

WINTERINGHAM INGS TO SOUTH FERRIBY FLOOD
ALLEVIATION SCHEME

Cultural Heritage Desk-Based Assessment

Prepared for

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Winteringham Ings to South Ferriby Flood Alleviation Scheme

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Acronyms and Abbreviations

BGL	Below Ground Level
BGS	British Geological Survey
DMRB	Design Manual Roads and Bridges
EA	Environment Agency
GI	Ground Investigation
Ha	Hectare
HER	Historic Environment Record (North Lincolnshire)
HLC	Historic Landscape Characterisation
LiDAR	Light Detection And Ranging
LPA	Local Planning Authority
MTR	Minimum Technical Requirements
NHLE	National Heritage List for England
NLC	North Lincolnshire Council
NPPF	National Planning Policy Framework
OD	Ordnance Datum
PAS	Portable Antiquities Scheme
PPG	Planning Practice Guidance

Executive Summary

The Scheme would have a direct physical impact on the Scheduled Ferriby Sluice and Scheduled Monument Consent would be required in addition to planning permission. The Scheme would not harm the significance of the asset through changes to its setting.

Groundworks could have an impact on the non-designated former channel of the River Ancholme and the site of a post medieval brickyard, both located within the eastern part of the Scheme and on a Roman road or causeway, located within the western part of the Scheme.

Groundworks for the Scheme could impact on previously unknown archaeological assets. There is firm evidence for sustained Roman activity within the landscape surrounding the Scheme, and a moderate potential for previously unknown Roman assets is identified. Medieval evidence within the wider study area focuses around South Ferriby itself and the crossing point across the former channel of the River Ancholme. Given that the eastern part of the Scheme crosses the line of the former river channel and encroaches on the periphery of the village, a moderate/low potential for medieval evidence is identified. Post medieval assets are anticipated to relate to former brickyards and associated areas of extraction. The requirement for further archaeological mitigation during the construction phase of the Scheme would be agreed with the Archaeological Advisor to North Lincolnshire Council.

There would be no permanent adverse impacts to any designated Listed Buildings by the Scheme either through physical impacts or through changes to their settings.

Impacts to non-designated historic buildings would be limited to changes to the settings of the former Coastguard Station located on Ferriby Road.

The Historic Landscape Character of the Scheme is of low cultural heritage value. The introduction of new flood embankments within this semi-industrial/semi-rural landscape would not be incongruous and would not alter the ability to appreciate or read the historic landscape.

The operation of the Scheme would provide enhanced flood protection to the designated cultural heritage assets within South Ferriby.

Introduction

1.1 General

This report examines the potential effects of the proposed Winteringham Ings to South Ferriby Flood Alleviation Scheme (hereafter ‘the Scheme’) on cultural heritage (heritage assets).

A heritage asset is defined by the National Planning Policy Framework (NPPF) as “a building, monument, site, place or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest”.

Heritage assets include designated assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens, Registered Battlefields and Registered Historic Wrecks) and non-designated assets identified by the Local Planning Authority (for example: locally listed buildings, archaeological sites and monuments and historic landscapes).

The assessment has been undertaken in accordance with guidance provided by the Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3, Part 2 (HA208/07 2007), the Environment Agency’s (EA) Minimum Technical Requirements (MTR) (801_14 SD01) and the Standards and Guidance for Historic Environment Desk-Based Assessments provided by the Chartered Institute for Archaeologists (2014).

1.2 Background to the Scheme

The east coast tidal surge in December 2013 inundated 129 properties in South Ferriby on the south bank of the Humber Estuary in North Lincolnshire. The adjacent CEMEX cement factory, A1077 highway and over 1000 hectares (ha) of agricultural land were also inundated. The tidal defences in this location comprise mainly earth embankments, which were overtopped by the surge tide, and a range of other structures associated with the outfall of the New River Ancholme into the Humber Estuary. The Environment Agency (EA) is developing a flood alleviation scheme between Winteringham Ings and South Ferriby in collaboration with local partners to reduce the risk of flooding to the community, the CEMEX cement factory and local infrastructure.

The existing tidal flood defences in this area comprise an earth embankment that runs along the frontage between Winteringham Ings and the South Ferriby Cliffs. For an 800m stretch the A1077 is situated on the crest of the embankment. The sluice to the New River Ancholme and the East and West Drains, together with the navigation lock link and the Winteringham Ings and South Ferriby embankments provide combined tidal and fluvial flood risk management and navigation functions.

1.3 The Proposed Scheme

The proposed Scheme comprises improvement of the existing flood defences at South Ferriby village, including managing the erosion risk using set-back defences to the east of South Ferriby Sluice, and using new walls and gates to reduce flooding to properties east and west of South Ferriby Sluice and Lock from the overtopping of the sluice and lock during extreme flood events. To include:

New CEMEX embankment and demountable defence

- Construction of a new embankment (approximately 1120 metres long) west of the CEMEX cement plant
- New demountable defence across the A1077

Raising and widening the western embankment

- Raising of an existing, approximately 555 metres long, embankment north of the A1077, west of the River Ancholme

Flood walls and demountable defence on the west bank of River Ancholme

- A second demountable defence on the A1077 immediately to the west of the River Ancholme
- Construction of a short length of new wall on the west bank of the River Ancholme to tie-in the new demountable defence with the existing wall over West Drain (note, this is where the Scheme ties into the Ferriby Sluice Scheduled Monument)

Flood walls and demountable defences on the east bank of River Ancholme

- A third demountable defence immediately east of the River Ancholme
- Construction of a new flood wall (with access demountable defences) between the River Ancholme (east bank), in front of the Hope and Anchor Public House and around the back of two residential properties and then to tie into a wall along the A1077 passing over East Drain
- Demountable defences on the two accesses to the existing footbridge over East Drain
- Construction of a new flood wall to replace the existing wall along the eastern bank of East Drain to connect with the eastern embankment

New eastern embankment

- Construction of a new sustainable embankment, approximately 1,074 metres long, to the south of the existing flood defence to the east of East Drain. This will extend from the East Drain to Elm Farm
- Three accesses over the new embankment to provide access by farm vehicles to fields on the north side of the embankment and for maintenance vehicles to access Fulseas Pumping Station
- New, approximately 50 metres long, ditch parallel to Fulseas Drain for water vole mitigation

CEMEX area for planting

- An area within CEMEX will be used for tree planting to replace trees lost as part of the Scheme.

Legislation and Policy

2.1 Ancient Monuments and Archaeological Areas Act 1979

The Ancient Monuments and Archaeological Areas Act 1979 (as amended) sets out the statutory protection afforded to selected nationally important archaeological assets. The Act details the protection of Scheduled Monuments and the need for written consent prior to carrying out any works that might be deemed to have an impact on their physical remains.

The Act does not afford any protection to the settings of such assets.

2.2 Planning (Listed Buildings and Conservation Areas) Act 1990

The Town and Country Planning Act (1971) as amended by the Planning (Listed Buildings and Conservation Areas Act) 1990 details the statutory protection afforded to Listed Buildings. Section 66 states the special considerations affecting planning functions, including the consideration of planning permission for development affecting listed buildings or their settings by Local Planning Authorities (LPAs) or the Secretary of State.

The Act also requires LPAs to designate areas of 'special architectural or historic interest' as Conservation Areas with the aim of preserving and enhancing their character and appearance. Historic England may need to be consulted with regard to proposed works within a Conservation Area and section 72(1) requires LPAs to pay particular attention to Conservation Areas in the planning process.

2.3 Enterprise and Regulatory Reform Act 2013

This deregulatory legislation allows greater authority to LPAs in respect of Listed Building Consent. It also allows greater definition of a Listed Building by allowing the exclusion of attached buildings and structures and those within the curtilage of the principal Listed Building from protection. It states that a certificate of immunity from listing may be applied for at any time and it replaced Conservation Area Consent with planning permission.

2.4 National Planning Policy Framework (NPPF) (revised July 2018)

The policies below from the NPPF state the approach to be used by LPAs to determine planning applications in relation to cultural heritage and also Listed Building Consent applications. They apply to designated heritage assets, such as Listed Buildings and also to non-designated, but potentially significant, heritage assets such as buried archaeological remains and other historic structures. Policy relevant to this assessment includes:

Section 16 - Conserving and enhancing the historic environment

'189. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities

should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

190. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.

192. In determining applications, local planning authorities should take account of: a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and c) the desirability of new development making a positive contribution to local character and distinctiveness.

193. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

194. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of: a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional; b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

195. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: a) the nature of the heritage asset prevents all reasonable uses of the site; and b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and d) the harm or loss is outweighed by the benefit of bringing the site back into use.

196. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

197. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

199. Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.'

2.5 Local Policy

Current local policy is provided by the North Lincolnshire Local Development Framework Core Strategy (adopted June 2011) which contains the following policy in respect of cultural heritage:

Policy CS6 - Historic Environment

'The council will promote the effective management of North Lincolnshire's historic assets through:

- *Safeguarding the nationally significant medieval landscapes of the Isle of Axholme (notably the open strip fields and turbaries) and supporting initiatives which seek to realise the potential of these areas as a tourist, educational and environmental resource.*
- *Preserving and enhancing the rich archaeological heritage of North Lincolnshire*
- *Ensuring that development within Epworth (including schemes needed to exploit the economic potential of the Wesleys or manage visitors) safeguards and, where possible, improves the setting of buildings associated with its Methodist heritage.*
- *Ensuring that development within North Lincolnshire's Market Towns safeguards their distinctive character and landscape setting, especially Barton upon Humber, Crowle and Epworth.*

The council will seek to protect, conserve and enhance North Lincolnshire's historic environment, as well as the character and setting of areas of acknowledged importance including historic buildings, conservation areas, listed buildings (both statutory and locally listed), registered parks and gardens, scheduled ancient monuments and archaeological remains.

All new development must respect and enhance the local character and distinctiveness of the area in which it would be situated, particularly in areas with high heritage value. Development proposals should provide archaeological assessments where appropriate.'

In addition, a number of policies within the North Lincolnshire Local Plan (adopted May 2003) in respect of cultural heritage have been saved until the full implementation of the Local Development Framework. Those relevant to the Scheme include:

Policy HE5 - Development affecting Listed Buildings

'The Council will seek to secure the preservation, restoration and continued use of buildings of special architectural or historic interest. When applications for planning permission relating to a listed building or listed building consent are being assessed, the primary consideration will be the need to preserve or enhance the fabric and character of the building. Permission or consent will not be granted unless it has been demonstrated that the proposed works would secure this objective. The Council will encourage the retention and restoration of the historic setting of listed buildings. Proposals which damage the setting of a listed building will be resisted. Whenever appropriate, proposals which would entail the loss of historic fabric from a listed building will be conditional upon a programme of recording being agreed and implemented.'

Policy HE8 - Ancient Monuments

'Development proposals which would result in an adverse effect on Scheduled Ancient Monuments and other nationally important monuments, or their settings, will not be permitted.'

Policy HE9 - Archaeological Evaluation

'Where development proposals affect sites of known or suspected archaeological importance, an archaeological assessment to be submitted prior to the determination of a planning application will be required. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.

Sites of known archaeological importance will be protected. When development affecting such sites is acceptable in principle, mitigation of damage must be ensured and the preservation of the remains in situ is a preferred solution. When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before and during development.'

Methodology

3.1 Data Sources

The data used to determine the baseline conditions for this assessment were accessed from the following sources:

- National Heritage List for England (NHLE) for information of designated cultural heritage assets;
- North Lincolnshire Historic Environment Record (HER) for information on non-designated assets including archaeological sites and monuments, previous archaeological events, and historic landscape characterisation data;
- North Lincolnshire Council (NLC) for information on locally listed buildings and Conservation Areas;
- Ground Investigation (GI) reports for the Scheme and geological information held by the British Geological Survey (BGS);
- Historic maps and pertinent historical material held at the Lincolnshire Archives and Lincoln Central Library (visited June and August 2018);
- The results of previous archaeological investigations within, and in close proximity to, the Scheme;
- Historic aerial photographs held at the Historic England Archive, Swindon (visited December 2016);
- The Portable Antiquities Scheme (PAS); and
- Open source EA Light Detection And Ranging (LiDAR) data.

Plots of designated and non-designated assets are provided at Appendix A. Assets are referred to in the sections below by the unique NHLE or HER numbers.

3.2 Study Area

The study area has been defined as the footprint of the Scheme plus a 500m radius surrounding area (“the wider study area”). The study area for this assessment is considered appropriate in regard to archaeological remains, historic buildings and the historic landscape due to the nature of the proposed works and anticipated sensitivity of the receiving environment.

The extent of the study area was agreed with the Archaeological Advisor to North Lincolnshire Council (Alison Williams) in June 2018.

3.3 Assessment of Significance (value)

The NPPF defines significance as the value of a heritage asset to this and future generations because of its heritage interest, and that heritage interest may be archaeological, architectural, artistic or historic. DMRB HA208/07 provides a methodology for the assessment of the value of cultural heritage assets and use of this methodology in this assessment aligns with the guidance provided by the NPPF.

The assessment was undertaken on a five-point scale of Very High, High, Medium, Low and Negligible. DMRB provides a robust methodology for the assessment of significance of heritage assets and is widely accepted by the main heritage bodies. The following table is consulted throughout to provide the appropriate value for each cultural heritage asset described below.

Table 3.1: Assessing the value of cultural heritage receptors

Sensitivity	Criteria
Very High	<p>World Heritage Sites (including buildings and those inscribed for their historic landscape qualities)</p> <p>Assets of acknowledged international importance</p> <p>Assets that can contribute significantly to acknowledged international research objectives</p> <p>Extremely well-preserved historic landscapes with exceptional coherence, time-depth or other critical factors</p>
High	<p>Scheduled Monuments (including standing remains)</p> <p>Designated historic landscapes of outstanding interest</p> <p>Undesignated assets of schedulable quality and importance</p> <p>Assets that can contribute significantly to national research objectives</p> <p>Grade I and II* Listed Buildings</p> <p>Other Listed Buildings that can be shown to have exceptional qualities in their fabric or historical associations</p> <p>Conservation Areas containing very important buildings</p> <p>Undesignated structures of clear national importance</p> <p>Undesignated landscapes of outstanding interest, high quality or importance and of demonstrable national value</p> <p>Well-preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factors</p>
Medium	<p>Designated or undesignated assets that contribute to regional research objectives</p> <p>Undesignated historic landscapes that would justify special historic landscape designations, or landscapes of regional value</p> <p>Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor</p> <p>Grade II Listed Buildings</p> <p>Conservation Areas containing buildings that contribute significantly to its historic character</p> <p>Historic Townscape or built-up areas with important historic integrity in their buildings, settings or built settings</p>
Low	<p>Designated and undesignated assets of local importance</p> <p>Robust undesignated historic landscapes and historic landscapes with importance to local interest groups</p> <p>Historic landscapes whose value is limited by poor preservation and / or poor survival of contextual associations</p> <p>Assets compromised by poor preservation and/or poor survival of contextual associations</p> <p>Assets of limited value, but with potential to contribute to local research objectives</p> <p>'Locally Listed' buildings</p> <p>Historic (unlisted) buildings of modest quality in their fabric or historical association</p> <p>Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings</p>
Negligible	<p>Assets with very little or no surviving archaeological interest</p> <p>Buildings of no archaeological or historical note, or buildings of an intrusive character</p> <p>Landscape with little or no significant historical interest</p>
Unknown	<p>The importance of the resource has not been ascertained, or buildings with some (hidden) potential for historical significance</p>

3.4 Setting

The assessment of setting has been conducted in general accordance with the following guidance:

3.4.1 Conservation Principles (English Heritage 2008)

Conservation Principles outlines Historic England's approach to the sustainable management of the historic environment. While primarily intended to ensure consistency in Historic England's own advice and guidance, the document is recommended to LPAs to ensure that all decisions about change affecting the historic environment are informed and sustainable.

The guidance describes a range of heritage values which enables the significance of assets to be established systematically, with the four main 'heritage values' being:

- evidential value;
- historical value;
- aesthetic value; and
- communal value.

3.4.2 Good Practice Advice Note 3: The Setting of Heritage Assets (Historic England 2017)

This advice note focuses on the management of change within the setting of heritage assets and replaces 'The Setting of Heritage Assets' (Historic England 2015) and 'Seeing the History in the View' (English Heritage 2011).

As with the NPPF the document defines setting as:

'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve.'

Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset. It also states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset.

While setting is largely a visual term, with views identified to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, setting, and thus the way in which an asset is experienced, can also be affected by other environmental factors including noise, vibration and odour, while setting may also incorporate perceptual and associational attributes pertaining to the asset's surroundings.

Guidance is provided on practical and proportionate decision making with regards to the management of proposed development and the setting of heritage assets. It is stated that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects and that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting. It is also identified that different heritage assets may have different abilities to accommodate change within their settings without harming the significance of the asset and therefore setting should be assessed on a case-by-case basis.

Although not prescriptive in setting out how this assessment should be carried out, noting that any approach should be demonstrably compliant with legislation, national policies and objectives, Historic England recommend using the 'five-step process' to assess the potential effects of a proposed development on the setting and significance of a heritage asset:

- 1) Identify which heritage assets and their settings are affected;
- 2) Assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- 3) Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it;
- 4) Explore the way to maximise enhancement and avoid or minimise harm;
- 5) Make and document the decision and monitor outcomes.

3.5 Site Inspection

A site inspection was undertaken on the 24th August 2018.

3.6 Baseline Structure

In the Section 5 below, the baseline for the Scheme is discussed by three sub-topics: Archaeological Remains, Historic Buildings and Historic Landscapes. This is in accordance with DMRB HA208/07 guidance.

Geology and Topography

4.1 Geology

The solid bedrock geology of the Scheme comprises mudstone and siltstone of the Oxford Clay Formation, West Walton Formation and Ampthill Clay Formation (from west to east respectively).

Superficial Tidal Flat Deposits of clay and silt are recorded along the shoreline of the Humber Estuary. To the south of these, deposits of alluvial clay, silt and gravel dating to the Quaternary Period are identified (BGS 2018 online).

In the review of boreholes below, warp deposits are also identified. Warping was the process of deliberately flooding low-lying areas next to the Humber. The flood water was held by a series of sluices and drains to allow for the deposition of sediment. The process is believed to have served two purposes: firstly, fertile sediment was deposited on the unproductive clays and peats; and secondly the deposition of sediment allowed for the raising of the ground level to prevent against future flooding.

Soils within the Scheme are identified as “*loamy and clayey soils of coastal flats with naturally high groundwater*” (Soilscapes 2018 online).

4.2 Boreholes

The BGS (2018 online) records a number of boreholes along, and immediately adjacent to, the Scheme. Where available, these are summarised below:

- Three boreholes at the western end of the Scheme (SE92SE/15 A-C) identified between 0.3m and 0.6m of soil over clay and warp. Peat deposits up to 1m in depth were recorded at between 7m and 8m Below Ground Level (BGL);
- Borehole (SE92SE/23) at the western end of the Scheme identified 0.28m of topsoil over alluvial deposits to 6m BGL;
- Two boreholes (SE92SE34 and SE92SE22) to the east of Ferriby Sluice identified 4m of clay overlying silt to a depth of 21m and 23m BGL respectively;
- Eight trial pits (SE92SE24 to SE92SE30, SE92SE36 and SE92SE37) off Sluice Road to the south of the scheme identified 0.2m of topsoil over alluvial clay and silts to the maximum depth of the interventions (3m BGL).

In addition, an archaeological evaluation at the Fulseas Pumping Station (HER ELS3382), approximately 50m to the north of the eastern part of the Scheme, included a borehole transect and excavation of a single trial trench.

The transect consisted of nine boreholes sunk to a depth of between 7m and 8m BGL on an east to west alignment. The westernmost three boreholes were over the line of the former channel of the River Ancholme (HER MLS20413). The boreholes identified broadly homogenous deposition across the site consisting of the upper levels of a peat-like deposit at approximately 7m BGL.

Palaeoenvironmental assessment of the layer identified plant detritus and insect remains suggestive of formation in reed marsh. The peaty layer was overlain by a series of grey estuarine clays with low organic content. The former channel of the River Ancholme (HER MLS20413) yielded a deposit with terrestrial and aquatic insects species as well as plants from fresh to brackish-water habitats and evidence for meadow grazing nearby. No material suitable for dating was identified.

The single evaluation trench was excavated to a depth of approximately 2.25m above Ordnance Datum (aOD) (maximum depth of 1.2m) with three sondages (north, centre and south) excavated to a depth of approximately 1.25m aOD (2.2m deep) to test deposits at greater depth. The sequence encountered within the trench reflected the upper sequence of estuarine clay encountered within the above noted borehole transect (Field Archaeology Specialists 2009).

The Humber Wetlands Project also investigated the alluvial deposits within the Ancholme Valley (HER ELS235) in which the Scheme is situated. Transect 6: South Ferriby, comprised 19 boreholes, 15 of which lie within the wider study area, on an east to west alignment spanning 2.69km. The following is summarised from Neumann (1998):

'A lower layer of woody peat was identified at 2.5m to 3.5m below OD (bOD), resting on a sandy loam; this became progressively shallower towards the eastern edge of the transect (closer to South Ferriby), where the lower peat occurred at 2m aOD. The woody peat gave way to reed peat with a transitional layer of peaty clay, before giving way to a grey clay deposit which measured between 2.5m and 3.0m thick, containing well-preserved rootlets. Within the central area of the channel, deeper deposits were encountered, with a black peat observed at 5.9m bOD (8.5m BGL).

The grey clay was succeeded by a second phase of peat development, encountered at between 1m and 2m aOD. This formed an almost horizontal level across the floodplain. This peat had been overlain by another grey clay, merging to pink/beige clay approximately 1m BGL. In some areas, the depth of alluvium was reduced to only 2.1m, overlying gravelly sand, belying the presence of a gravel ridge rising to at least 1.7m aOD.

The results suggested channel aggradation followed by floodplain aggradation, first by organic (basal peat) and then by minerogenic (grey estuarine clay) deposits. The onset of peat development becomes younger towards the edges of the valley (4000-900 cal. BC); the infill of the main channel was complete by the mid-Holocene, followed by the formation of mire across the valley floor from 3800 BC onwards, reaching a maximum extent at the Bronze Age/Iron Age transition (1000-790 cal. BC). The central part of the valley saw the deposition of marine clay at 700-800 cal. BC. Marine regression in the Roman period resulted in the formation of the upper peat deposits; this was short-lived and the deposition of marine clays continued within the Roman period.'

4.3 Ground Investigations (GI)

GI works undertaken in support of the Scheme comprised 16 cable percussive boreholes and six window samples (Arcadis 2016). Boreholes (BH01-BH16) were located at regular intervals from west to east along, or just to the south of, the extant tidal defences.

In the western part of the Scheme, boreholes BH01-BH06 identified a deep sequence of alluvial clays and silts sealed by made ground deposits between 1.2m and 2m in depth. Peat deposits were recorded within BH01 at 8.5m BGL, in BH05 at 11.5m BGL and BH06 at 14m BGL. BH07 was located to the north of the Hope and Anchor public house and encountered 3.4m of made ground overlying alluvial clays and silts to a depth of 23.5m BGL.

In the eastern part of the Scheme, to the west of the former channel of the River Ancholme (HER MLS20413), boreholes BH08-BH13 identified sequences of alluvial clays and silts sealed by deep deposits of made ground between 2m and 2.9m in depth. No peat deposits were encountered in this area.

To the east of the former channel of the River Ancholme (HER MLS20413), boreholes BH14-BH16 again identified deposits of made ground to 2m BGL overlying alluvial clays and silts. Again, no peat deposits were recorded.

The six window samples were located centrally within the Scheme, to the south of a former brickyard (HER MLS21994). A deep deposit of made ground was recorded within WS01 to 1.2m BGL. The remainder of the window samples contained relatively modest deposits of made ground between 0.2m and 0.35m in depth. The made ground was shown to overly alluvial clays and silts. A peat deposit was identified in WS02 at 5.9m BGL only.

4.4 Topography

The Scheme occupies low-lying ground on the southern bank of the South Channel of the Humber Estuary at a height of between 2m and 3m aOD.

To the east of the Scheme, in the vicinity of South Ferriby, the ground grades up along the north to south oriented chalk Wolds.

Baseline: Archaeological Remains

5.1 Previous Archaeological Investigations

The locations of previous archaeological investigations are shown in Figure 1 in Appendix A.

The HER identifies a previous geophysical survey (HER ELS3036) at land north of Sluice Road to partly overlap with the western part of the Scheme. The survey was undertaken in advance of urgent tidal defence works and comprised three small areas. The survey recorded anomalies interpreted to reflect a possible channel, former extraction pits, and traces of a recently demolished brick structure (Oxford Archaeotechnics 1997).

A watching brief (HER ELS3035) was subsequently undertaken during excavations for the urgent tidal defence works at Ferriby Sluice (NHLE 1005244) near the footprint of the western part of the Scheme. The works included the monitoring of topsoil removal across an area measuring 16m x 150m. The topsoil was 0.3m in depth and covered a 0.3m thick layer of demolition material which contained post medieval china. This deposit overlaid red brick wall foundations and a flat surface interpreted as a yard shown on historic mapping. A new 63m open drain was also excavated to a depth of 0.85m within the stripped surface. No archaeological evidence pre-dating the post medieval period was observed (Tann 1999).

In the wider study area, a number of previous interventions are identified. Those considered most relevant to the Scheme are summarised below:

- As noted above (Section 4.2) a programme of archaeological investigation was undertaken in support of the construction of the Fulseas Pumping Station approximately 50m to the north of the eastern part of the Scheme. This included: a desk-based assessment (HER ELS3267); borehole transect and trial trench (HER ELS3382); and a watching brief (HER ELS3383). The watching brief did not identify any archaeological evidence. The recorded deposits comprised estuarine/alluvial clays consistent with those observed during the preceding evaluation and borehole transect (Field Archaeology Specialists 2010);
- An archaeological desk-based assessment of the Humber foreshore (HER ELS3025), to the immediate north of the Scheme, was undertaken in support of the Humber Estuary Shoreline Management Plan (Wetland Archaeology & Environments Research Centre 2001). The Scheme falls within Management Unit 5: Whitton to South Ferriby Cliff. The assessment highlighted a Roman road on the foreshore at South Ferriby (HER MLS16777) to the immediate north of the western part of the Scheme. This was previously identified by the Humber Wetlands Project (HER ELS137);
- A watching brief at Ferriby Depot (HER ELS3099), approximately 100m to the south of the Scheme, was undertaken during excavations for a ring-beam foundation trench. The excavations reached depths of between 1m and 1.2m BGL and only modern deposits were observed (Jarvis 1997);
- An archaeological evaluation at Old Post Office Lane (HER ELS2617), approximately 130m to the south-east of the Scheme, comprised the excavation of two trial trenches in advance of a proposed residential development. No significant archaeological deposits were identified. The natural geological substrate, a yellow sand, was identified at a depth of 1.4m BGL (Hamilton 2006);
- Amateur excavations on the site of a medieval bridge (HER MLS17657) over the former channel of the River Ancholme (HER ELS1346), approximately 175m to the south of the Scheme, identified masonry and brickwork foundations and a possible stone and chalk rubble causeway (HER MLS26041);

- A watching brief at Humber Lodge (HER ELS2908), approximately 180m to the south-east of the Scheme, identified a large undated north to south oriented ditch (HER MLS20719) (Clay 2008);
- An archaeological evaluation at Skinners Lane (HER ELS2616), approximately 220m to the south-east of the Scheme, comprised the excavation of two trial trenches in advance of a proposed residential development. No significant archaeological deposits were identified. The natural geological substrate, a yellow sand, was identified at a depth of 1m BGL (Hamilton 2006);
- An archaeological watching brief at The Old Garth (HER ELS964), approximately 250m to the south of the Scheme, did not record any archaeological evidence;
- A building survey at South Ferriby Hall, approximately 250m to the north-east of the Scheme, identified the building to date to the 17th century. Six phases of development were suggested.
- The study areas for a number of previous desk-based assessment are also noted to intersect with the Scheme and wider study area (HER ELS3030, ELS3522, ELS3848, ELS3747 and ELS3900). These studies do not provide any further insights into the archaeological potential of the Scheme and wider study area; and
- Geophysical survey (HER ELS2035) and excavation (HER ELS2165 and ELS2234) at Horkstow Road, approximately 500m to the south-east of the Scheme, recorded evidence of prehistoric, Roman and early medieval activity.

In addition, it is noted that an extensive programme of research was undertaken as part of the Humber Wetlands Project. This included areas of fieldwalking, to the south (HER ELS274, ELS277, ELS456, ELS457, ELS458, ELS461, ELS462, ELS463 and ELS2113) and west (HER ELS507, ELS510, ELS559, ELS560, ELS561, ELS586 and ELS587) of the Scheme respectively, and an earthwork survey (HER ELS1345) of a possible medieval haven (HER MLS19662) on the eastern bank of the former channel of the River Ancholme (HER ELS1346), approximately 130m to the south of the Scheme. No finds were recorded during the fieldwalking. The project also included the above mentioned (Section 4.2) borehole transect crossing the Ancholme Valley (Neumann 1998).

The HER also notes numerous aerial photograph sorties, LiDAR survey flights and Defence of Britain site visits. Where relevant the results of these past investigations and assessments will be referred to in the sections below.

5.2 Designated Assets

The locations of designated and non-designated archaeological assets are shown in Figure 2 in Appendix A.

There is one Scheduled Monument (Ferriby Sluice (NHLE 1005244)) within the Scheme, this is discussed further below.

There are no Protected Historic Wrecks within the wider study area.

5.2.1 Ferriby Sluice (NHLE 1005244)

This asset comprises a scheduled sluice and lock over the New River Ancholme (Plate 1) located centrally within the Scheme.



Plate 1: View of Ferriby Sluice (NHLE 1005244) from west

List Entry: The following is recorded in respect of the asset:

'The modern sluice and lock was built in 1842-44 by Sir John Rennie, on the site of earlier sluices of 1640 and 1769. It separated the New River Ancholme from the tidal River Humber, and incorporated a lock that was crossed by a swing road bridge. This bridge was replaced by a lifting bridge in 1982.'

Significance: No reason for designation is provided, however its primary significance, in NPPF terms, derives from its archaeological, architectural and historic interest as a surviving example of a 19th century sluice located on the site of an earlier 17th century structure.

This asset is of high cultural heritage value.

Setting: The immediate setting of this asset comprises its position on the New River Ancholme. To the north is the Humber Estuary, to the east are a number of small dwellings, the Hope and Anchor public house and industrial yards, to the south and west are the New River Ancholme and the CEMEX cement factory. The asset is experienced, primarily, when traversing the A1077 road and there are wide ranging views to the north and south towards the Humber and along the New River Ancholme respectively. This immediate setting is considered to make a small positive contribution to the overall significance of the asset, and allows for an appreciation of its evidential and historical values.

Significance and Setting Summary: The Scheme forms a small part of the immediate setting of this asset and allows for a limited experience of its evidential and historic values. As such, the Scheme is considered to make a neutral contribution to the asset's overall significance.

5.3 Non-designated Assets

5.3.1 Prehistoric Period (c.750,000 BC – AD 42)

There are no prehistoric assets recorded within the Scheme.

In the wider study area, prehistoric assets include: the Middlegate Lane Trackway (HER MLS20002) which follows the edge of the chalk Wolds approximately 250m to the south-east of the Scheme. While a prehistoric date for the trackway is unproven, at the southern limit of the trackway it connects with another trackway that forms part of a complex of enclosures of Iron Age date; a possible prehistoric burial (HER MLS1659) found in a coracle-type vessel on the banks of a former creek within the former South Ferriby brick works approximately 350m to the south of the Scheme during the early 20th century; and a worked piece of flint (HER MLS19389) found approximately 370m to the south of the Scheme.

These assets suggest a low-level of prehistoric activity within the wider study area and are of low cultural heritage value.

In addition, it is noted that the PAS records the findspots of a number of prehistoric lithic implements within the South Ferriby area. These assets have been removed from the wider study area and are therefore of negligible cultural heritage value.

5.3.2 Romano-British Period (AD 43 – AD 410)

Traces of a south-east to north-west oriented Roman road or causeway (HER MLS16777) were identified on the foreshore to the immediate north of the western part of the Scheme in 1994. Investigation of the road revealed it to have been constructed in two phases. The first phase consisted of a layer of brushwood overlying alluvium. The second phase was a layer of chalk blocks covered by a layer of compacted gravel. Pottery recovered from the road indicated a 2nd to 3rd century date. It was suggested that the road could have linked the Roman settlements at Old Winteringham (HER MLS2068) to the west and at South Ferriby Cliff (HER MLS1661) to the east.

Further investigation of the road was undertaken during the Humber Wetlands Project in 1996 due to coastal erosion. This investigation identified three successive road surfaces with evidence of marine inundation between the upper two. A radiocarbon date of 44-130 cal. AD was obtained from the brushwood layer (Chapman *et al.* 1998). The projected course of the road is thought to cross the western part of the Scheme. Although, no evidence of the asset was identified during the archaeological watching brief previously undertaken across this area (HER ELS3035, Tann 1999).

This asset forms part of the wider Roman landscape surrounding the Scheme and is associated with the two important settlement sites and their arterial roads. Therefore, the asset is of medium cultural heritage value.

In the wider study area, Roman assets include: pottery and human remains (HER MLS1663) found during a housing development in South Ferriby during the 1950s approximately 180m to the south of the Scheme; fragments of pottery (HER MLS10296 and MLS1659) recovered from the South Ferriby brickyard approximately 200m to the south of the Scheme; a Roman coin (HER MLS1660) found within South Ferriby approximately 370m to the south of the Scheme; the Roman settlement site at South Ferriby Cliff (HER MLS1661) approximately 450m to the north-east of the Scheme; and a Roman seal box fragment (HER MLS21736) found by a metal detectorist approximately 470m to the south-east of the Scheme.

The settlement site at South Ferriby Cliff (HER MLS1661) is of medium cultural heritage value. The remainder of the Roman assets have been removed from the wider study area and are of negligible cultural heritage value.

In addition, the PAS records the findspots of approximately 500 Roman coins, pottery, and other metallic objects from within the South Ferriby area. The majority of these are noted to have been recovered from the foreshore to the north-east of South Ferriby Hall (NHLE 1215058) during the late 19th century along with finds of human remains (Roth 1906). Further human remains and pottery (HER MLS26109) have also recently been identified eroding from the Humber foreshore at South Ferriby Cliff (HER *pers. comm.*) at the north-eastern limit of the wider study area. These finds are likely to relate to the known Roman settlement site on the higher ground (HER MLS1661) approximately 450m to the north-east of the Scheme. While these assets indicate a sustained Roman presence at South Ferriby, they have been removed from the wider study area and are therefore of negligible cultural heritage value.

5.3.3 Early Medieval Period (AD 411 – AD 1065)

There are no early medieval assets recorded within the Scheme.

In the wider study area, early medieval assets are limited to a 9th century strap end and an annular brooch (HER MLS21736) found by a metal detectorist approximately 470m to the south-east of the Scheme.

These assets have been removed from the wider study area and are of negligible cultural heritage value.

Within South Ferriby, an early Anglo-Saxon 'Grubenhau' (HER MLS20560) was recorded during excavations on land off Horkstow Road (Clay 2004), approximately 600m to the south-east of the Scheme, which suggests some limited settlement within the area at this time.

This asset is important to the understanding of the development of South Ferriby during the early medieval period and is of low cultural heritage value.

In addition, the PAS also records nine finds of early medieval date from the South Ferriby area including three coins, a spindle whorl, a brooch, a weight, a linen smoother, a mount and a buckle. These assets have been removed from the wider study area and are of negligible cultural heritage value.

5.3.4 Medieval Period (AD 1066 – AD 1550)

The eastern part of the Scheme crosses the medieval former channel of the River Ancholme (HER MLS20413) which led to a haven at South Ferriby. The channel alignment is clearly discernible within the available historic aerial photographs and LiDAR data (see below).

In the wider study area, the site of a bridge (HER MLS17657) and associated sluice (HER MLS19663) are recorded approximately 100m to the south of the Scheme. The bridge was first mentioned in documentary sources in c.1200 AD and is thought to have survived until the 17th century, as demonstrated by the available historic mapping (Section 5.4). Amateur investigation of the site in 1983 (HER ELS1346) recorded an approach causeway (HER MLS26041) and the remains of a single arch with a 15-foot span. The causeway alignment is also discernible within the available historic aerial photographs and LiDAR data (see below).

Further medieval assets include: the site of the above noted haven (HER MLS19662) on the eastern bank of the former channel of the River Ancholme (HER MLS20413) approximately 130m to the south of the Scheme; the site of a possible medieval hermitage (HER MLS19664) identified from historic mapping approximately 160m to the south of the Scheme; the historic core of South Ferriby village (HER MLS9684) which was first mentioned in the Domesday Book of 1086 AD as 'the farmstead/village at the ferry' and lies approximately 290m to the east of the Scheme; the site of a possible moat (HER MLS1656) approximately 350m to the south of the Scheme; a substantial drainage system and possible watermill site (HER MLS1655) approximately 360m to the south of the Scheme; and an area of extant ridge and furrow earthworks (HER MLS10249) approximately 400m to the north-east of the Scheme.

These assets contribute to the understanding of the development and economy of South Ferriby during the medieval period and are of low cultural heritage value.

The PAS also records approximately 340 medieval finds from the wider study area including coins, buckles and strap mounts. These assets have been removed from the wider study area and are therefore of negligible cultural heritage value.

5.3.5 Post Medieval (AD 1551 – Present)

The eastern part of the Scheme crosses the area of a former brickyard (HER MLS21994) identified from historic mapping.

This asset has been identified from cartographic sources and is of negligible cultural heritage value.

In the wider study area, numerous post medieval assets are recorded, mainly reflecting the industrial usage of the areas along the banks of the New River Ancholme and the sites of former buildings and farmsteads shown on historic mapping. These assets are summarised in Table 5.1 below.

Table 5.1: Summary of non-designated post medieval assets within the wider study area

HER Number	Name	Monument Type	Value	Proximity to the Scheme
MLS2904	Mill House (site of), Ferriby Sluice	House	Low	370m
MLS7787	Ferriby Sluice mill (site of)	Windmill	Low	360m
MLS9481	New River Ancholme	Canal	Low	80m
MLS10287	Workhouse and yard (site of), foot of Ferriby Hill	Workhouse	Negligible	225m
MLS17656	Monson sluice (site of), New River Ancholme	Sluice	Negligible	170m
MLS17661	Frank's brick works (site of), Red Lane	Brick works	Negligible	490m
MLS17675	Abstainer's hall (site of), Low Street	Meeting hall	Negligible	270m
MLS17683	White Cottage, Sluice Road (n side) (site of)	House	Negligible	130m
MLS21409	Searchlight Battery, Sluice Road (site of)	WWII asset (site of)	Low	140m
MLS22005	Brickyard (site of)	Brickyard	Negligible	350m
MLS22006	Brickyard (site of)	Brickyard, brick works	Negligible	350m
MLS22007	Brick works (site of)	Brick works	Negligible	320m
MLS22218	Pinfold (site of), Sluice Road	Pound	Negligible	100m
MLS22219	Rectory (site of), Horstow Road	Vicarage	Low	360m
MLS22806	Pinfold (site of), Ferriby Hill	Pound	Negligible	225m
MLS25073	Site of unnamed farmstead, South Ferriby	Farmstead	Negligible	70m

MLS25075	Site of unnamed farmstead, South Ferriby	Farmstead	Negligible	100m
MLS25098	Site of unnamed farmstead, Winteringham	Farmstead	Negligible	20m

The PAS also records 196 post medieval finds within the wider study area including coins, buckles, buttons and hooked tags. These assets have been removed from the wider study area and are therefore of negligible cultural heritage value.

5.3.6 Undated

There are no undated assets recorded within the Scheme.

In the wider study area, undated assets include: two linear cropmarks (HER MLS20788) that extend towards the western limit of the Scheme; the site of a sundial (HER MLS7149) identified in the vicinity of the Hope and Anchor public house approximately 40m to the east of the Scheme; a large ditch (HER MLS20719) observed during an archaeological watching brief at Humber Lodge (HER ELS2908) approximately 180m to the south-east of the Scheme; and another ditch (HER MLS20811) approximately 400m to the south of the Scheme identified as a non-antiquity by the HER.

These assets are of unknown cultural heritage value.

5.4 Historic Mapping

A review of the available historic mapping for the Scheme is presented below and illustrated in Figures 3-9 in Appendix A.

The 1622 Map of the Manor of Winteringham (Figure 3 in Appendix A) shows the western part of the Scheme to lie within an enclosed area identified as 'Ancom Marshe'. To the north is the road from Barton to Winterton and an area of salt marsh labelled as 'Winteringham East Groves'. To the east is the River Ancholme, although no structures are shown at the site of Ferriby Sluice. To the south is an area labelled as Winterton common pasture and to the west is a large area of common meadow labelled as 'Winteringham Ings'. The shoreline at this time is noted to extend significantly further to the north, encompassing the current area of Read's Island

The 1644 Plan of the River Ancholme (Plate 2) does not show the area of the Scheme in any detail, although two bridges are depicted crossing the New River Ancholme and the former channel of the River Ancholme (HER MLS20413) respectively. The map also suggests the former channel of the River Ancholme (HER MLS20413) was still extant as a watercourse at this time.



Plate 2: Extract from a plan of the River Ancholme dated 1644

The 1719 Map of the Manor of Winterringham (Figure 4 in Appendix A) shows the western part of the Scheme to lie within a series of north to south oriented narrow rectilinear enclosures forming part of 'Ankam Marsh'. To the north of these enclosures, is a broad area identified as 'Farr Groves' which is bounded by the foreshore of the Humber. At the eastern limit of the map, the course of the New River Ancholme is depicted and is bounded to the west by three irregular enclosures labelled as 'Nooks'. The map covers the Manor of Winterringham and shows that the landscape to the west of the Scheme was comprised of regular enclosures labelled as 'Ings' and 'Carr', or watermeadow and marsh, which reflects the low-lying nature of the area.

The 1804 South Ferriby Enclosure Map (from a 20th century copy) shows the eastern part of the Scheme to lie within an area of regular enclosures to the south of the Humber Bank (Figure 5 in Appendix A). The eastern extent of the Scheme is shown to extend into the area/gardens forming part of South Ferriby itself. South Ferriby is depicted to be formed from a series of irregular enclosures along a principal north-east to south-east axis and the wider landscape is shown to comprise regular rectangular enclosures.

The 1868 Plan of South Ferriby (Figure 6 in Appendix A) shows limited change within the eastern part of the Scheme, although some of the fields to the immediate east of Ferriby Sluice are not depicted. Those at the eastern limit of the Scheme are recorded to comprise: Cottager's Pasture (137); Bank and Foreshore (138 and 139); and Normarsh (140).

The 1886 Ordnance Survey Map (Figure 7 in Appendix A) shows the western part of the Scheme as an area of regular elongated rectangular enclosures as shown within the 1719 Winterringham Manor Map. To the north-west of Ferriby Sluice (NHLE 1005244), the area of the Scheme is depicted to lie within three small irregular fields with a number of buildings present on the western bank of the New River Ancholme. The tidal defences in this area are shown to be up to 80m further to the north of the present-day defences. The eastern part of the Scheme is shown to comprise a number of small regular enclosures and includes a large fishpond and brickyard (HER MLS21994). In the wider study area, the aforementioned brick works (HER MLS22005 to MLS22007) and associated extraction pits are shown on the western and eastern banks of the New River Ancholme. In general, the landscape surrounding the Scheme is depicted to comprise regular rectangular enclosures. South of the wider study area, on the western edge of the New River Ancholme, a windmill (HER MLS7787) is also mapped.

The 1908 Ordnance Survey Map (Figure 8 in Appendix A) shows limited change to the western part of the Scheme. Modifications to the line of the tidal defences to the north of the Scheme are depicted including the construction of a new east to west oriented embankment to the south of Sluice Road. In the eastern part of the Scheme, further expansion of the brick works and associated

extraction pits is shown (HER MLS21994). Similarly, further expansion of the brickyards to the west and east of the New River Ancholme (HER MLS22005 to MLS22007) is depicted in the wider study area. The above noted windmill (HER MLS7787) is now labelled as Sluice Corn Mill.

The 1950 Ordnance Survey Map (Figure 9 in Appendix A) shows limited change to the area of the Scheme. In the wider study area, the CEMEX cement factory is depicted to have been constructed (this is documented to have occurred in 1938) with associated ponds to the west.

The 1965 Ordnance Survey Map (not illustrated) shows further modifications to the tidal defences in the western part of the Scheme. The line of the defences shown in the earlier mapping appears to have been eroded or damaged and new embankment is depicted to have been constructed to the south along the alignment of the present-day defences. South of Sluice Road, substantial expansion of the CEMEX cement factory and associated ponds to the west is recorded. This includes the construction of a conveyor from the South Ferriby Chalk Pit to the east. The brick works and extraction pits within the eastern part of the Scheme, and along the New River Ancholme, are no longer labelled as such. The above noted Sluice Corn Mill is no longer depicted.

The 1995 Ordnance Survey Map (not illustrated) shows limited change to the area of the Scheme. In the wider study area, further expansion of the CEMEX cement factory ponds is depicted. A football ground is also recorded to have been constructed to the north of Sluice Road in the western part of the Scheme.

Subsequent mapping shows limited change to the area of the Scheme and wider study area.

5.5 Aerial Photographs

Historic aerial photographs held at the Historic England Archive (Swindon) were reviewed in December 2016. A full gazetteer of the photographs is provided at Appendix B. In general, the photographs support the results of the map regression above.

Images dating from September 1946 (RAF/CE/UK/178 1131-1139) show ongoing extraction work on the western and eastern banks of the New River Ancholme. The CEMEX cement factory is recorded at this time and the above-mentioned (Section 5.4) Sluice Corn Mill is also shown to remain extant.

Images from April 1947 (RAF/CPE/UK/2043 2111-2119) similarly show ongoing extractive activities along the New River Ancholme and traces of the new conveyor from the South Ferriby Chalk Pit to the CEMEX cement factory. To the north of the western part of the Scheme, the new embankment shown in the 1965 mapping is recorded to have been constructed. Also clearly depicted are the course of the former channel of the River Ancholme (HER MLS20413) in the eastern part of the wider study area and associated causeway (HER MLS26041) to the former river crossing from South Ferriby. A circular feature recorded on the foreshore to the north-west of the former river mouth is of uncertain origin and purpose and does not appear in the later imagery or LiDAR data. This feature is considered likely to relate to the South Ferriby Brickyard (HER MLS21994). Ridge and furrow earthworks (HER MLS10249) were also noted to the north-east of South Ferriby Hall (NHLE 1215058) and are clearly shown in the LiDAR data discussed below (Section 5.6).

Images from August 1966 (OS/66224) record repair works being undertaken to the tidal defences to the north of the eastern part of the Scheme, to the north and north-west of the CEMEX cement factory, and to the north-east of Ferriby Sluice (NHLE 1005244).

Detailed images from October 1987 (OS/87 199 625-637) again clearly show the causeway (HER MLS26041) from South Ferriby to the river crossing of the former channel of the River Ancholme (HER MLS20413). A number of palaeochannels were also noted.

No trace of the Roman road (HER MLS16777) to the north of the Scheme was identified within the aerial photographs. No other features of archaeological interest, not previously recorded by the HER, were identified.

5.6 LiDAR Data

LiDAR data for the Scheme (Figure 10 in Appendix A) provides further detail on surviving landscape elements shown in the historic mapping and aerial photographs discussed above.

In the western part of the Scheme, a series of north to south oriented linear features are shown to the north of the CEMEX cement factory. These features accord with former field boundaries shown on the historic mapping that have been gradually eroded/removed during the expansion of the factory. The disturbed nature of the area to the west of the CEMEX cement factory, bordering the Scheme to the immediate east, is also clearly evident within the data. This reflects the successive phases of pond excavation, expansion and backfilling shown within the historic mapping and aerial photographs.

In the eastern part of the Scheme, traces of former extraction activity are clearly shown to the immediate south of the extant tidal defences. The sinuous course of the former channel of the River Ancholme (HER MLS20413), a number of subsidiary channels, and the causeway from South Ferriby (HER MLS26041) are also discernible. At the eastern limit of the Scheme, a north-east to south-west oriented linear feature again accords with the location of a former field boundary shown on the historic mapping. In the wider study area, the LiDAR data indicates a series of extant ridge and furrow earthworks (HER MLS10249) in the vicinity of South Ferriby Hall (NHLE 1215058). These include cultivation earthworks represented by a series of north-west to south-east oriented parallel linear features to the north-east and a complex of linear and rectilinear features to the south-west. The origin of the latter features is uncertain, although it is considered that they are likely to represent former boundaries or drains.

5.7 Archaeological Potential

There is limited evidence for prehistoric activity within the Scheme, although it is acknowledged that paleoenvironmental deposits of prehistoric date associated with the former channel of the River Ancholme (HER MLS20413) may be present. However, such deposits have been shown to be deeply buried under alluvial and warp deposits within the footprint of the Scheme at approximately 7m BGL.

There is firm evidence for sustained Roman activity within the landscape surrounding the Scheme, particularly the settlements at Old Winteringham (HER MLS2068) to the west and at South Ferriby Cliff (HER MLS1661) to the east. A possible road connecting these settlements has been identified on the foreshore to the north of the Scheme (HER MLS16777) and the projected alignment of this feature crosses the western part of the Scheme. In addition, numerous finds including coins, brooches and human remains have been found within South Ferriby, particularly along the Humber foreshore at South Ferriby Cliff. Given the above, a moderate potential for previously unknown Roman assets is identified. Given the low-lying topography of the Scheme, such evidence, if present, is anticipated to comprise further unstratified finds particularly towards the higher ground on the eastern fringe of the Scheme.

Medieval evidence within the wider study area focuses around South Ferriby itself and the crossing point (HER MLS17657) across the former channel of the River Ancholme (HER MLS20413) and associated haven (HER MLS19662). Given that the eastern part of the Scheme crosses the line of the former river channel and encroaches on the periphery of the village, as shown in the historic mapping, a moderate/low potential for medieval evidence is identified. Such evidence, if present, is anticipated to comprise unstratified finds derived from peripheral village activity. As identified below (Section 7.3), during the medieval period, periodic inundation of the Scheme from the River Ancholme would have precluded its use for settlement and agriculture. This is further supported by the historic mapping which records the western part of the Scheme as within Ankam Marsh including areas labelled as 'Ings and 'Carr'.

Post medieval assets within the footprint of the Scheme relate to a former brickyard (HER MLS21994) and associated areas of extraction/fish ponds. Both the historic mapping and LiDAR data

indicate broad areas of disturbance to the west of the former channel of the River Ancholme (HER MLS20413). In addition, the courses of a number of former field boundaries are noted within the LiDAR data at the western and eastern limits of the Scheme respectively.

The PAS records numerous finds from the South Ferriby area dating from the prehistoric period onwards. A potential for further unstratified evidence is therefore acknowledged.

Baseline: Historic Buildings

6.1 Designated Assets

The locations of designated and non-designated historic buildings are shown in Figure 11 in Appendix A.

There are no Listed Buildings within the Scheme. In the wider study area, four Listed Buildings are present which are discussed below.

There are no Conservation Areas within the Scheme or wider study area.

6.1.1 Woodside Farmhouse (NHLE 1103705)

This asset comprises a Grade II listed farmhouse dating to the early 18th century located 170m to the north-east of the eastern limit of the Scheme within South Ferriby.

List Entry: Historic England (2018 online) records the following in respect of the asset:

'Farmhouse. c1700 with later additions and alterations. Brick, colourwashed to front and sides. Pantile roof. Original section L-shaped on plan, with later C18 - C19 extension set back to right, and later C19 - early C20 infill in angle to rear left. 2 storeys, 3 first floor windows; entrance to left of centre. Recessed C19 panelled door and plain overlight in doorcase with pilasters supporting plain entablature and hood flanked by single sashes. First floor has small sash above entrance flanked by sashes under gables with decorative bargeboards. All sashes are C19 4-pane in flush wood surrounds with flush sandstone lintels and projecting cills. Stepped and cogged brick eaves cornice. Brick coped and tumbled gable to left with C19 bargeboards; roof hipped to right. Axial stack to rear right. Extension to right has plain door, single 6-pane sashes to each floor, dentilled brick eaves cornice and end stack. Interior not investigated.'

Significance: No reason for designation is provided, however its primary significance, in NPPF terms, derives from its architectural and historic interest as a surviving example of an early 18th century farmhouse.

This asset is of medium cultural heritage value.

Setting: The immediate setting of this asset comprises its position at the northern limit of South Ferriby, bounded to the north and west by associated agricultural buildings and a non-designated former farmhouse (HER MLS25071), to the east by a private garden, and to the south by further private dwellings within South Ferriby. There are limited views from the asset towards the Scheme due to intervening vegetation and buildings. This immediate setting is considered to make a small positive contribution to the significance of the asset and allows for an appreciation of its evidential and historical values.

Significance and Setting Summary: The Scheme forms part of the wider landscape setting of this asset but is mostly screened due to intervening vegetation and buildings. As such, the Scheme is considered to make a neutral contribution to the asset's overall significance.

6.1.2 South Ferriby Hall (NHLE 1215058)

This asset comprises a Grade II listed 19th century hall, with earlier 17th elements, located approximately 250m to the north-east of the Scheme (Plate 3).



Plate 3: View of South Ferriby Hall (NHLE 1215058) from the north-west

List Entry: Historic England (2018 online) records the following in respect of the asset:

'Small country house. 1805 for Sir John Nelthorpe with later C19 additions to rear. Red brick: original section in Flemish bond with front and right return in narrower facing bricks. Concrete tile roof to central front section, slate roof to wings and rear. Plan: double-depth central section has single room to front with two central canted bays and entrance/stairhall to right, flanking single-room projecting wings with canted fronts and later additions to rear. Main rooms to front and right; service and servants' rooms to left and rear. 2 storeys, 6 bays; symmetrical, with 4-bay central section flanked by single-bay wings. Entrances to end bays of central section have flights of 4 stone steps to half-glazed panelled doors (that to left a dummy) beneath plain overlights and channelled and keyed stucco flat arches. Pair of central full-height bay windows with three 12-pane sashes to each floor in Doric surrounds with columns supporting recessed entablatures. First floor 12-pane sashes to either side with channelled and keyed stucco flat arches and projecting cills. Fronts of wings have 3 similar windows to each floor, apart from blind window panels to right side of left wing. Three downpipes to central section with fluted rainwater heads bearing date. Plain eaves board. Double-span hipped roof to central section; hipped roofs to bays, wings and additions. Pair of axial stacks to front central section, large axial stack to rear; lateral stacks to wings, axial stacks to later section. Right return: 2 storeys with 2-storey and attic section to right, 5 bays. Original wing to left has 3 stone steps to French window and single 12-pane sashes to each floor similar to front; later section set back to right has 3 flush 12-pane ground floor sashes under segmental arches, similar sash and tripartite sash to first floor, 2 unequal sashes to attic and stepped and cogged brick eaves cornice. Interior. Stairhall has open well staircase with ramped and wreathed handrail, column newels and balusters, ornate dentilled cornice to lower hall, and modillioned cornice and pair of round-headed doors with radial fanlights in architraves to upper hall. Ground floor central room has moulded dado rail, ornate moulded cornice and marble chimneypiece with reeded surround and frieze with carved panels. Ground floor right wing has ornate moulded cornice and marble chimneypiece with triple half-columns and pulvinated frieze with carved central and side panels. The three main first floor rooms

have moulded and dentilled cornices and good chimneypieces with composition ornament, that to centre left particularly ornate. Beaded-panel window-shutters and doors in architraves throughout.'

Significance: No reason for designation is provided, however its primary significance, in NPPF terms, derives from its architectural and historic interest as a surviving example of an 19th century small country house, with associated landscaped gardens, with earlier 17th century origins.

This asset is of medium cultural heritage value.

Setting: The immediate setting of this asset comprises its position to the north of South Ferriby bounded to the north and south by woodland, to the east by agricultural land, and to the west by further small areas of agricultural land and private gardens. There are views to the north-west from the asset towards the Humber. This immediate setting allows for the quiet appreciation of the assets evidential and historical values and is considered to make a small positive contribution to its overall significance.

Significance and Setting Summary: The Scheme forms part of the wider landscape setting of this asset but is mostly screened due to intervening vegetation and buildings. As such, and given the intervening distance, the Scheme is considered to make a neutral contribution to the asset's overall significance.

6.1.3 Glentworth House (NHLE 1346857)

This asset comprises a Grade II listed 19th century house located approximately 300m to the south-east of the Scheme within South Ferriby.

List Entry: Historic England (2018 online) records the following in respect of the asset:

'House. c1800. Brick with pantile roof. 2-room central entrance hall plan: gable-end to street. 2 storeys, 2 first floor windows. Panelled door flanked by 12-pane flush sashes beneath segmental arches. Narrow 12-pane first floor sashes. Stepped and cogged brick eaves cornice. Stone-coped gables. End stacks.'

Significance: No reason for designation is provided, however its primary significance, in NPPF terms, derives from its architectural and historic interest as a surviving example of a 19th century vernacular building.

This asset is of medium cultural heritage value.

Setting: The immediate setting of this asset comprises its position on High Street, within South Ferriby, bounded to the north, south and west by further residential buildings, and to the east by an area of sloping grass. There are no views from the asset towards the Scheme due to intervening vegetation and buildings. This immediate setting is considered to make a small positive contribution to the significance of the asset and allows for an appreciation of its evidential and historical values.

Significance and Setting Summary: The Scheme forms part of the wider landscape setting of this asset but is entirely screened due to intervening vegetation and buildings. As such, the Scheme is considered to make a neutral contribution to the asset's overall significance.

6.1.4 Church of Saint Nicholas (NHLE 1288277)

This asset comprises a Grade II* listed medieval church (Plate 4) located approximately 350m to the south-east of the Scheme within South Ferriby.



Plate 4: View of Church of Saint Nicholas (NHLE 1288277) from the west

List Entry: Historic England (2018 online) records the following in respect of the asset:

'Parish church. C13 or earlier nave with C14-C15 windows, rebuilding of 1578-80, including chancel. Early C19 rebuilding and top stage to tower, lancets to nave; restorations of 1889 by C H Fowler of Durham included new chancel, re-roofing, re-flooring. Red brick tower with ashlar dressings; nave and porch of limestone ashlar, coursed rubble and brick; brick and ashlar vestry; chancel of brick with ashlar dressings. Slate roofs. Steep hillside position. 3-bay nave re-aligned north-south in 1889, with north-east tower and adjoining east vestry (former chancel), west porch and single-bay south chancel. Nave: C19 buttresses to north; three C19 west lancets with hoodmoulds, incorporating original masonry; re-set four-centred arch east window with Perpendicular tracery; pointed 3-light north window with Perpendicular tracery, re-set in C19 above blocked door, flanked by lancets similar to those on west (one with re-used medieval masonry); cornice and coped parapet. Vestry (outshut in angle of tower and nave) has re-set segmental-pointed 2-light cinquefoiled east window with hoodmould, C19 pointed 2-light window and blocked square-headed opening to south. 2-stage tower: plinth, diagonal buttress to east. 1st stage has pointed chamfered west door with re-set hoodmould and crude headstops, east slit window, plain string course. Second has 2-light square-headed ashlar openings to north and south, latter blocked. Pointed belfry openings with brick band and low stone-coped embattled parapet with plain angle pinnacles. porch: quoins to lower section, brick above; re-set C14 pointed double-chamfered outer arch with hoodmould and headstops. Reset C11 tympanum above, with relief carving of bishop with staff, flanked by crosses in roundels; pointed hollow-chamfered inner arch. Interior restored pointed hollow-chamfered former chancel arch to

east with octagonal responds and plain moulded capitals and bases. C19 pointed double-chamfered chancel arch. C19 font and fittings.'

Significance: No reason for designation is provided, however its primary significance, in NPPF terms, derives from its architectural and historic interest as a surviving example of a medieval parish church.

This asset is of high cultural heritage value.

Setting: The immediate setting of this asset comprises its elevated position on the south-eastern periphery South Ferriby. The asset is bounded to the north and south by woodland, to the east by its graveyard, Middlegate Lane and agricultural fields, and to the west by a grassed slope leading down towards South Ferriby itself. This immediate setting is considered to make a small positive contribution to the significance of the asset and allows for an appreciation of its evidential, historical, aesthetic and communal values. Given the elevated position of the church, there are views over South Ferriby towards the Scheme.

Significance and Setting Summary: The Scheme forms a small part of the wider landscape setting of this asset and is considered to make a neutral contribution to the asset's overall significance.

6.2 Non-designated Assets

There are no non-designated buildings within the Scheme.

The HER records 25 non-designated buildings within the wider study area. These assets are summarised in Table 6.1 below.

Table 6.1: Summary of non-designated historic buildings within the wider study area

HER Number	Name	Period	Value	Proximity to the Scheme
MLS10288	Wesleyan Methodist Chapel	Post Medieval to Modern	Low	60m
MLS10289	Primitive Methodist Chapel	Post Medieval	Low	310m
MLS17670	Barn	Post Medieval	Low	350m
MLS17671	Inn	Post Medieval	Low	280m
MLS17672	House	Post Medieval	Low	200m
MLS17673	Farmstead	Post Medieval	Low	190m
MLS17674	House	Post Medieval	Low	225m
MLS17676	House	Post Medieval	Low	230m
MLS17677	Terrace	Post Medieval	Low	240m
MLS17678	House	Post Medieval	Low	390m
MLS17680	School	Post Medieval	Low	275m
MLS17681	House	Post Medieval	Low	300m
MLS17682	Blacksmiths workshop	Post Medieval	Low	190m
MLS17684	House	Post Medieval	Low	85m
MLS17685	Farmstead	Post Medieval	Low	85m
MLS21174	Pillbox	Modern	Low	100m
MLS21468	House	Post Medieval	Low	310m
MLS21698	War memorial	Modern	Low	340m
MLS22217	Coastguard station, house	Post Medieval to Modern	Low	30m

MLS22220	Reading room, house	Post Medieval to Modern	Low	250m
MLS22812	Air raid shelter	Modern	Low	200m
MLS25071	Farmstead	Post Medieval to Modern	Low	135m
MLS25072	Farmstead	Post Medieval to Modern	Low	100m
MLS25074	Farmstead	Post Medieval to Modern	Low	80m
MLS25077	Farmstead	Post Medieval to Modern	Low	360m

Given the proximity of the majority of these assets to the Scheme, and the presence of intervening vegetation and buildings, it is considered that any change to the wider landscape settings of these assets would not result in any adverse harm to their cultural heritage value.

The only exception to this would be the former Coastguard Station (HER MLS22217) located on Ferriby Road approximately 30m to the south of the eastern part of the Scheme. This asset comprises a modern pair of terraced houses overlooking the area of the Scheme. While it is uncertain if the extant buildings are the former Coastguard Station as recorded by the HER, the setting of this asset is considered to make a small positive contribution to its significance. Particularly the views towards the Humber that would have historically been an important factor in the operation of the Coastguard Station (HER MLS22217).

Baseline: Historic Landscape

7.1 Designated Assets

There are no designated historic landscape assets (World Heritage Sites, Registered Parks and Gardens or Registered Battlefields) within the Scheme or wider study area.

7.2 Non-designated Assets

There is one non-designated historic landscape within the wider study area. This comprises the formal gardens (HER MLS21536) surrounding the Grade II listed South Ferriby Hall (NHLE 1215058) which lie approximately 150m to the east of the Scheme's eastern limit.

This asset forms part of the immediate setting of the designated South Ferriby Hall (NHLE 1215058) and is of low cultural heritage value.

7.3 Historic Landscape Characterisation

Historic landscape characterisation data is shown in Figure 12 in Appendix A.

The Scheme is identified to lie within the Historic Landscape Character Zone of the Ancholme Carrs (CLV4) which is characterised by flat arable countryside situated on either side of the New River Ancholme (Lord and MacIntosh 2011a). The evolution of the wider landscape is described as follows:

'Prior to the drainage of the zone in the post medieval period the landscape was characterised by seasonally waterlogged carr woodland, resulting from the uncontrolled flooding of the River Ancholme. Although largely useless for growing crops, the Carrs may have provided opportunities for hunting wildfowl, fishing and gathering useful building materials such as reeds and timber, which would have been exploited by settlements in neighbouring areas.'

The course of the River Ancholme has been subject to alteration and management since the medieval period, when the earliest attempts were made to drain the surrounding land. The process accelerated in the sixteenth century, and was largely complete by the eighteenth century. As the land was drained, it was also enclosed, creating the field pattern that can be seen in the zone to this day.

Following the enclosure of the carrs, many isolated farmsteads were established on the former floodplain. These are much more prevalent in the area to the south of Brigg than in the north. This may be because the lower Ancholme Valley was more prone to flooding. The characteristic disjointed pattern of minor roads was created to provide access to these farmsteads and even today many such roads only lead to one or two farm complexes before reaching a dead end.

Although there is no remaining carr woodland in the zone today, there are several areas of more recent plantation to be found across the Ancholme Valley. These are typically rectilinear in form, indicating that they were planted either at the point of enclosure or subsequently to it. Some of these blocks of woodland may have been created as part of a wider fox-hunting landscape, as indicated by plantations such as New Covert in the parish of Glenthams.

The agricultural landscape of the zone was altered in several ways during the 20th century. The most wide-ranging change is the removal of field boundaries across the zone, which has in places transformed the preceding enclosed landscape of small rectilinear fields to an open landscape of large irregular 'prairies'. The transfer of pasture to arable is another ongoing trend in the landscape.'

The Lincolnshire Historic Landscape Characterisation (HLC) provides further detail on the character of the Scheme and wider study area (Lord and MacIntosh 2011b).

In the west, the Scheme lies within the industrial landscape of the CEMEX cement factory (HLS947) dating to the modern period. To the immediate north of the cement factory, the Scheme crosses through an area of marsh (HLS938) of post medieval to modern date. To the north-east of Ferriby

Sluice (NHLE 1005244), the Scheme intersect with another area of industrial activity identified along the New River Ancholme (HLS1599) of modern date. The remainder of the eastern part of the Scheme passes through an area of Parliamentary Planned Enclosure (HLS1491) of post medieval date.

The above modern industrial areas are of negligible cultural heritage value. The remainder of the HLC areas that the Scheme intersects with are of low cultural heritage value.

In the wider study area, a further 26 HLC areas are identified. These are summarised in Table 7.1 below.

Table 7.1: Summary of HLC areas within the wider study area

HLC Number	Broad Type	HLC Type	Period	Value
HLS782	Fields and Enclosed Land	Parliamentary Planned Enclosure	Post Medieval to Modern	Low
HLS793	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS948	Recreational Open Space	Recreation Ground	Modern	Negligible
HLS1001	Fields and Enclosed Land	Parliamentary Planned Enclosure	Post Medieval to Modern	Low
HLS1002	Fields and Enclosed Land	Parliamentary Planned Enclosure	Post Medieval to Modern	Low
HLS1327	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1393	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1404	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1414	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1436	Industry	Derelict Industrial Land	Modern	Negligible
HLS1447	Industry	Derelict Industrial Land	Modern	Negligible
HLS1458	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1469	Fields and Enclosed Land	Modern Fields	Modern	Negligible
HLS1480	Fields and Enclosed Land	Parliamentary Planned Enclosure	Post Medieval to Modern	Low
HLS1316	Settlement	Historic Settlement Core	Early Medieval/Dark Age to Modern	Low
HLS1502	Water and Wetland	Marsh	Post Medieval to Modern	Low
HLS1513	Settlement	Detached Housing (C20th)	Modern	Negligible
HLS1522	Settlement	Detached Housing (C20th)	Modern	Negligible
HLS1533	Recreational Open Space	Recreation Ground	Modern	Negligible
HLS1555	Woodland	Ancient/Semi Natural Woodland	Unknown to Modern	Low

HLS1566	Woodland	Ancient/Semi Natural Woodland	Unknown to Modern	Low
HLS1588	Fields and Enclosed Land	Estate Fields	Modern	Negligible
HLS1577	Parkland	Country House	Post Medieval to Modern	Low
HLS1654	Agriculture	Fish Farm	Modern	Negligible
HLS1665	Fields and Enclosed Land	Ancient Enclosure	Post Medieval to Modern	Low
HLS1969	Recreational Open Space	Nature Reserves	Modern	Negligible

In general, the landscape surrounding the Scheme reflects the development and drainage of the Ancholme Valley described above. There are few surviving historic landscape elements, albeit ridge and furrow earthworks (HER MLS10249), the causeway from South Ferriby to the crossing of the former River Ancholme (HER MLS26041), some historic field boundaries/drainage channels, and further earthworks noted within the LiDAR data survive towards the higher ground at the eastern extent of the Scheme. The cultural heritage value of the historic landscape is therefore of low cultural heritage value at best.

Potential Impacts of the Scheme

8.1 Construction Phase

8.1.1 Archaeological Remains

8.1.1.1 Designated Assets

The proposed works at Ferriby Sluice (NHLE 1005244) would directly physically impact the fabric of the Scheduled Monument. Such works would need Scheduled Monument Consent in addition to planning permission. The works requiring Scheduled Monument Consent lie on the western side of the asset where a new floodwall is proposed. Historic England have been informally consulted on the Scheme and have identified that the works would present an opportunity for enhancement measures to this designated asset.

The presence of construction machinery, noise, dust and vibration would have a temporary adverse impact on the setting of this asset during the construction phase of the Scheme, particularly during the work in the immediate vicinity of the asset to include: replacement of existing walls, new floodwalls; installation of a new flood gate and works for the demountable gates and bollards across the A1077 to the east and west of the sluice respectively.

8.1.1.2 Non-designated Assets

Groundworks could impact the non-designated medieval course of the River Ancholme (HER MLS20413), the site of a former brickyard (HER MLS21994), both located within the eastern part of the Scheme and a Roman road or causeway (HER MLS16777).

The brickyard and associated extraction pit/ponds are well attested in the cartographic record of negligible cultural heritage value. Construction work could adversely impact on surviving vestiges of this asset, although the historic mapping and LiDAR data indicate that all above-ground evidence of the associated buildings have been erased.

8.1.1.3 Archaeological Potential

Groundworks for the Scheme could adversely impact on previously unknown archaeological assets. However, it has been confirmed that there would be no borrow pits within areas of undisturbed ground and that all the proposed embankment material would be from the CEMEX cement factory and other currently unknown sources. As such, groundworks for the Scheme are likely to be limited to topsoil and sub-soil stripping within the footprints of the proposed embankments and temporary construction compounds and haul routes, the locations of which are yet to be confirmed. The GI works have confirmed that there are extensive areas of made ground in the eastern part of the Scheme, probably related to the former extractive activities noted above. The requirement for further archaeological mitigation during the construction phase of the Scheme would be agreed with the Archaeological Advisor to North Lincolnshire Council.

It is not expected that any archaeological monitoring would be required for works to raise existing embankments. A previous programme of archaeological monitoring (HER ELS3035) was undertaken in 1998 which confirmed the limited potential of the area to the north of the CEMEX cement factory.

8.1.1.4 Geoarchaeological Potential

The previous GI and geoarchaeological investigations have identified that the peat deposits within the footprint of the Scheme lie at a considerable depth, approximately 7m BGL. As such, it is anticipated that there would be no direct physical impact on these assets during groundworks for the Scheme.

8.1.2 Historic Buildings

8.1.2.1 Designated Assets

There would be no direct physical impacts to any designated Listed Buildings by the Scheme.

The presence of construction machinery, noise, dust and vibration would have a temporary adverse impact on the setting of the four Listed Buildings within the wider study area during the construction phase of the Scheme.

8.1.2.2 Non-designated Assets

There would be no direct physical impacts to any non-designated historic buildings by the Scheme.

The presence of construction machinery, noise, dust and vibration would have a temporary adverse impact on the settings of the six non-designated historic buildings located on the western periphery of South Ferriby (HER MLS10288, MLS17684, MLS17685, MLS25071, MLS25072 and MLS25074), and the two non-designated historic buildings to the immediate south of the Scheme (HER MLS21174 and MLS22217), during the construction phase.

8.1.3 Historic Landscape

8.1.3.1 Historic Landscape Character

Groundworks for the Scheme would impact on historic landscapes which have existed since the post medieval period, consisting of an area of marsh to the north of the CEMEX cement factory (HLS938) and an area of parliamentary planned enclosure in the eastern part of the Scheme (HLS1491), due to partial removal as a result of the Scheme although there would be no severance of the landscapes and they would still be understood.

There would be an impact on historic landscapes which may have existed since the modern period, consisting of the industrial area of the CEMEX cement factory itself (HLS947) and an area of former docks, wharves and havens along the New River Ancholme (HLS1599), due to partial removal as a result of the Scheme although there would be no severance of the landscapes and they would still be understood.

The presence of construction machinery, noise, dust and vibration would have a temporary adverse impact on the Historic Landscape Character within the wider study area during the construction phase of the Scheme.

8.2 Operation Phase

8.2.1 Archaeological Remains

8.2.1.1 Designated Assets

The operation of the Scheme would provide enhanced flood protection to the designated Ferriby Sluice (NHLE 1005244).

It is considered that the introduction and operation of the new defences in the immediate setting of this asset (floodwalls, gates and demountable defences) would not harm its significance or the ability to appreciate this significance.

The two proposed embankments, to the west of the CEMEX cement factory and to the east of the Hope and Anchor public house, would be entirely screened by intervening buildings and the cement factory itself. Raising of the extant embankment to the north-west of the asset would not preclude views of the Humber looking north-west from the asset, nor would it alter the ability to appreciate the asset, when traversing the A1077 road. Primary views from the asset are to the north and south towards the Humber and along the New River Ancholme respectively. As such, it is considered that the Scheme would not harm the asset's significance due to changes within its setting.

8.2.1.2 Non-designated Assets

There may be an impact on the non-designated medieval course of the River Ancholme (HER MLS20413) and the associated medieval harbour complex due to the introduction of the new eastern embankment during the operation of the Scheme.

8.2.1.3 Archaeological Potential

There would be no impact on unknown archaeological assets during the operation of the Scheme.

8.2.1.4 Geoarchaeological Potential

There would be no impact on unknown geoarchaeological deposits during the operation of the Scheme.

8.2.2 Historic Buildings

8.2.2.1 Designated Assets

The operation of the Scheme would provide enhanced flood protection to the designated Listed Buildings within South Ferriby.

The proposed embankment in the eastern part of the Scheme would be a new element within the wider landscape setting of Woodside Farmhouse (NHLE 1103705), South Ferriby Hall (NHLE 1215058) and Glentworth House (NHLE 1346857). However, it is anticipated that there would be limited intervisibility between these assets and the Scheme due to intervening buildings and vegetation. As such, it is considered that the Scheme would not harm these asset's significance.

Due to its elevated position, the Church of St Nicholas (NHLE 1288277) may share some intervisibility with the Scheme. However, it is considered that the introduction of a new linear flood defence embankment, roughly parallel to the extant defence, would not be an incongruous intrusion into the wider landscape setting of this asset nor would it affect the asset's significance or the ability to appreciate this significance.

8.2.2.2 Non-designated Assets

Given the proximity of the majority of these assets to the Scheme, and the presence of intervening vegetation and buildings, it is considered that any change to the wider landscape settings of these assets would not result in any adverse harm to their cultural heritage value.

The only exception to this would be: the former Coastguard Station (HER MLS22217) located on Ferriby Road, approximately 30m to the south of the eastern part of the Scheme, and the WWII Pillbox (HER MLS21174), located in an embankment to the north of the CEMEX cement factory. The new/raised flood embankments would alter the views from these assets towards the Humber to the north. This could result in a minor adverse impact to the assets' significance given their historical functions.

8.2.3 Historic Landscape

There would be an impact on historic landscapes which have existed since the post medieval period, consisting of an area of marsh to the north of the CEMEX cement factory (HLS938) and an area of parliamentary planned enclosure in the eastern part of the Scheme (HLS1491), due to the introduction of new landscape elements and raising of existing embankments although there would be no severance of the landscapes and they would still be understood.

There would be an impact on historic landscapes which may have existed since the modern period, consisting of the industrial area of the CEMEX cement factory itself (HLS947) and an area of former docks, wharves and havens along the New River Ancholme (HLS1599), due to the introduction of new landscape elements and raising of existing embankments although there would be no severance of the landscapes and they would still be understood. The magnitude of impact would be minor adverse and the significance of effect would be neutral/slight.

In the wider study area, the Historic Landscape Character is of low cultural heritage value at best. As noted above within the map regression, the progressive erosion of the Humber foreshore and various modifications to the line of the Humber Embankment demonstrate the dynamic nature of this landscape. As such, the introduction of embankments within this semi-industrial/semi-rural landscape would not be incongruous and would not alter the ability to appreciate or read the historic landscape itself.

8.3 Recommendations for Further Work

8.3.1 Archaeological Remains

Consultation with Historic England and the Archaeological Advisor to North Lincolnshire Council will be undertaken to discuss any further requirement for archaeological mitigation, Scheduled Monument Consent, and opportunities for enhancements to Ferriby Sluice (NHLE 1005244).

A geophysical survey of the footprint of the proposed two new embankments could be undertaken to confirm the low archaeological potential of the Scheme identified by this assessment.

8.3.2 Historic Buildings

No further works are recommended.

8.3.3 Historic Landscape

No further works are recommended.

Summary and Conclusion

The Scheme would directly physical impact on the scheduled Ferriby Sluice (NHLE 1005244) and Scheduled Monument Consent would be required in addition to planning permission. Historic England have been informally consulted on the Scheme and have identified that the works could present an opportunity for enhancement measures to this designated asset. The Scheme would not harm the significance of the asset through changes to its setting.

Groundworks could impact the non-designated former channel of the River Ancholme (HER MLS20413) and the site of a former brickyard (HER MLS21994), both located within the eastern part of the Scheme and a Roman road or causeway (HER MLS16777) potentially located within the western part of the Scheme.

Groundworks for the Scheme could adversely impact on previously unknown archaeological assets. There is firm evidence for sustained Roman activity within the landscape surrounding the Scheme, and a moderate potential for previously unknown Roman assets is identified. Medieval evidence within the wider study area focuses around South Ferriby itself and the crossing point (HER MLS17657) across the former channel of the River Ancholme (HER MLS20413). Given that the eastern part of the Scheme crosses the line of the former river channel and encroaches on the periphery of the village, a moderate/low potential for medieval evidence is identified. Post medieval assets are anticipated to relate to former brickyards and associated areas of extraction. The requirement for further archaeological mitigation during the construction phase of the Scheme would be agreed with the Archaeological Advisor to North Lincolnshire Council.

There would be no direct impacts to any designated Listed Buildings by the Scheme either through physical impacts or through changes to their settings.

Impacts to non-designated historic buildings would be limited to changes to the settings of the former Coastguard Station (HER MLS22217) located on Ferriby Road, approximately 30m to the south of the eastern part of the Scheme; and a WWII Pillbox (HER MLS21174), located in an embankment to the north of the CEMEX cement factory. The new/raised flood embankments would alter the views from these assets towards the Humber to the north. This could result in a minor adverse impact to the assets' significance given their historical functions.

The Historic Landscape Character of the Scheme is of low cultural heritage value and mostly relates to modern industrial activity in the vicinity of the CEMEX cement factory and areas of post medieval enclosure in the east. The introduction of new flood embankments within this semi-industrial/semi-rural landscape would not be incongruous and would not alter the ability to appreciate or read the historic landscape.

The operation of the Scheme would provide enhanced flood protection to the designated cultural heritage assets within South Ferriby.

References

Arcadis (2016) Blacktoft to Yokefleet and South Ferriby: Ground Investigation Report

BGS (2018) Geology of Britain Viewer available online from:

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Chapman, H., Head, H., Neumann, H. and Van de Noort, R. (1998) The Archaeological Survey of the Ancholme Valley in Van de Noort, R. and Ellis, S. (eds.) Wetland Heritage of the Ancholme and Lower Trent Valleys

Chartered Institute for Archaeologists (2017) Standards and Guidance for Historic Environment Desk-Based Assessments available online from:

http://www.archaeologists.net/sites/default/files/CIfAS&GDBA_2.pdf

Clay, C. (2004) Land off Horkstow Road, South Ferriby, North Lincolnshire: Archaeological Evaluation

Clay, C. (2008) Archaeological Watching Brief: Humber Lodge, Old Post Office Lane, South Ferriby, North Lincolnshire

DMRB (2007) Volume 11, Section 3, Part 2 HA208/07 available online from:

<http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20807.pdf>

English Heritage (2008) Conservation Principles available online from:

<https://content.historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/conservationprinciplespoliciesguidanceapr08web.pdf/>

English Heritage (2011) Seeing the History in the View: A Method for assessing Heritage Significance within Views

Field Archaeology Specialists (2009) Archaeological Evaluation Report: Fulseas Pumping Station, South Ferriby, North Lincolnshire

Field Archaeology Specialists (2010) Archaeological Watching Brief Report: Fulseas Pumping Station, South Ferriby, North Lincolnshire

Hamilton, L. (2006) Archaeological Evaluation Report: Land off Old Post Office Lane and Skinners Lane, South Ferriby, North Lincolnshire

Historic England (2015) Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets

Historic England (2017) Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets available online from:

<https://content.historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets.pdf/>

Historic England (2018 online) National Heritage List for England available online from:

<https://historicengland.org.uk/listing/the-list/>

Jarvis, M. (1997) South Ferriby Depot, South Ferriby, Lincolnshire: Archaeological Watching Brief

Lord, J. and MacIntosh, A. (2011a) The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones

Lord, J. and MacIntosh, A. (2011b) The Historic Character of The County of Lincolnshire: Main

Neumann, H. (1998) The Paleoenvironmental Survey of the Ancholme Valley in Van de Noort, R. and Ellis, S. (eds.) Wetland Heritage of the Ancholme and Lower Trent Valleys

Oxford Archaeotechnics (1997) Humber Estuary Tidal Defences Urgent Works: Land North of Sluice Road, South Ferriby (UW6) Gradiometer Survey

Roth, B. (1906) A Find of Ancient British Coins at South Ferriby, near Barton-On-Humber, Lincolnshire

Soilscapes (2018) Soilscapes map provided by Cranfield University available online from:

<http://www.landis.org.uk/soilscapes/>

Tann, G. (1999) Ferriby Sluice (UW6) Humber Estuary Tidal Defence Works: Archaeological Monitoring at South Ferriby

Wetland Archaeology & Environments Research Centre (2001) Historic Environment Baseline Study Volume 1

Appendix A: Figures

Appendix B: Gazetteer of Aerial Photographs held by Historic England