and one near Little Steeping (MLI82343 420 m west) but are likely of medieval date as they appear to predate the detailed post-medieval mapping. A watching brief (ELI2580) revealed an unspecified amount of pottery (MLI82344, 115m south of the draft Order Limits) that dated to the 14th-15th century. Sea banks were constructed in about 1300 as sea defences and mark the coastline. Nucleated medieval market towns were located roughly parallel to this, along the coast (Ref.2.7.B.38), beyond the study area, which allowed access to both marsh and meadow land. Flocks were brough to Zone 2 from as far as Ireland and Scotland to graze, before they were moved to London to be sold (Ref.2.7.B.38) (Lincolnshire County Council, 2011a). Further improvements to the waterways were made during the period to accommodate trade (Ref 2.7.B.42) (Historic England, 2017).
- 2.7.B.2.24 Boston in the south of the study area was the largest medieval settlement in the wider area. Boston was a major medieval port (Ref.2.7.B.37), centred 3 km east of the Draft Order Limit. Settlement in the study area would, therefore, likely have been sparse and related to the agricultural activity that would have likely been associated with the town. Historic Landscape Characterisation of the zone shows that whilst very little of the medieval landscape is still legible, historic settlement cores still retain a lot of their character (Ref.2.7.B.38).
- 2.7.B.2.25 Geophysical survey (ELI12322) and trial trenching (ELI12323) was undertaken on a series of linear ditches (MLI115957, 115 m northwest of the draft Order Limits), which

found a small assemblage of late medieval to post-medieval pottery and animal bones in the fill of the ditches. These investigations were 290 m northwest of the draft Order Limit. The lack of medieval heritage assets discovered during these investigations suggest that this location was repeatedly drained, and field boundaries were redefined (Ref.2.7.B.38). Settlements and farmsteads in the landscape were mostly located on the elevated 'geological 'islands' or the roddon banks of the fens, which is typical of fenland occupation During the later medieval period, areas of the fens began to be reclaimed. However, this was focused around the fen edge (Ref.2.7.B.38).

#### Post-medieval (AD 1540-1900)

- 2.7.B.2.26 There are 166 heritage assets that date to the post-medieval period, of which six are Grade II listed buildings. There are no conservation areas in the study area.
- 2.7.B.2.27 The 151 heritage assets recorded by the HER include churches (MLI93251, MLI93634, MLI99138, MLI99088, MLI92031), and transport infrastructure, including railway heritage assets (e.g. MLI124888, MLI124883, MLI13471), and bridges (MLI93049, MLI93249, MLI93257, MLI93477). There are also 131 farms and agricultural buildings, the most notable of which is Sibsey Trader Windmill (NHLE1063535 NHLE1013828 MLI43497) which is both a scheduled monument and a Grade I listed building. There are also a number of find spots (MLI82344, MLI83328) that were discovered during watching briefs (ELI2580, ELI3475) and seven identified by the PAS. Through LiDAR analysis, eight heritage assets have been identified in the form of an extraction pit (WSP\_ID\_266), and seven field boundaries.
- 2.7.B.2.28 The earliest dated post-medieval heritage asset is a duck decoy site (MLI42243, 455 m southeast) in Thorpe St Peter, 600 m east of the draft Order Limit. Decoy sites were artificially created or modified pools of water which would have been used for hunting wildfowl. It is no longer extant and was discovered by the surface finds of pottery, tile, and brick.
- 2.7.B.2.29 The heritage assets from the post-medieval period evidence that the study area continued to be an agricultural landscape as there are 131 farms and agricultural buildings. Many of these farms are in isolated locations due to planned enclosures, and some have lost over 50% of the traditional material due to more recent development, including large modern sheds. The large number of farms and agricultural use of the landscape was as a result of the reclamation of the fens which promoted the expansion of arable farming. The scheduled and Grade I listed Sibsey Trader Windmill (NHLE1063535 NHLE1013828 MLI43497) is located 350 m southwest of the draft Order Limits. It is a six-sailed tower mill built in 1877 by Saunderson and Son. It was in regular use until its engine was removed in 1953 and it fell into disrepair. It was taken into the care of the Secretary of State in 1975 and was restored to working order. It produces stone-ground flour. Other designated agricultural assets in Zone 2 include the stable, store buildings, and barn at Elm's farm (NHLE1062057 MLI85834; 1360472 MLI85834 430 m south of the draft Order Limits), and Hubbert's Bridge farmhouse (NHLE1232947 MLI86193 495 m southwest of the draft Order Limits).
- 2.7.B.2.30 Particularly bad floods in November 1598 impacted both agrarian and pastoral farming (Ref 2.7.B.47). Work was largely piece-meal until the 18th century when the Witham Drainage Act was passed in 1762, and it had been fully canalised by 1891 (Ref 2.7.B.43). John Rennie was the engineer who oversaw the extensive works in

early 1800s (Ref 2.7.B.47) and many industrial heritage assets in the study area can be attributed to him. These include four Grade II road bridges (NHLE 1360451/MLI93049 150 m southeast of the draft Order Limits, and NHLE1168163/MLI93249 within the draft Order Limit, NHLE1168221/MLI93257 350 m north of the draft Order Limits, NHLE1267366/MLI93477 adjacent to the draft Order Limit) and a pound lock (NHLE1062085/ MLI88910 430 m northwest of the draft Order Limits).

- 2.7.B.2.31 New drainage channels were cut and pumping stations were constructed to drain the areas that were below sea-level (Ref.2.7.B.38)., The land reclamation changed the landscape from medieval open fields to rectilinear fields that were separated by drains rather than hedges (Ref.2.7.B.38). These planned enclosures are the most readily identifiable historic landscapes as they survive well (Ref.2.7.B.38). The initial analysis of historic maps indicates the removal of many of these field boundaries across the zone since the 1880s and many former field boundaries are evident only through LiDAR data analysis (WSP\_ID\_268, WSP\_ID\_269, WSP\_ID\_270, WSP\_ID\_271, WSP\_ID\_272, WSP\_ID\_311, WSP\_ID\_259). Remains of these former boundary or drainage ditches (MLI115957, 115 m northwest) have also been identified through magnetometry survey (ELI12322) and trial trenching (ELI12323).
- 2.7.B.2.32 The southwest of the medieval village at Little Steeping (MLI97841) became parkland (MLI91675) by the time the first detailed Ordnance Survey map was created. At its closest, the park is 355 m northwest of the draft Order Limit. The historic mapping marks a manor house within this park, which is not included in the HER, and that the northeastern section subsequently became fields. Parklands are also noted on historic mapping near Boston Golf Course (MLI92277, 465 m southeast of the draft Order Limits at its closest point). Both of these are now used as agricultural land.
- 2.7.B.2.33 Some villages in the landscape were dispersed ribbon settlements along the main arterial routes such as the villages of Stickford (3 km northwest of the draft Order Limits) and Stickney (3.5 km west of the draft Order Limits) along what is now the modern A16. The overall settlement in the region is dispersed (Ref.2.7.B.38). This could be because in the early post-medieval period the fenland geology meant there was limited easily accessible and locally sourced building materials. Therefore, many vernacular buildings across Lincolnshire were mud and stud construction (Ref 2.7.B.48) and there is one, The Tudor Cottage (NHLE1389027/MLI92839 120 m southeast of the draft Order Limits), in the study area that dates to the 17th century. The 18th and 19th century saw the rise of red brick cottages, The Cottage (NHLE1223749/MLI93382 I25m south of the draft Order Limits), Overton Cottage and Stoke's Cottage (NHLE1359724/MLI93627 65 m northwest of the draft Order Limits), as they became more affordable because of the improved transport links.
- 2.7.B.2.34 There is a pit (MLI13503) that was identified during a watching brief (ELI6909), 95 m southwest of the draft Order Limit. It may be of post-medieval date as it was found in the grounds of Tudor Cottage (NHLE1389027), and other finds of that period (MLI13504) were also discovered during the watching brief, including 18th-20th century pottery, glass fragments, and animal bones.
- 2.7.B.2.35 Four religious buildings were constructed during the 1800s to serve these communities, two (MLI93251 50 m north of the draft Order Limits; NHLE1359743/MLI93634 80m northeast of the draft Order Limits) of which were built under the Fen Churches Act 1816. This Act facilitated the construction of six churches in the region to support the growing population that occurred as a result of the reclamation of the fens. The fenland north of Boston was the last and most

difficult to reclaim (Ref 2.7.B.49). There were seven new townships created in this newly reclaimed land of which one, Midville, is within the draft Order Limits (Ref 2.7.B.49). Jeptha Pacey lived in Boston and was the architect who designed five of the six churches (Ref 2.7.B.49). It was common for late-Georgian churches to be small and built within a modest budget, however those constructed under the Fen Act were considerably plainer and more economically built (Ref 2.7.B.49) potentially due to the cost of reclaiming the land.

- 2.7.B.2.36 The Church of St Peter (NHLE1359743/MLI93634, MLI116307) is a Grade II listed church in Midville that served as a parish church until its closure in 2014. It has a date stone of 1819 and was the third church built after the passing of the Fen Church Act of 1816. It is built from red brick with ashlar dressings and a slate roof in the late Georgian style (Ref 2.7.B.50). It has not been demolished.
- 2.7.B.2.37 The Church of St Paul (MLI93251) was a formerly Grade II listed parish church in New Leake that was consecrated in 1840. It was constructed in the Early English style from red and stock brick and had slate roofs (Ref 2.7.B.51). It was designed by John C. Carter and was the last of the six churches built under the Fen Churches Act of 1816. Ecclesiastical exemption for its demolition was granted in 2015 as it was at risk of structural collapse and it was consequently delisted. Its churchyard (MLI125735) is still present.
- 2.7.B.2.38 The other two religious buildings were Primitive Methodist chapels (MLI99044, MLI99088). The Primitive Methodist Church developed in 1811 from the Wesleyan Methodist Church after Hugh Bourne and William Clowes were expelled (Ref 2.7.B.52). Neither are still in use, and both have been redeveloped (MLI99044, MLI99088).
- 2.7.B.2.39 The East Fen Chapel (MLI99044, 390 m east of the draft Order Limits) is a red brick structure built in New Leake in 1831. It was later rebuilt in 1855 and was subsequently closed in 1969. Since its closure the building has become a garage for a private residence. Leaning against the building is a tablet inscribed with "Primitive Methodist Chapel, 1831" (Ref 2.7.B.53).
- 2.7.B.2.40 Thorpe Bank Primitive Methodist Chapel (MLI99088) was built in 1858 for a capacity of 120 people. The draft Order Limits circles its land. After being damaged in a fire the chapel was rebuilt on the same site in 1874. The chapel closed in 1970 and was converted into a house, named 'Heaven'. It faced alterations after being converted which included the additions of windows and a porch, it was also rendered grey (Ref 2.7.B.54).
- 2.7.B.2.41 The other major change to the infrastructure in the study area, was the introduction of the Firsby to Bolton Railway (MLI124888). The railway (MLI124888) opened in 1848 as part of the East Lincolnshire Railway line. The draft Order Limit follows the rough orientation of the railway line and abuts it at multiple points between Firsby and Eastville. Railway stations opened at Little Stepping (MLI124883, 220 m east of the draft Order Limits) and Old Leake (MLI13471, 495 m south of the draft Order Limits at the closest point) on this line in 1848 to service the local populations. The station at Little Steeping closed for passengers in 1961, and Old Leake's followed in 1964, due to the Beeching cuts. The railway line is still largely in use, except for the section between Firsby South Junction and Firsby Railway Station, which were dismantled in the early 1970s.
- 2.7.B.2.42 There are seven find spots noted by PAS, comprising three strap fittings (PAS90008, PAS90006, PAS90005) a tankard (PAS284562, within the draft Order Limit), a

candle snuffer (PAS464711, 385 m south of the draft Order Limits), a crotal bell (PAS90214, 120 m southeast of the draft Order Limits), and a mount (PAS160370) which reflect domestic life.

#### Modern (1901-present)

- 2.7.B.2.43 There are nine heritage assets that date to the modern period. Seven of these were listed in the HER and two are PAS finds. The landscape in Zone 2 continued to be mostly arable fields used for food production that were specifically grown to be sold (Ref.2.7.B.38). An initial analysis of the historic maps shows the continued removal of field boundaries which is also noted in the Historic Landscape Characterisation of the area. Efforts to support the agricultural industry include the development of industrial complexes to process the goods (Ref 2.7.B.44) and the introduction of the A16 in 1922 (Ref 2.7.B.55) which allowed large lorries to transport the produce. Modern housing developments surround historic settlement cores (Ref 2.7.B.44), including Boston. The study area does not include any large towns and instead features nucleated settlement.
- 2.7.B.2.44 The recorded heritage assets of modern date are all military in nature. There are five World War II pillboxes (MLI43373, MLI43374, MLI43375, MLI82729, MLI43376) and two Cold War Royal Observer Corps monitoring post (MLI85907, MLI125181). Despite the land being prone to flooding, its coastal location near to mainland Europe meant that the study area would have been a defensive landscape during the World War II. All four pillboxes were type 22 and hexagonal in plan. These pillboxes would have been built as part of the anti-invasion preparations. Three of the pillboxes (MLI43375, MLI43376, MLI43376) were surveyed as part of the Defence of Britain project (ELI12693, ELI12691, ELI12694). The pillbox at Woddys Den Farm (MLI43374, overlapped by the Draft Oder Limit) was demolished in 1990 but the other four (MLI43373, MLI43375, MLI82729, MLI43376) are still extant. Within the Draft Order Limit there is one extant pillbox (MLI43375).
- 2.7.B.2.45 The Royal Observer Corps initially formed in 1925 as the "Eyes and Ears" of the Royal Airforce (RAF), they were active until 1995 and were responsible for tracking and reporting aircraft that were flying over Britain, and, later, any nuclear explosions (Ref 2.7.B.56). They were a grassroots organisation that supported Britain through the interwar period, and both World War II and the Cold War (Ref 2.7.B.57). The majority of the organisation was stood down in 1991 following the 1990 Option for Change defence spending review, and the remainder were stood down by the end of 1995. In response to the threat of the Cold War, Royal Observer Corps underground observation posts were opened across the United Kingdom. Within the study area two were opened in 1963, one in Frithville (MLI85907), and one near Little Steeping (MLI125181), which are both within the draft Order Limit. The underground bunker was in use until 1991 when it was closed and locked. The post at Frithville is still extant and the post near Little Steeping has been demolished.
- 2.7.B.2.46 There are two PAS finds that relate to the military, a mount from military uniform (PAS510810), and a button (PAS510808).

#### 2.7.B.3 Zone 3: Townlands and Reclaimed Wash Farmlands

#### Introduction

2.7.B.3.1 Full detail of assets can be found in Volume 2, Part 2, Appendix 2.7.C: Cultural Heritage Gazetteer and shown on Volume 3, Part 2, Figure 7-2 Heritage Assets and Volume 3, Part 2, Figure 7-3 LiDAR Interpretation. Asset numbers provided throughout this chapter are either numbers from the Historic Environment Record (e.g. MLI125181), from WSP analysis of LiDAR (e.g. WSP\_ID\_150) or from the National Heritage List for England (e.g. NHLE101917).

#### Geology

- 2.7.B.3.2 Zone 3 sits wholly within The Fens NCA and incorporates parts of the Lincolnshire Landscape Character Areas of Townlands and Reclaimed Wash Farmlands, Reclaimed Coastal Fringe and Cross Keys Wash Landscape Areas (Ref 2.7.B.58). This area predominately comprises arable, agricultural land resulting from gradual post-medieval enclosure and interspersed with low density 18th and 19th century farmstead settlements. The field systems are dissected by several navigable and canalised river outlets, including the Nene, Witham, and Welland. The coastal fringe is dominated by areas of reclaimed saltmarsh used for grazing, protected by a network of active and relict earthen sea-banks aligned parallel and perpendicular to the coastline (Ref 2.7.B.38).
- 2.7.B.3.3 The underlying geology comprises Jurassic Age mudstones and siltstones, overlain by Quaternary tidal flat deposits (alluvium) of clays and silts with occasional pockets pet (Ref 2.7.B.1).
- 2.7.B.3.4 The topography through Zone 3 is flat at around 3 m AOD, undulating between 2 m and a maximum height of approximately 4 m AOD across the zone. The draft Order Limits crosses the river Welland near Forsdyke, with other drains also present.

#### Prehistoric

- 2.7.B.3.5 There are 14 heritage assets that date to the prehistoric period. There are two heritage assets listed in the HER, one PAS find, and eleven identified through LiDAR analysis.
- 2.7.B.3.6 There is currently no known evidence for Palaeolithic (1,000,000 BC- 10,000 BC) or Mesolithic (10,000 BC – 4,000 BC) activity in the 500 m study area for Zone 3. Much of Britain was under ice throughout early prehistory, with the level of coverage varied as the climate fluctuated, the ice sheets receded in approximately 12,000 BC (Ref.2.7.B.36). Humans are known to have been largely transitory throughout the Palaeolithic and Mesolithic periods, and therefore archaeological remains are residual in nature, such as find spots of lithic artefacts.
- 2.7.B.3.7 The sea level began to rise from around 5,740 BC and the area containing Zone 3 is likely to have been largely flooded by around 4,000 BC. LiDAR analysis and interpretation of features present on aerial photographs and satellite imagery have revealed numerous now-dried up palaeochannels (WSP\_ID\_257, WSP\_ID\_236, WSP\_ID\_235, WSP\_ID\_232, WSP\_ID\_223, WSP\_ID\_218, WSP\_ID\_159, WSP\_ID\_147, WSP\_ID\_145, WSP\_ID\_073, WSP\_ID\_072) throughout Zone 3 which demonstrates the former landscape context in this area. This largely riverine and marshy environment means that this area was unlikely to have been conducive to

permanent settlement in the Neolithic (4,000 BC – 2,000 BC) (Ref.2.7.B.37), with more transitory and temporal activity remaining to be the case, as in preceding periods. A scraper dating to between 2,400 to 2,200 BC were identified by PAS. It is likely that any further archaeological remains in Zone 3 would be of a similar nature.

- 2.7.B.3.8 Due to the environments which characterised the landscape context within Zone 3 during the prehistoric periods, areas of potential settlement are likely to be confined to raised areas such as roddons, which are dried-up raised beds of former watercourses (Ref 2.7.B.3 and Ref 2.7.B.43). There are no known heritage assets relating to Bronze Age (4000 BC 800 BC) activity within the 500 m study area for Zone 3. There are no known monuments, such as causewayed enclosures or round barrows, within the 500 m study area for Zone 3, which are often signifiers for Neolithic and Bronze Age occupation. This supports the suggestion that that this area was not permanently settled at this time.
- 2.7.B.3.9 Known heritage assets dating to the Iron Age (800 BC AD 43) within the 500 m study area for Zone 3 comprise two sherds of Iron Age 'A' type pottery (MLI23005) which were recovered during the excavation of a medieval motte and bailey site 490 m east of the draft Order Limits. The sherds were chance finds which were not reported on and have since been tentatively dated to Iron Age, Saxo-Norman or even as late as the 15th century AD. The finds are therefore not robust markers for Iron Age activity pre-dating the medieval site. A geophysical survey (ENF124288) 335 m south of the southern extent of the draft Order Limits revealed ditched enclosures and pits with Iron Age and Roman pottery (MNF58809).
- 2.7.B.3.10 Undated linear features recorded as cropmarks on aerial photographs (MLI20466) and as low earthworks on LiDAR (WSP\_ID\_252-254) could represent late prehistoric activity, although this remains tentative in the absence of further work. It is also possible that soilmarks identified on aerial photographs and assigned to the Roman period (MLI12624) could also be representative of late prehistoric activity.
- 2.7.B.3.11 It is known from elsewhere in eastern England that salt production was in operation by the Iron Age (Ref 2.7.B.41). However, there are no buildings or salthouses known to be associated with this practice recorded within Zone 3. A number of known salterns are recorded, although these are assigned to the medieval period in the in the HER records (MLI20535; MLI20529; MLI20378; MNF18567); these are yet to be fully investigated, and some may also contain evidence for late prehistoric activity. It is possible that salt production was a seasonal industry limited to when the weather was tolerable during the later prehistory (Ref 2.7.B.40).
- 2.7.B.3.12 Currently known archaeological evidence, considered alongside the landscape context during the Iron Age, suggests that human activity in the area in which Zone 3 is situated was largely transient and limited with relatively few permanent settlements compared with what is known further north in the Lincolnshire Wolds for example.

#### Roman (43 AD to 410)

2.7.B.3.13 There are 38 heritage assets that date to the Roman period. Thirty-two of these were noted in the HER, four are PAS finds, and two were identified through LiDAR analysis. Current known evidence within Zone 3 suggests an expansion of settlement and land exploitation during the Roman period from that in preceding periods, as evidenced by the pottery (MNF58809) discovered at the south of the draft Order Limits.

- 2.7.B.3.14 Excavations in the 1960s undertaken within the draft Order Limits, close to Delph Farm, revealed traces of between eight and twelve possible hut floors, along with artefact scatters comprising a high proportion of Samian ware fragments (MLI22323). This was interpreted as evidence for a native Romano-British settlement by the excavators, and the HER entry records that traces of enclosures and drove roads have been identified as cropmarks on aerial photographs. Low earthworks identified during LiDAR analysis may relate to these features (WSP\_ID\_101).
- 2.7.B.3.15 A complex of soil marks within the draft Order Limits identified on aerial photographs have been interpreted as evidence for the remains of a Romano-British farmstead (MLI12624). Numerous sherds of Roman period pottery were recovered through fieldwalking at this location, which was followed by limited archaeological excavations which recorded buried deposits in the form of a ditch and further sherds of Roman period pottery. A double-ditched linear feature identified as cropmarks on aerial photography around 500 m southwest of the draft Order Limits has been interpreted as a possible drove road dated to the Romano-British period (MLI20432). Without further investigation this interpretation remains conjectural, however. Excavations in the south of Zone 3 which largely revealed traces of early medieval settlement also led to the discovery of charred macrofossils dating to the Roman period (MNF18943; ENF91042).
- 2.7.B.3.16 Other evidence for Roman period activity is largely derived from chance finds of artefacts through fieldwalking. A potential roddon was recorded alongside finds of Roman pottery sherds within the draft Order Limits (MNF18978). Ploughing in 1967 exposed several Roman period artefacts (MLI12609). Artefacts included greyware and painted sherds, quern fragments, tile, and mortarium material. Further chance finds of Roman pottery sherds are recorded in the HER within the 500 m study area for Zone 3 (MNF19050, MNF18975, MLI12547, MLI12548, MLI80713). The latter three were found in the north of the 500 m study area, possibly linked with the nearby Roman farmstead (MLI12624) near Kirton, whilst the other two (MNF19050, MNF18975) were found near West Walton and may represent casual loss. A Byzantine coin (MNF18953) was discovered in the southernmost section draft Order Limits.
- 2.7.B.3.17 Following the contraction of the wetlands, the study area was located within a saltmarsh that had higher islands where some people settled (Ref 2.7.B.38). There is believed to have been a general trend towards woodland clearance during this period (Ref 2.7.B.43) which would help to drain the land and make it more suitable for agriculture.
- 2.7.B.3.18 There is evidence of salt production (MNF18600) in the form of a series of ditches and 17 fragments of briquetage that have been dated by a single sherd of Nene Valley ware (Ref 2.7.B.59). A number of saltern mounds recorded in the HER within the study area have been assigned to the medieval period (e.g. MLI20378; MNF18567). These features have not been subjected to archaeological excavation and it could therefore be the case that some at least date to the Roman period. The southern most point of the draft Order Limits intersects the Roman road of Stane Street (Margary 32; Ref 2.7.B.8) which connects Braughing and Colchester. Roadside activity would be expected near to this road, but nothing is recorded in the HER.
- 2.7.B.3.19 Other finds dating to the Roman period that have been recorded by PAS include two vessels (PAS1137010, PAS38489), a spindle whorl (PAS1138492), and a brooch (PAS1139478). Current evidence suggests an increase in settlement and land-use

from that in the Iron Age, with permanent occupation continuing to be confined to higher ground away from the area containing Zone 3. It is likely that the area remained largely marshland and riverine in nature during the Roman period, with the most likely land use being salt production and livestock grazing. The relative lack of evidence compared with areas such as the Lincolnshire Wolds could be due to less archaeological investigations being undertaken within the study area.

#### Early medieval (AD 410–1066)

- 2.7.B.3.20 There are 21 heritage assets from this period recorded in the 500 m study area for Zone 3. Seventeen of these are recorded in the HER and four are PAS finds.
- 2.7.B.3.21 Current evidence in Zone 3 suggests that the sparse nature of permanent settlement in previous periods continued into the early medieval period. Early medieval communities are believed to have broadly continued traditions of settlement and land-use from late prehistory and the Roman period within the fenlands and the Wash (Ref 2.7.B.60), although there is little known evidence for either within the study area for Zone 3 through Prehistory and the Roman period. Small-scale reclamation of the marshes (Ref 2.7.B.43) and landscape management such as the Sea Bank (MNF2187) allowed a further expansion of settlements and the use of the land for arable purposes.
- 2.7.B.3.22 A large earthen bank known as the Sea Bank (MNF2187) along the River Nene is thought to have been extant by the early medieval period based on artefacts recovered from multiple excavations across and adjacent to the earthwork remains. It should be noted that these excavations were undertaken beyond the study area. The Norfolk National Mapping Programme suggested that it may not have been a single construction but instead built over a number of phases over a long period of time, perhaps in some places pre-dating the early medieval period. Without further investigation the dating of the Sea Bank within Zone 3 therefore remains conjectural. The location of the bank suggests that it was likely built for sea defence as it is on the boundary between the lower salt marsh and the mud flat. As the region was prone to flooding and the coastline varied, the sea banks would protect settlements and agricultural land.
- 2.7.B.3.23 There are four settlements which are believed to have been in existence by the early medieval in the study area: Fleet (MLI20434), 220 m east of the draft Order Limits, which is now a conservation area; Holbeach Hurn (MLI20226), at its closest, the settlement is 245 m east of the draft Order Limits; Algarkirk (MLI88774; NHLE 1004933), around 300 m west of the draft Order Limits; and Tydd which at its closest is 90 m south of the draft Order Limits. Fieldwalking within the scheduled shrunken medieval village of Algakirk led to the recovery of pottery sherds believed to be early medieval in date, suggesting the area immediately east of the current settlement may have been the focus of early medieval activity. Aside from this there is relatively little archaeological data with which to assign these settlements to the early medieval period; however, all are recorded within the Domesday Book of 1086 and comprised townships consisting of arable and meadow land (Ref 2.7.B.46). This is suggestive of well-established settlements by the time of the Norman Conquest. Tydd and Algarkirk were in the largest 20 percent of settlements recorded in Domesday Book and both, along with Fleet (MLI20434), had a fishery.
- 2.7.B.3.24 Place-name evidence is also indicative of early medieval occupation at Fleet, Holbeach Hurn and Tydd, which are all named after natural features of their landscape. 'Fleet' was named after the Old English word for stream (Ref 2.7.B.61).

Within the name Holbeach Hurn (MLI20226), Holbeach is interpreted as meaning either 'hole' or 'hollow place' and Hurn means 'corner of land' (Ref 2.7.B.62). Tydd is at the location of the modern Tydd St Mary. 'Tydd' is the Old English world for either brushwood or teat, while St Mary is a medieval addition to the name to differentiate the settlement from Tydd Gote. Both of these are now conservation areas. Algarkirk is named after Algar, the Earl of Mercia who defeated the Danes at this location in 870 AD (Ref 2.7.B.63).

- 2.7.B.3.25 Archaeological excavations undertaken in 1992 within the draft Order Limits area in the southern portion of Zone 3 revealed a number of ditches containing domestic waste including early medieval pottery sherds. This followed a programme of fieldwalking that led to the recovery of early medieval pottery in the ploughsoil (MNF18943; ENF91042). Sampling of material from the ditch fills revealed the presence of salt-tolerant crops such as barley, suggesting agricultural activity in the landscape to support settlement activity described above. Charred macrofossils within the ditches were found to date to both Roman and early medieval dates which indicates a continued use of settlement in this area.
- 2.7.B.3.26 The location of Holbeach Hurn would have allowed for the collection of tidal silts and salt crystals. However, there are no salterns dated to the early medieval period recorded in the 500 m study area for Zone 3. Fish was an essential part of the diet of local populations within wetland areas (Ref 2.7.B.64); and salthouses are also recorded at Fleet (MLI20434) in the Domesday book (Ref 2.7.B.46).
- 2.7.B.3.27 Three HER entries within the study area for Zone 3 are chance finds that are domestic in nature, including pottery sherds and metal objects (MNF18942, MNF18943, MNF18958). There are a further four PAS finds that are also domestic, a stirrup (PAS227591), a pin (PAS36686), a strap fitting (PAS36691) and a silver bar (PAS38488).
- 2.7.B.3.28 Overall, current evidence suggests an increase in land-exploitation and settlement in the early medieval period from earlier periods, with a focus on this in the south of the study area, which may be the result of the relative distribution of archaeological investigations.

#### Medieval (AD 1066 - 1540)

2.7.B.3.29 There are 224 heritage assets recorded in the 500 m study area that date to the medieval period. Of these, 126 are recorded in the HER, 46 are PAS finds and 52 were identified through LiDAR analysis. There are three Grade I listed buildings of medieval date. The Church of St Mary (NHLE 1204871) at Tydd St Mary and the Church of St Mary at West Walton (NHLE 1077676) along with the nearby bell tower (NHLE 1171875). The remains of a medieval cross in the Tydd St Mary churchyard (NHLE 1064544) is Grade II listed. There are also three scheduled monuments comprising the sunken village near Algarkirk (MLI88774; NHLE 1004933), and two crosses (NHLE1010678, MLI13283; NHLE1014429, MLI22338). Heritage assets include six settlement sites (MLI20434, MLI20226, MLI20436, MLI20437, MLI20498, MLI88774), 14 features relating to sea defences (including MLI89892, MLI90830, MNF2187, MNF18567, MNF18571, MNF19042), seven salt working related heritage assets (MLI20378, MLI20497, MLI81196, MLI81197, MNF74666, MLI20529, MLI20535), two houses (MNF38777, MNF18976), four religious buildings (MLI22333; NHLE 1204871, MNF14903, MNF18976, MNF2210; NHLE1077676), a cross (MLI22315), a mill (MNF16338), an enclosure (MLI90829), a field system (MLI80712), and 18 chance finds. LiDAR analysis has identified 52 heritage assets,

including 37 field boundaries, two sea defences (WSP\_ID\_185, WSP\_ID\_158), and 12 salterns.

- 2.7.B.3.30 As discussed above, the medieval settlements within Zone 3 are likely to have had origins in the early medieval period: Fleet (MLI20434); Holbeach Hurn (MLI20226); and the sunken village near Algarkirk (MLI88774; NHLE 1004933). The settlement of Fleet Hargate (MLI20436) developed around Fleet's market (MLI20434), which was held to the north of the main settlement. Feet Hargate is now a conservation area. The conservation area of Fleet Hargate captures the junction of Low Gate, East Gate and Fleet Road and extends the length of Fleet Road, which is the main throughfare (Ref 2.7.B.65). Approximately 50 acres of land within the historic township of Fleet is believed to have been owned by the Templars in the medieval period based on historic field names taken from tithe mapping (e.g. Temple Bottoms) (MLI20437). The scheduled settlement remains adjacent to Algarkirk (NHLE 1004933; MLI88774), located approximately 300 m southwest of the draft Order Limits between the Grade I listed Algarkirk Church (NHLE 1164857) and Algakirk Hall (now demolished), is believed to have been occupied since the 7th century and continued to be into the medieval period based on stray finds of pottery in the ploughsoil.
- 2.7.B.3.31 Archaeological features potentially relating to Riche Deserted Medieval Village (MLI13072) skirt the western portion of the study area. The area covered by the HER record comprises a series of linear cropmarks, one of which is depicted as a footpath on historic OS mapping, which also shows the conjunction of multiple former footpaths in this area, along with the presence of a pond which may be a remnant of the former settlement. The site of a former moated site is recorded approximately 470 m east of the draft Order Limits (MLI22265). This is clearly depicted on historic Ordnance Survey mapping in the late 19th century, and was excavated in 1913, from which there is no surviving reporting. The site of the motte is currently largely ploughed flat through 20th century agriculture; however, faint traces of earthworks remain visible on LiDAR imagery (outwith LiDAR interpretation study area).
- 2.7.B.3.32 There are two listed churches in the study area, which are both dedicated to St Mary, these are the parish church for West Walton (MNF2210; NHLE1077676), and Tydd St Mary (MLI22333; NHLE1204871). Both are Grade I listed.
- 2.7.B.3.33 The parish church of Tydd St Mary (MLI22333; NHLE1204871) was constructed in the 12th century and faced alterations and restorations throughout the 13th to 17th centuries. It is built from ashlar, coursed rubble, red brick and render. Alterations include the addition of a 15th century brick tower with an octagonal spire.
- 2.7.B.3.34 The Grade I listed parish church of West Walton (MNF2210; NHLE1077676) was constructed between 1240 and 1250, faced alterations in the 15th century, and was restored in 1907. It is constructed of Barnack stone with some brick in the Gothic style. The church's bell tower, also Grade I listed (NHLE 1171875) and dating to the 1240s, is located approximately 20 m to the south.
- 2.7.B.3.35 Due to the landscape context being largely marshland during the medieval period, and potential archaeological evidence, it is probable that salt production was practiced in the medieval period. There is evidence of a potential saltern (MNF74666), within the draft Order Limits. Archaeological evaluation through trial trenching revealed a linear feature that was filled with fragments of fired clay near to a cluster of hearths that were identified through a geophysical survey (ENF151957; ENF152313). Further evidence is recorded on the Lincolnshire HER within the 500 m study area around Saracen's Head (MLI20379). A number of earthen mounds throughout the southern portion of the study area have been interpreted as possible

saltern mounds. LiDAR interpretation undertaken within the draft Order Limits has led to the identification of a number of such possible features (WSP\_ID\_061; WSP\_ID\_062; WSP\_ID\_150-156). An area of potential salt work remains are located within the draft Order Limits at Washway Road (MLI20378) and also close to Ingleborough (MNF18567; MNF18571) in the southern portion of Zone 3. Numerous earthen mounds interpreted as medieval period salterns within and projecting from the settlement of Holbeach Hurn (MLI20535) suggests the presence of salt-making industry within the draft Order Limits. This is bolstered by proximity to the coastline beyond the sea bank (MLI89892).

- 2.7.B.3.36 There are 46 medieval casual loss finds that have been recorded by PAS which includes 19 coins, a toy cauldron (PAS1138531), and a brooch (PAS551024).
- 2.7.B.3.37 The medieval period within Zone 3 is characterised by expansion and consolidation of settlement, sea defences and industry in the form of salt making.

#### Post-medieval (AD 1540-1900)

- 2.7.B.3.38 There are 445 recorded heritage assets dating to the post-medieval period within the 500 m study area for Zone 3, largely reflecting activity that followed the draining of the Fens. Of these, 248 were recorded in the HER, and 178 are characterised by former or extant structures related to recorded farmsteads, either domestic or functional in character. Of the remaining 29, four reflect the establishment and expansion of railway infrastructure within the region during the 19th century, and five are milestones. LiDAR analysis identified 171 heritage assets, which include 55 field-boundaries, and numerous areas of ridge and furrow. There are 26 PAS finds. There are 19 listed buildings of post-medieval date, which are all Grade II listed, and include farmhouses and milestones.
- 2.7.B.3.39 The key influence on activity during the post-medieval period is the draining of the Fens in the 17th century. This process, initiated by royal decree in the 1630s and led by Cornelius Vermuyden from the 1650s onwards (Ref 2.7.B.66), involved the straightening of meandering rivers, and building embankments and sluices in addition to washes for the storage of flood waters. Prior to the drainage, the use of land management and industrial practices, primarily salt production, and associated infrastructure such as salterns, continued from those present in the medieval period. Efforts had already been made to manipulate the landscape, evidenced through extant features such as The Sea Bank, discussed above, but not on the scale seen in from the 17th century onwards. The drainage process took place in the face of local opposition but enabled subsequent cultivation of the land and accompanying infrastructure development (Ref 2.7.B.67).
- 2.7.B.3.40 The drainage of large areas of fen led to widespread enclosure for agricultural and land holding. Evidence of this can still be seen in today's existing fieldscapes throughout Zone 3, along with numerous relict field boundaries identified as straight linear earthworks on LiDAR imagery. These represent the former extent of enclosure during the post-medieval period. The widespread drainage and enclosure were coupled with the establishment of numerous farms, of which many are located within the study area. Most of these records represent extant structures, but some indicate the former locations of farms since demolished (for example: MLI122988; MLI123029). No related upstanding features relating to these former farmsteads were identified on LiDAR imagery, but it is possible that potential remains survive as buried archaeological deposits.

- 2.7.B.3.41 Four HER entries within Zone 3 relate to the railway infrastructure. These are the Holbeach to Sutton Bridge Railway (MLI24894), intersecting the draft Order Limits at Haycroft Lane, the former Level Crossing Gate Houses at Algakirk, (MLI13345; MLI13344), and the former Tydd Railway Station, now demolished (MLI20496), also within the draft Order Limits. The Holbeach to Sutton Bridge Railway (MLI24894) opened on 1 July 1862. Four years later, Tydd Railway Station (MLI20496) opened. These were both incorporated into the Midland and Great Northern Joint Railway in 1893.
- 2.7.B.3.42 Formalised infrastructure in the post-medieval period is also evident in the road network within Zone 3, with seven milestones, and a county boundary marker post recorded. Three of these are located within the draft Order Limits:
  - Algakirk (Grade II listed NHLE 1062045; MLI92492);
  - Frampton (Grade II listed NHLE 1308503; MLI86316); and
  - Fleet (Grade II listed NHLE 1064545; MLI94390).
- 2.7.B.3.43 There are a further five milestones located at:
  - Fleet Hargate (Grade II listed NHLE 1064519; MLI89887), 160 m northeast of the draft Order Limits;
  - Fosdyke (Grade II listed NHLE 1317488; MLI92617) 125 m east of the draft Order Limit;
  - Sutterton (Grade II listed NHLE 1165317; MLI92537) 35 m north of the draft Order Limit;
  - Fleet (Grade II listed NHLE 1308933; MLI94561) 100 m west of the draft Order Limit; and
  - Lynn Road (not listed, MNF63139) 395 m southeast of the draft Order Limit.
- 2.7.B.3.44 Formal infrastructure coupled with the expansion of agricultural land and practices following widespread draining allowed the population in the study area to grow throughout the post-medieval period. In less than 100 years the population in Fleet grew from 174 in 1794 to 1162 in 1851 (Ref 2.7.B.68). Alongside a large number of existing and former historic farmhouses and associated buildings throughout Zone 3, other historic buildings of note include the Algakirk Workhouse which is located off Workhouse Lane 50 m west of the draft Order Limits (MLI13076), and the Grade II listed Faulkner House, (NHLE 1237331; MNF18480) located approximately 80 m east of the draft Order Limits.
- 2.7.B.3.45 In terms of more nucleated settlement, the existing village of Tydd St Mary, 450 m south of the draft Order Limits, continued to develop during this period (MLI22334), with Pevsner's Buildings of England survey recording a rectory of 1855 date, and a development sequence for Tysdale Manor from the 16th to 18th centuries (Ref 2.7.B.69). The Forge (MLI97232), 425m south of the draft Order Limits, and Threeways (MLI97233), 390 m south of the draft Order Limits, are both individual buildings identified as of historical interest within Tydd St Mary. The former West Walton National School (MNF63398) is located 70m south of the draft Order Limits, and the West Walton War Memorial (MNF65325) is located 260m south of the draft Order Limits.
- 2.7.B.3.46 There are four conservation areas in Zone 3 which are all part of the South Holland Local Planning Authority:

- Tydd St Mary;
- Tydd Gote;
- Fleet; and
- Fleet Hargate.
- 2.7.B.3.47 The development of the agricultural landscape of Zone 3 in the post-medieval period led to a number of windmills throughout the region. Within the study area, the locations of windmills are recorded in Mill Lane Tydd St Mary, 495 m south of the draft Order Limits (no longer extant, MLI81195), as shown on late 18th century mapping, and the Grade II listed Inglethorpe Mill, previously known as Ingleborough Mill, 100 m northeast of the draft Order Limits (NHLE 1077675, MNF2199). The extant structure at Inglebourough's 19th century architecture is of brick construction with seven storeys, a gallery at fourth floor level, and a sawtooth cornice below the curb track.
- 2.7.B.3.48 Evidence portraying the scale of landscape change and civil infrastructure can be found in the River Nene Outfall, located 370 m west of the draft Order Limits (MNF42344). This is a river canalisation, dug in 1830 in order to make Wisbech into a port, supporting its economic expansion. This intersects the draft Order Limits.
- 2.7.B.3.49 Other evidence for post-medieval activity includes scatters of post-medieval pottery (MNF19860) and a concentration of debris at the location of a former building recorded through field walking within the draft Order Limits (MNF19960). An archaeological trial trench evaluation (ENF96247, MNF43998) recorded intercutting drainage ditches of 18th and 19th century date, 30 m south-west of the draft Order Limits.
- 2.7.B.3.50 Further chance finds associated with the post-medieval period include bones recorded during road works (MLI20536), 80m west of the draft Order Limits, and a sixpence of Elizabeth I (MLI22186) recorded near Whaplode. Post-medieval pottery and a brick sewer (MLI12500) were recorded during digging works for a septic tank near Algakirk.
- 2.7.B.3.51 There are 26 post-medieval casual loss finds that have been identified by PAS which includes five coins (PAS1162512, PAS1162110, PAS1162091, PAS1066933, PAS227596), a pipe tamper (PAS1171345), and a bell (PAS1132360).
- 2.7.B.3.52 The post-medieval period within Zone 3 is characterised by changes in land management, infrastructure development and consolidation and expansion of existing settlements following the drainage of the Fens and increase in cultivatable land. This is manifest in the large numbers of field enclosures, drainage networks, and historic farms along with the inclusion of rail infrastructure which together represent widespread changes to the wider landscape from preceding periods.

#### Modern (1901-present)

- 2.7.B.3.53 There are 14 heritage assets associated with the modern period within the 500 m study area for Zone 3. Thirteen are listed in the HER and one was identified through LiDAR analysis. These are primarily associated with World War II military infrastructure, with some associated with transportation.
- 2.7.B.3.54 The location of a World War II aircraft crash (MNF18977) is located within the draft Order Limits. This record is representative of anecdotal evidence provided by the landowner who reported a crash site within this field. Fieldwalking has been undertaken within part of this field and no remains associated with a crash site have been recovered. The certainty of this apparent crash site is unclear.
- 2.7.B.3.55 The landscape of Zone 3 has an abundance of defensive structures as it is on the eastern coast of the country which was exposed to attacks from mainland Europe (Ref 2.7.B.70). The 1944 Land Utilisation map marks the eastern coast as largely arable land which was protected as the area provided food for the rest of the country. The remains of a World War II Resistance Hide (MLI125206) are located 100 m northeast of the draft Order Limits. No traces of this former structure survive above ground, and its former presence is only known through the Defence of Britain Archive (Ref 2.7.B.71). Other World War II former infrastructure within the study area includes former Royal Observer Corps posts (MLI26224) located at Fosdyke, 400 m east of the draft Order Limits and 200 m southwest of the draft Order Limits at Dixon's Drove (MNF39561). No above ground remains associated with these structures now survive. However, it is possible that buried deposits may survive. Surviving pillboxes are recorded 300 m northeast of the draft Order Limits at Fosdvke Bridge (MLI13391) and 330 m southwest of the draft Order Limits at Rectory Farm, Algakirk (MLI13414). Airfields are located at RAF Sutton Bridge (MLI20490) and at Tydd St Mary, partly intersected by the draft Order Limits (MLI99380).
- 2.7.B.3.56 Land reclamation continued until 1970 when the last areas of new land were brought into cultivation (Ref 2.7.B.43). A review of historic mapping and satellite imagery shows a trend towards the removal of numerous former post-medieval field boundaries throughout the modern period. Many of these former boundaries survive as low earthworks and have been identified through LiDAR survey.
- 2.7.B.3.57 Modern transport infrastructure is represented via a disused tramway (MLI20377) recorded on Ordnance Survey mapping dated to 1956. The disused tramway (MLI20377) does not appear on the 1942 map it is likely that it was built post-War. The modern Fosdyke Bridge (MLI89013) is located 345 m northeast of the draft Order Limits.
- 2.7.B.3.58 A lych-gate to St Mary's churchyard (MLI4519) is located in Tydd St Mary, 470 m south of the draft Order Limits. A fieldwalking exercise northwest of West Walton recorded modern period finds (MNF55115; ENF118017).

#### Undated

- 2.7.B.3.59 There are 13 heritage assets without a definitive date. Of these, five are categorised either as a mound (MNF18566, MNF19043, MNF19718, MNF19868) or saltern (MLI20015), of which one (MNF18566) intersects the draft Order Limits. North of West Walton, along Mill Road a mound is interpreted as a possible shipping navigation mark (MNF2201).
- 2.7.B.3.60 An undated earthen bank (MNF18953) is recorded north of West Walton, along Mill Road.

- 2.7.B.3.61 Cropmarks indicating undated features are also located throughout the area. These include cropmarks indicating a penannular enclosure (MNF18955), a double circular enclosure (MNF2200), a trackway and associated enclosures (MNF28050), cropmarks indicating a field system (MLI13492), and a further field system and trackway (MLI13493).
- 2.7.B.3.62 The find spot of a crescent shaped cast copper alloy object (PAS227684) that is undecorated and of an unknown date is also recorded.

#### **Bibliography**

Ref 2.7.B.1: British Geological Survey. 2025. *Geology Viewer*. Retrieved 08 21, 2024, from <a href="https://geologyviewer.bgs.ac.uk/?ga=2.103070080.1830245176.1736178298-1594596380.1736178297">https://geologyviewer.bgs.ac.uk/?ga=2.103070080.1830245176.1736178298-1594596380.1736178297</a>

Ref 2.7.B.2: Myers, A., 2012. *Mesolithic*. [Online] Available at: <u>https://researchframeworks.org/emherf/regional-overview/the-mesolithic/ [Accessed 21 01 2025].</u>

Ref 2.7.B.3: Clay, P. 2012. *Neolithic and Early to Middle Bronze Age*. Retrieved 02 17, 2025, from <u>https://researchframeworks.org/emherf/regional-overview/neolithic-and-early-to-middle-bronze-age/#section-9</u>

Ref 2.7.B.4: Parker Pearson, M., 2009. The Earlier Bronze Age. In: R. Ralston & J. Hunter, eds. *The Archaeology of Britain. An Introduction from the Earliest Times to the Twenty-First Century.* London: Routeledge, pp. 10-125.

Ref 2.7.B.5: Allen Archaeology Ltd. 2014. *The Glebe Field, Gunby Hall. AAL site code: GUHA 14.* Allen Archaeology Ltd.

Ref 2.7.B.6: Bewley. 1998. *Royal Commission on the Historical Monuments of England*. Gainsborough: Royal Commission on the Historical Monuments of England.

Ref 2.7.B.7: Willis, S. 2012. *Updated Period Resource Assessment: The Later Bronze Age and Iron Age*. Retrieved 02 18, 2025, from <u>https://researchframeworks.org/emherf/updated-period-resource-assessment-the-later-bronze-age-and-iron-age/#</u>

Ref 2.7.B.8: Margary, I. 1955. Roman Roads in Britain. London: John Baker.

Ref 2.7.B.9: Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M., Holbrook, N., Smith, A. 2016. *The Rural Settlement of Roman Britain: an online resource*. Retrieved 08 07, 2024, from <a href="https://archaeologydataservice.ac.uk/archives/view/romangl/map.html">https://archaeologydataservice.ac.uk/archives/view/romangl/map.html</a>

Ref 2.7.B.10: Jones, D., 1998. Romano-British Settlements in the Lincolnshire Wolds. In: R. Bewley, ed. *Lincolnshire's Archaeology from the Air.* Gainsborough: Royal Commission on the Historical Monuments of England, pp. 69-80.

Ref 2.7.B.11: Powell-Smith. 2025. *Orby*. Retrieved 02 18, 2025, from <u>https://opendomesday.org/place/TF4967/orby/</u>

Ref 2.7.B.12: Anglo Saxon History, 2017. *Village/Town Names(Saxon derivation)*. [Online] Available at: <u>https://saxonhistory.co.uk/9900\_saxon\_village\_names.php</u> [Accessed 18 02 2025].

Ref 2.7.B.13: Lincolnshire County Council, 2021. *Monument record MLI88720 - Welton le Marsh settlement.* [Online] Available at: <u>https://heritage-</u>explorer.lincolnshire.gov.uk/Monument/MLI88720 [Accessed 14 11 2024].

Ref 2.7.B.14: Lincolnshire County Council, 2024. *Monument record MLI43299 - Settlement of Huttoft.* [Online] Available at: <u>https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI43299</u> [Accessed 14 11 2024].

Ref 2.7.B.15: Field, N. & McDaid, M., 1995. *Alford Road, Huttoft. Planning Application N/089/1302/94 (Museum Accession No. 87.95). Archaeological Evaluation.,* s.l.: Lindsey Arcahaeological Services.

Ref 2.7.B.16: Rayner, T., 2002. *Land at Church Road, Huttoft, Lincolnshire. Archaeological Watching Brief,* s.l.: Archaeological Project Services.

Ref 2.7.B.17: Vince, A., 2012. *Anglo-Saxon Period, East Midlands Historic Environment Research Framework.* [Online] Available at: <u>https://researchframeworks.org/emherf/regional-overview/anglo-saxon-period/</u> [Accessed 14 11 2024].

Ref 2.7.B.18: Lincolnshire Museum, 1980. *Information Sheet: Lincoln: A Viking Town.* s.I.:Lincolnshire Museum.

Ref 2.7.B.19: Lincolnshire County Council, 2023b. *Monument record MLI42184 - Human Remains and Armour, Candlesby.* [Online] Available at: <u>https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI42184</u> [Accessed 06 12 2024].

Ref 2.7.B.20: Lewis, C., 2012. *Medieval Period, East Midlands Historic Environment Research Framework.* [Online] Available at: <u>https://researchframeworks.org/emherf/regional-overview/medieval-period/#</u> [Accessed 14 11 2024].

Ref 2.7.B.21: Lincolnshire County Council, 2019. *Revealed - the 100-plus medieval Lincolnshire villages that were wiped off the map.* [Online] Available at: https://www.lincolnshirelive.co.uk/news/local-news/revealed-100-plus-medieval-lincolnshire-<u>3463235</u> [Accessed 11 11 2024].

Ref 2.7.B.22: National Trust, No date. *Deserted Medieval Village, Gunby Hall Estate.* [Online] Available at:

https://heritagerecords.nationaltrust.org.uk/HBSMR/MonRecord.aspx?uid=MNA112107 [Accessed 19 02 2025].

Ref 2.7.B.23: Le Patourel, J. & Roberts, B., 1978. The Significance of Moated Sites. In: F. Aberg, ed. *Medieval Moated Sites.* s.I.:CBA Research Report No 17, pp. 46-56.

Ref 2.7.B.24: Powell-Smith, A., 2024. *Candlesby.* [Online] Available at: <u>https://opendomesday.org/place/TF4567/candlesby/</u>[Accessed 06 12 2024].

Ref 2.7.B.25: Lincolnshire County Council, 2023. *Monument record MLI88093 - Undated Enclosures, Candlesby.* [Online] Available at: <u>https://heritage-</u>explorer.lincolnshire.gov.uk/Monument/MLI88093 [Accessed 06 12 2024].

Ref 2.7.B.26: National Trust, 2024. *Explore the Gunby estate*. [Online] Available at: <u>https://www.nationaltrust.org.uk/visit/nottinghamshire-lincolnshire/gunby-estate-hall-and-gardens/explore-the-gunby-estate [Accessed 14 11 2024].</u>

Ref 2.7.B.27: Campion, G., 2021. *Modern Period, East Midlands Historic Environment Research Framework*. [Online] Available at: <u>https://researchframeworks.org/emherf/regional-overview/modern-period/</u>[Accessed 14 11 2024].

Ref 2.7.B.28: Historic England, 2023. *Lincolnshire. Building Stones of England.* 3 ed. Swindon: Historic England.

Ref 2.7.B.29: Lincolnshire County Council, 2021. *Monument record MLI43675 - Sutton on Sea to Alford Tramway.* [Online] Available at: <u>https://heritage-</u> explorer.lincolnshire.gov.uk/Monument/MLI43675 [Accessed 14 11 2024]

Ref 2.7.B.30: London School of Economics, 1942. *Land Utilisation Survey of Britain Sheets 40* & 48 - Grimsby Louth & Skegness. London: London School of Economics.

Ref 2.7.B.31: London School of Economics, 1937. *Land Utilisation Survey of Britain: Sheet 56 - Boston.* London: London School of Economics.

Ref 2.7.B.32: Zetica UXO, 2024. UXO Desk Study & Risk Assessment Theddlethorpe St Helen to Ingleborough, s.l.: s.n.

Ref 2.7.B.33: National Trust, 2025. *Gunby Estate, Hall and Gardens*. [Online] Available at: <u>https://www.nationaltrust.org.uk/visit/nottinghamshire-lincolnshire/gunby-estate-hall-and-gardens</u> [Accessed 19 02 2025].

Ref 2.7.B.34: Ellis, S., 2001. *The wetland heritage of the Lincolnshire marsh.*, Kingston-upon-Hull: Humber Wetlands Project.

Ref.2.7.B.35: Natural England. 2024. National Character Area Profile: 46. The Fens.

Ref.2.7.B.36: Humber Field Archaeology. 2007. *Rapid Coastal Zone Assessment Survey Yorkshire and Lincolnshire: Donna Nook to Gibraltar Point*.

Ref.2.7.B.37: Green, C. 2023. *Land on the Edge: The Landscape Evolution of the Lincolnshire Coastline*. Historic England and Lincolnshire County Council.

Ref 2.7.B.38: Lincolnshire County Council. 2011. *The Historic Character of The County of Lincolnshire. The Historic Landscape Character Zones*. English Heritage and Lincolnshire County Council.

Ref.2.7.B.39: Lincolnshire County Council. 2021. *Monument record MLI84488 - Later Mesolithic flintworking site, Mexican Bridge, Midville*. Retrieved 02 07, 2025, from https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI84488

Ref 2.7.B.40: Morris, E. 2001. Briquetage and Salt Production and Distribution Systems: A Comparative Study. In T. Lane, & E. Morris (Eds.), *A Millennium of Saltmaking: Prehistoric and Romano-British Salt Production in the Fenland* (pp. 389-404). Sleaford : Heritage Trust of Lincolnshire.

Ref 2.7.B.41: Historic England. 2018. *Pre-industrial Salterns: Introductions to Heritage Assets.* Swindon: Historic England.

Ref 2.7.B.42: Historic England. 2017. *Canal and River Navigations National Overview: an appraisal of the heritage and archaeology of England's present and former inland navigable waterways.* Swindon: Historic England.

Ref 2.7.B.43: Humber Field Archaeology. 2007. *Rapid Coastal Zone Assessment, Yorkshire and Lincolnshire, Gibraltar Point to Sutton Bridge*. English Heritage.

Ref 2.7.B.44: Lincolnshire County Council. 2011. *The Historic Character of The County of Lincolnshire Report.* English Heritage and Lincolnshire County Council.

Ref 2.7.B.45: Lincolnshire County Council. 2021. *Monument record MLI42767 - Northdike Briggs Chapel and Hermitage, Stickney*. Retrieved 02 07, 2025, from https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI42767

Ref 2.7.B.46: Powell-Smith, A. 2024. *Map: England in 1086*. Retrieved 11 15, 2024, from https://opendomesday.org/map/

Ref 2.7.B.47: Hills, R. L. 1967. *Machines, Mills and uncountable costly necessities: a short history of the drainage of the Fens.* Norwich: Goose & Sons.

Ref 2.7.B.48: Aslet, C. 2011. *Villages of Britain: The Five Hundred Villages that Made the Countryside.* Bloomsbury Publishing USA.

Ref 2.7.B.49: Webster, C. 2017. Lincolnshire's '1812 Fen Churches Act' and its Buildings. *The Georgian Group Journal, 25*, 247-262.

Ref 2.7.B.50: The Church of England. 2022. *Church Heritage Record 621467*. Retrieved 02 20, 2025, from

https://facultyonline.churchofengland.org//CHR/ChurchDetails.aspx?id=16663#Home

Ref 2.7.B.51: The Church of England. 2022. *Church Heritage Record 621466*. Retrieved 02 20, 2025, from <u>https://facultyonline.churchofengland.org/CHR/ChurchDetails.aspx?id=16662#Home</u>

Ref 2.7.B.52: Methodist Heritage. 2025. *Primitive Methodism*. Retrieved 02 20, 2025, from <u>https://www.methodistheritage.org.uk/methodist-history/primitive-methodism/</u>

Ref 2.7.B.53: Lincolnshire County Council. 2021. *Building record MLI99044 - East Fen Chapel, New Leake*. Retrieved 02 20, 2025, from https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI99044

Ref 2.7.B.54: Lincolnshire County Council. 2021. *Building record MLI99088 - Thorpe Bank Primitive Methodist Chapel, Thorpe St Peter*. Retrieved 02 20, 2025, from https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI99088

Ref 2.7.B.55: Ministry of Transport. 1922. *List of Class I and Class II Roads and Numbers.* United Kingdom Government.

Ref 2.7.B.56: Royal Observer Corps Association. 2024. *Home*. Retrieved 01 24, 2025, from http://www.roc-heritage.co.uk/

Ref 2.7.B.57: Royal Observer Corps Association. 2024. *Heritage of the Corps*. Retrieved 02 19, 2025, from http://www.roc-heritage.co.uk/

Ref 2.7.B.58: WSP. 2024. *Eastern Green Link 3 and Eastern Green Link 4. Environmental Impact Assessment. Scoping Report. Volume 1 Main Text. Part 2 English Onshore Scheme.* 

Ref 2.7.B.59: Archaeological Project Services. 2001. *Land adjacent to Rectory Lane, Gedney, Lincolnshire. Archaeological Watching Brief.* Sleaford: Archaeological Project Services.

Ref 2.7.B.60: Oosthuizen, S. 2016. Culture and Identity in the Early Medieval Fenland Landscape. *Landscape History*, *37*(1), 5-24.

Ref 2.7.B.61: University of Nottingham. 2025. *Key to English Place-Names*. Retrieved 01 23, 2025, from <u>http://kepn.nottingham.ac.uk/map/county/Lincolnshire</u>

Ref 2.7.B.62: Lincolnshire County Council. 2021. *Monument record MLI20226 - The settlement of Holbeach Hurn*. Retrieved 11 15, 2024, from <u>https://heritage-</u>explorer.lincolnshire.gov.uk/Monument/MLI20226

Ref 2.7.B.63: Hinson, C. 2020. *Algarkirk*. Retrieved 01 23, 2025, from <u>https://www.genuki.org.uk/big/eng/LIN/Algarkirk</u>

Ref 2.7.B.64: Hull Domesday Project. 2025. *Fisheries*. Retrieved 01 23, 2025, from <u>https://www.domesdaybook.net/domesday-book/data-terminology/manors/fisheries</u>

Ref 2.7.B.65: Archaeological Project Services. 2000. *Archaeological Implications of the Reappraisal of Fleet Hargate Conservation Area, Fleet Hargate, Lincolnshire (SCA 99).* Archaeological Project Services.

Ref 2.7.B.66: Knittl, A. 2007. The Design for the Initial Drainage of the Great Level of the Fens: an historical whodunnit in three parts', *Agricultural History Review, 55*, 23-50.

Ref 2.7.B.67: Wildlife Trust. 2024. *A brief history of the Great Fen*. Retrieved 11 15, 2024, from <u>https://www.greatfen.org.uk/about-great-fen/heritage/brief-history-great-</u>

fen#:~:text=Water%20from%20the%20fens%20could%20now%20reach%20the,summer%20cu Itivation%20and%20to%20prevent%20serious%20winter%20flooding.

Ref 2.7.B.68: Lincolnshire County Council. 2021. *Monument record MLI20434 - Settlement of Fleet*. Retrieved 11 15, 2024, from https://heritage-explorer.lincolnshire.gov.uk/Monument/MLI20434

Ref 2.7.B.69: Pevsner, N., & Harris, J. 1964. *Lincolnshire (The Buildings of England).* Penguin Books.

Ref 2.7.B.70: Andrew, D. 2018. *Post-medieval Resource Assessment, East of England Research Framework*. Retrieved 11 15, 2024, from https://researchframeworks.org/eoe/resource-assessments/post-medieval/#

Ref 2.7.B.71: Council for British Archaeology. 2006. Defence of Britain Archive. York: Archaeology Data Service.

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