

wardell-armstrong.com

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT



BETHELL CONSTRUCTION LIMITED

SEWER PIPELINE WORKS AT HOYLES LANE, PRESTON

ARCHAEOLOGY AND HERITAGE DESK BASED ASSESSMENT

DECEMBER 2023

DATE ISSUED: DECEMBER 2023
JOB NUMBER: GM12914
REPORT NUMBER: 001
VERSION: 2.0

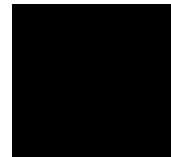
BETHELL CONSTRUCTION LIMITED

SEWER PIPELINE WORKS AT HOYLES LANE, PRESTON

ARCHAEOLOGICAL AND HERITAGE DESK BASED ASSESSMENT

PREPARED BY:

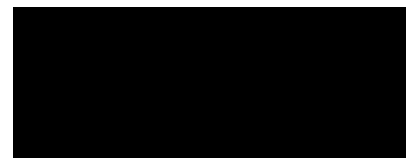
Cat Peters Associate Director



REVIEWED & APPROVED

BY:

Dave Jackson Technical Director



This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



Wardell Armstrong is the trading name of Wardell Armstrong LLP, Registered in England No. OC307138.

Registered office: Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom

UK Offices: Stoke-on-Trent, Birmingham, Bolton, Bristol, Bury St Edmunds, Cardiff, Carlisle, Edinburgh, Glasgow, Leeds, London, Newcastle upon Tyne, and Truro. International Office: Almaty.

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

CONTENTS

EXECUTIVE SUMMARY

1	INTRODUCTION	2
2	PLANNING POLICY AND LEGISLATION	4
	Legislation	4
	National Planning Policy	5
	Local Policy	6
3	DESCRIPTION OF THE SITE	8
	3.1 Location and Description	8
	3.2 Recorded Heritage Assets	8
4	METHODOLOGY	10
	4.1 Introduction	10
	4.2 Archaeology	10
	4.3 Heritage	11
5	ARCHAEOLOGY - BASELINE INFORMATION	14
	5.1 Geology and Topography of Site	14
	5.2 Designated and Non-Designated Assets within the Site	14
	5.3 Previous Archaeological Work	15
	5.4 General Historical Background	16
	5.5 Cartographic Sources	21
	5.6 Aerial Photographs	23
	5.7 Historic Landscape Characterisation	24
	5.8 LiDAR	25
	5.9 Site Visit	26
6	ARCHAEOLOGICAL POTENTIAL	28
	6.1 Summary of Potential	28
7	ARCHAEOLOGY - IDENTIFICATION AND ASSESSMENT OF IMPACTS	30
	7.1 Introduction	30
	7.2 Direct (Construction) Impacts	30
8	ARCHAEOLOGY - MITIGATION	32
9	ARCHAEOLOGY - ASSESSMENT AGAINST PLAN POLICY	33
	9.1 Legislation	33
	9.2 Policy	33
10	HERITAGE – BASELINE INFORMATION	34
11	ASSESSMENT OF SIGNIFICANCE AND SETTING	36
	11.1 Introduction	36

11.2 Canal Bridge Number 9: Quaker’s Bridge (NHLE 1165066)	36
12 MITIGATION	38
13 HERITAGE IMPACT ASSESSMENT	39
Canal Bridge Number 9: Quaker’s Bridge (NHLE 1165066)	39
14 HERITAGE - ASSESSMENT AGAINST PLAN POLICY	40
14.1 National Policy and Legislation	40
15 CONCLUSIONS - ARCHAEOLOGY & HERITAGE	41
16 GLOSSARY.....	42
17 BIBLIOGRAPHY	43

APPENDICES

Appendix 1	Site Visit Plates
Appendix 2	Archaeology Impact Assessment Methodology
Appendix 3	Heritage Impact Assessment Methodology
Appendix 4	Historic Hedgerows

DRAWINGS	TITLE
GM12914-001	Non-Designated Heritage Assets
GM12914-002	Designated Heritage Assets
GM12914-003	Plan of the Hamlet of Lea, Tithe Award Plan, 1838
GM12914-004	Historic Ordnance Survey mapping, 25inches to 1 mile scale, 1893 & 1911
GM12914-005	LiDAR imagery

EXECUTIVE SUMMARY

This assessment has described the significance of designated and non-designated heritage assets with the potential to be affected by the proposed sewer pipeline works at Hoyles Lane, Preston. There are no designated heritage assets recorded within the boundary of the Site.

The nearest designated heritage asset, a Grade II listed structure, is located c.5m to east of the Site, Canal Bridge Number 9: Quaker's Bridge (NHLE 1165066)). The assessment concludes there will be less than substantial harm to the significance of the bridge, predominantly temporary during the construction phase of works. In accordance with the NPPF, this less than substantial harm will need to be weighed against the public benefits offered by the proposals. No harm to the significance of any other designated heritage assets within the vicinity of the Site has been identified.

In consideration of archaeology, known heritage assets within the Site boundary may be affected, including a hollow way of probable medieval origin (**HER PRN 15255**), part of the route of a postulated Roman road (**HER PRN26142**) and areas of ridge and furrow. This assessment has also concluded there is potential for additional, associated archaeological remains within the Site which may originate from the Roman, medieval and post-medieval periods. The nature of these finds is unknown, but they are unlikely to represent settlement activity; the medieval and post-medieval, if present, may be represented by agricultural features. Overall, there is no evidence for archaeological remains of high (national) significance to be present within the Site. As such there is no evidence to reasonably indicate the potential for the presence of archaeological remains which would preclude development. Therefore, it is anticipated that archaeological fieldwork, if required, could be delayed as a condition to consent for any forthcoming application.

The proposals are anticipated to be in accordance with legislation and national and local planning policy on archaeological and heritage grounds.

1 INTRODUCTION

- 1.1.1 This report has been prepared by Wardell Armstrong LLP, a Registered Organisation with the Chartered Institute for Archaeologists. This report sets out the archaeological and historical background in relation to the proposed sewer pipeline works at Hoyles Lane, Preston. The Site is a linear Scheme, extending between Hoyles Lane at the north-eastern extent (NGR SD 49801 32507) and the existing Lea Gate Pump Station at the south-western extent (NGR SD 47846 29995). The proposals entail the upgrading, and replacement, of existing utility infrastructure.
- 1.1.2 The proposed sewer pipeline works will comprise the upgrading of the existing pipeline of between 150mm and 225mm diameter to 600mm diameter, along the same line as the current pipeline along Hoyles Lane. A new section of 600mm sewer pipe is proposed, crossing Sidgreaves Lane at the western extent of Hoyles Lane, and running south-eastwards, adjacent to Sidgreaves Lane, with some existing pipes to be abandoned, and others to feed into the upgraded pipe. The proposed new foul sewer will be auger bored beneath the Lancaster Canal and the railway, before meeting Darkinson Lane. At Darkinson Lane, the existing pipeline which runs adjacent and to the south of the lane will be increased from 300mm to 600mm, and this will continue southwards, then south-eastwards to Savick Brook. Here, a new 600mm gravity sewer pipe is proposed, to divert flows through a new syphon below Savick Brook, which would be tunnelled (the existing pipeline here to be abandoned). South of Savick Brook, a new 900mm sewer pipe is proposed, to connect into the existing sewer trunk main manhole to Lea Gate Pump Station. These works will require associated compound and laydown areas, as well as temporary access routes.
- 1.1.3 This report provides an assessment of the significance of any known or potential heritage assets of an archaeological or built heritage nature within the Site boundary. It also sets out the potential impacts on the archaeological and built heritage resource as result of the proposed development and details appropriate mitigation measures for reducing/ offsetting these potential impacts where relevant.
- 1.1.4 An assessment is also made of the potential for the proposed development to affect designated heritage assets within the vicinity of the Site as a result of introducing changes to their setting which may affect the significance of the asset or the ability to appreciate that significance.

- 1.1.5 This report includes proportionate statements of significance of the designated assets potentially affected, including the contribution that their setting makes to their significance, in order to allow for an understanding of any potential harm.
- 1.1.6 The assessment was undertaken following the Standards and Guidance of the Chartered Institute for Archaeologists (CIfA 2020) and in accordance with terminology expressed within the National Planning Policy Framework. Historic England guidance good practice guidance presented in the *Setting of Heritage Assets* (Historic England GPA 3 2017) has been adhered to as appropriate.

2 PLANNING POLICY AND LEGISLATION

2.1.1 A heritage asset is defined in the National Planning Policy Framework (NPPF) as ‘a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions because of its heritage interest’ (Department for Levelling Up, Housing and Communities (DLUHC) 2023, Annex 2).

Legislation

2.1.2 Designated heritage assets protected by statutory legislation comprise Scheduled Monuments, Protected Wrecks, Listed Buildings and Conservation Areas.

2.1.3 Nationally significant archaeological sites, monuments and structures are protected under the Ancient Monuments and Archaeological Areas Act (1979), which provides for a schedule of nationally important monuments. It should be noted that this Act makes no provision for the setting of scheduled monument, which is a matter of planning policy only.

2.1.4 Listed Buildings and Conservation Areas are protected under the Planning (Listed Building and Conservation Areas) Act (1990). In relation to development proposals, the legislation states that:

‘in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the secretary of state shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses’ (section 66).

2.1.5 With regards to Conservation Areas it states that:

‘special attention shall be paid to the desirability of preserving or enhancing the character of that area’ (section 72).

2.1.6 Hedgerows are afforded protection under the Hedgerow Regulations 1997 (amended 2002). Hedgerows are deemed important under Schedule 1, Part 2 of the regulations if they:

- Are associated with a Scheduled Monument or a site recorded on an Historic Environment Record; or
- form an integral part of a field system shown on a map pre-dating 1845;
- mark a parish or township boundary predating 1850; or

- mark the boundary of a pre-1600 estate.

National Planning Policy

- 2.1.7 The National Planning Policy Framework (NPPF) supported by the National Planning Policy Guidance (PPG; Department for Communities and Local Government 2019), which endorses the conservation and enhancement of the historic environment, defines the role of the planning system as to promote and achieve sustainable development and involves protecting and enhancing *'our natural, built and historic environment'* (DLUHC 2023, para:8).
- 2.1.8 The NPPF requires that in determining applications *'great weight'* should be given to the asset's conservation and that *'substantial harm to or loss of...assets of the highest significance, notably Scheduled Monuments ... should be wholly exceptional'* (DLUHC 2023, para:199 & 200).
- 2.1.9 In ensuring the statutory duty of the Planning (Listed Building and Conservation Areas) Act, the NPPF requires that in determining applications *'great weight'* should be given to the asset's conservation and that *'substantial harm to or loss of... grade II listed buildings, or grade II registered parks or gardens, should be exceptional'* whilst *'substantial harm to or loss of...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'* (DLUHC 2023, para:199 & 200).
- 2.1.10 Non-statutory designated heritage assets, comprising Registered Parks and Gardens and Registered Battlefields, are protected under national and local planning policy only. This is also the case for the remainder of the archaeological resource; entries onto a historic environment record or sites and monument record as well as previously unknown features which may be recorded during the course of data collection in respect to a given development proposal.
- 2.1.11 The significance of a heritage asset (designated or non-designated) is defined within the National Planning Policy Framework (NPPF) as *'the value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic'* (DLUHC 2023, Annex 2).
- 2.1.12 The setting of a heritage asset (designated or non-designated) is defined 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. Elements of a setting may make a*

positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.’ (DLUHC 2023, Annex 2).

2.1.13 Where heritage assets (designated or non-designated) are to be affected by development, *‘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’ (DLUHC 2023, para:194).*

2.1.14 Developments where substantial harm to or total loss of significance of a designated heritage asset should be assessed against specific tests and should deliver substantial public benefits which outweigh any loss or harm (DLUHC 2023, para:201). Less than substantial harm to a designated asset would require public benefits including the securement of an optimum viable use (DLUHC 2023, para:202).

2.1.15 Impacts to the significance of non-designated assets will require a balanced judgement based on the level of significance and the scale of harm (DLUHC 2023, para:203), although non-designated assets which are of equivalent significance to designated assets will be considered as such (DLUHC 2023). Where heritage assets of an archaeological nature may be impacted upon by development *‘local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation’ (DLUHC 2023, para:194).*

Local Policy

2.1.16 The Preston Local Plan 2012-26 (Site Allocations and Development Management Policies (DPD)) was adopted on 2nd July 2015. The relevant policy is reproduced below (Preston City Council 2015, 108-109):

Policy EN8: Development and Heritage Assets

- A) Proposals affecting a heritage asset or its setting will be permitted where they:
- i) accord with national policy on the historic environment and the relevant Historic England guidance;
 - ii) take full account of the information and guidance in the Council’s Conservation Area Appraisals and Management Plans and other relevant policy guidance on the historic environment;
 - iii) make a positive contribution to the character and local distinctiveness through high quality new design that responds to its context;
 - iv) act as a catalyst for the regeneration of the area in accordance with the Council’s objectives for regeneration;
 - v) are accompanied by a satisfactory Heritage Statement that fully explains the impact of the proposal on the significance of the heritage asset and;

vi) sustain, conserve and, where appropriate, enhance the significance, appearance, character and setting of the heritage asset itself and the surrounding historic environment and where they have consideration for the following:

(a) the scale, layout, and appearance to the heritage asset and its setting;

(b) the proposed use of the heritage asset being appropriate in relation to its significance

B) Proposals involving the total or substantial loss of a heritage asset or the loss of the elements that contribute to its significance will be refused. Proposals will only be granted in exceptional circumstances where they can be clearly and convincingly justified in accordance with national planning guidance on heritage assets. In addition to the requirements of national policy applicants will be required as part of the justification to provide evidence that:

i) other potential owners or users of the site have been sought through appropriate marketing where the marketing includes the offer of the unrestricted freehold of the asset at a price that reflects the building's condition and;

ii) reasonable endeavours have been made to seek grant funding for the heritage asset's conversion and;

iii) efforts have been made to find charitable or public authorities willing to take on the heritage asset.

C) Where the loss of the whole or part of a heritage asset is approved this will be subject to an appropriate condition or planning obligation to ensure that any loss will not occur until a contract is in place to carry out a replacement development that has been approved

3 DESCRIPTION OF THE SITE

3.1 Location and Description

3.1.1 The Site is a linear Scheme near Preston, extending between Hoyles Lane at the north-eastern extent (NGR SD 49801 32507) and extending along this lane to Sidgreaves Lane, where it runs to the west of this, broadly southwards to Darkinson Lane. It then runs south-westwards, adjacent to Darkinson Lane, and south-eastwards to Savick Brook, before extending south-westwards to culminate at the existing Lea Gate Pumping Station, a distance of approximately 3.8km. The centre of the Site is situated approximately 4.9km west-north-west of the railway station at Preston and 7.2km east-south-east of Kirkham.

3.1.2 As well as the proposed linear sewer pipeline route, associated works including laydown and compound areas, will be required, and the extent of these are anticipated within the blue line boundary including within the drawings accompanying this document. In addition, access routes for machinery to undertake the works associated with the proposed sewer pipeline have been identified, and most of these require planning permission (Access Point 2 is proposed in the vicinity of the existing water treatment works). Access Point 1 is proposed to be located the south of the pipeline route, to allow access from Riversway, the A583. Access Point 3 is proposed to be located to the east of the pipeline route, to allow access from Lea Road. Access Point 4 is proposed to be located to the east of the pipeline route, east of Sidgreaves Lane. Access Point 5 is proposed to be located to the east of the pipeline route, to allow access west from Sidgreaves Lane. Access Points 6a and Access Point 6b are proposed to be located north and south of Darkinson Lane respectively.

3.1.3 Much of the Site comprises land within the Hoyles Lane, Sidgreaves Lane and Darkinson Lane road alignments and/or existing sewage pipeline adjacent to these, although the land to the west of Sidgreaves Lane is agricultural, arable and pasture, as is the land to the south of Darkinson Lane, which is largely pasture. To the south is an area of marginal land, west of Ashton and Lea Golf Club and east of the A582 Edith Rigby Way, and, south of Savick Brook, the land is agricultural, though recently affected by the A583 Blackpool Road construction works.

3.2 Recorded Heritage Assets

3.2.1 There are no designated heritage assets within the boundary of the Site. The nearest designated heritage asset is less than 5m to the east of the Site. This is Canal Bridge

Number 19, Quaker's Bridge, a grade II listed structure which carries Sidgreaves Lane over the Lancaster Canal (**NHLE 1165066/HER PRN 134765**).

3.2.2 The Lancashire Historic Environment Record (HER) records ten entries within the scheme boundary. Six of these comprise the following non-designated heritage assets:

- The Lancaster Canal (**HER PRN10337**);
- A stone bridge carrying a farm track over a watercourse and adjacent to a culvert (**HER PRN39349**) under the canal (**HER PRN39351**);
- Part of Roman Road 703, which connected Ribchester and Poulton-le-Fylde (**HER PRN26142**);
- The earthwork remains of a possible Roman road or medieval hollow way (**HER PRN15255**);
- An area of probable ridge and furrow (**HER PRN42946**).

3.2.3 Also recorded within the boundary of the Site are four findspots; one of a pierced silver coin predating 1485 (**HER PRN33579**) and, further south and at the same location, three coins, two silver groats from Elizabeth I's reign (**HER PRN31632** and **HER PRN35677**), and a silver groat from Mary's reign (**HER PRN32230**). The latter three are all recorded at NGR SD 48000 30000 and thus are likely to have been recovered within the grid square rather than at this exact location, and therefore may have been found some distance from the Site.

4 METHODOLOGY

4.1 Introduction

4.1.1 This report assesses potential impacts to buried archaeological remains as a result of ground disturbance, and potential impacts to the significance of built heritage assets through changes in their setting.

4.1.2 The following sets out the evidential sources and impact assessment methodologies.

4.2 Archaeology

Archaeological Databases

4.2.1 The standard collation of all known non-designated heritage assets within 500m comes from Lancashire's Historic Environment Record (HER) (consulted July 2023; 500m buffer search area resulting from advice from Joanne Smith, Planning Officer at Lancashire County Council). Known heritage assets are plotted on Drawings GM12914-001 and GM12914-002 and are discussed in Section 5.

4.2.2 Information on designated heritage assets has been sourced from Historic England datasets. Due to the nature of the proposals, a 1km search area has been implemented for the following designated heritage assets as assets of national importance: World Heritage Sites, Scheduled Monuments, Grade I and Grade II* Listed Buildings, Registered Parks and Gardens, Conservation Areas and Historic Battlefields.

4.2.3 A 1km search area has also been implemented for Grade II Listed Buildings as assets of regional importance and Conservation Areas (where they hold assets of regional importance).

Historical and Cartographic Sources

4.2.4 The principal sources for this type of evidence were:

- Lancashire Record Office, Preston; and
- online sources holding historic Ordnance Survey and Tithe maps (where available).

4.2.5 Relevant documents are listed in the Bibliography.

Secondary Sources

4.2.6 All sources are listed in the Bibliography. The principal sources of secondary material were:

- the Archaeology Data Service; and
- the Wardell Armstrong in-house library.

Geological/Geotechnical Information

- 4.2.7 A description of the superficial and solid geology of the local and surrounding area has been compiled in order to assess the likely presence and potential condition of any archaeological remains on the site. This information was drawn from appropriate maps published by the Geological Survey of Great Britain (BGS 2023).

Site Inspection

- 4.2.8 To support the desk-based assessment, a physical walkover of the Site was undertaken in July 2023 and this considered the surrounding area. The inspection had the following purposes:

- to examine the areas of archaeological potential identified during the desk-based assessment; in particular, with a view to gauging the likely survival and condition of archaeological remains;
- to identify signs of disturbance or truncation within the Site which could affect archaeological potential;
- to review the presence/absence of earthworks indicative of the presence of archaeological remains i.e., ridge and furrow earthworks;
- to confirm the presence/absence of historic hedgerows;
- to inform the Impact Assessment element of this document; and
- to inform the assessment of significance of built heritage assets.

Assessment of Significance

- 4.2.9 Where an impact assessment is required the DMRB methodology for the assessment of impacts will be utilised. This sets out a methodology for assessing the importance or significance of the asset, for assessing the magnitude of impact to the asset and for assessing the resulting significance of effect of any impact, see Appendix 3.

4.3 Heritage

- 4.3.1 With specific regard to the assessment of impacts to designated heritage assets, as stated within the NPPF '*significance derives not only from the physical fabric of a heritage asset but also from its setting*' (DLUHC 2023, Annex 2).

- 4.3.2 The assessment of the setting of heritage assets uses Historic England's good practice guidance, presented in *The Setting of Heritage Assets* (Historic England GPA 3 2017); specifically, the five-step approach to assessment:

- Step 1 – Identify which heritage assets and their settings may be affected;

- Step 2 – Assess the degree to which settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3 – Assess if any change to the setting identified would affect the appreciation/ understanding of an asset’s significance (there may be no change);
- Step 4 – Explore ways to maximise enhancement and avoid or minimise harm;
- Step 5 – Make and document the decision and monitor outcomes.

4.3.3 A non-exhaustive list provided within the document (Historic England GPA 3 2017: 11) identifies themes such as the following to elucidate on how setting may add to significance:

- Physical Surroundings:
 - topography;
 - aspect;
 - functional relationships and communications; and
 - history and degree of change over time.
- Experience:
 - views from, towards, through, across and including the asset;
 - intentional inter-visibility with other historic assets and natural features; and
 - sense of enclosure, seclusion, intimacy or privacy.

Assessment of Impact

4.3.4 The NPPF stipulates three levels of potential impact to designated heritage assets. The NPPF references these as:

- Substantial harm;
- Less than substantial harm; and
- No harm (Significance is sustained or enhanced).

4.3.5 The PPG discusses how to assess substantial harm where it states *‘in general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset’s significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting’* (Para 19).

4.3.6 The application of the terms 'substantial' and 'less than substantial' is made, based on professional judgement and experience. The level of impact expressed by this assessment will be either no harm, less than substantial harm or substantial harm.

5 ARCHAEOLOGY - BASELINE INFORMATION

5.1 Geology and Topography of Site

5.1.1 The Site comprises a linear route of approximately 3.8km, within the road alignment and/or existing sewage pipeline of Hoyles Lane and Darkinson Lane, through agricultural land to the west of Sidgreaves Lane and south of Darkinson Lane. It traverses through an area of marginal land, west of Ashton and Lea Golf Club and east of the A582 Edith Rigby Way, and through agricultural land to the south of Savick Brook, which has been recently affected by the A583 Blackpool Road construction works.

5.1.2 Within the bounds of the Site, the land gradually slopes downwards to the south as it nears Savick Brook, with the River Ribble further south. The north-eastern extent of the Site is situated at c.29m above Ordnance Datum (aOD), and the south-western extent at c.8m aOD.

5.1.3 The bedrock geology mapped across the Site is sandstone of the Sherwood Sandstone Group, a sedimentary bedrock formed between 272.3 and 237 million years ago during the Permian and Triassic periods (BGS 2023). Overlying the bedrock across most of the Site, Devensian Till is recorded, a sedimentary superficial deposit formed between 116 and 11.8 thousand years ago and the present, during the Quaternary period, except in the vicinity of Savick Brook, where Tidal Flat Deposits of silt, clay and sand, a sedimentary deposit formed between 2.588 million years ago and the present during the Quaternary period are mapped (*ibid*).

5.2 Designated and Non-Designated Assets within the Site

5.2.1 As noted above, there are no designated heritage assets recorded within the boundary of the Site and ten non-designated heritage assets recorded within the boundary of the Site:

- the Lancaster Canal (**HER PRN10337**);
- a stone bridge carrying a farm track over a watercourse and adjacent to a culvert (**HER PRN39349**) under the canal (**HER PRN39351**);
- part of Roman Road 703, which connected Ribchester and Poulton-le-Fylde (**HER PRN26142**);
- the earthwork remains of a possible Roman road or medieval hollow way (**HER PRN15255**). This was visible from Darkinson Lane during the Site walkover;

- an area of probable ridge and furrow (**HER PRN42946**). This was not visible during the site walkover, though this area had been impacted by the recent construction of the Edith Rigby Way;
- Also recorded within the boundary of the Site are the findspots of a pierced silver coin predating 1485 (**HER PRN33579**) and, at the same location, three coins, two silver groats from Elizabeth I's reign (**HER PRN31632** and **HER PRN35677**), and a silver groat from Mary's reign (**HER PRN32230**). The latter three are all recorded at NGR SD 48000 30000 and thus are likely to have been recovered within the grid square rather than at this exact location, and therefore may have originated some distance from the Site.

5.3 Previous Archaeological Work

- 5.3.1 A large number of previous investigations have targeted areas within the present Site boundary which have since been impacted by the developments they helped inform or mitigate against. These include a desk based assessment (ELA2223) and trial trench evaluation (ELA2449) followed by an archaeological watching brief during the construction of the full length of the canal, mapped as Savick Brook (ELA995). This found *'a lack of any occupation or industrial activity within the project area. The majority of the features recorded related to protection against bank erosion, and the provision of crossing points across Savick Brook'*.
- 5.3.2 A number of investigations associated with the construction of two new roads by Lancashire County Council, together known as Preston Western Distributor and East/West Link Road have occurred in the vicinity, elements of which extended to within the Site boundary. These included a desk-based assessment, geophysical survey (ELA3000), walkover and LiDAR survey (ELA3002), building survey, excavation and topographic survey (ELA3324, ELA3325 and ELA3326) and deposit model (ELA3327). These revealed a number of archaeological features, included within the HER dataset, many of which have since been removed by construction-related activity.
- 5.3.3 In addition, in relation to proposals for Cottam Parkway Railway Station a geophysical survey (ELA3289) was undertaken, which included an area within the present Site boundary, which revealed four possible small-scale brick firing and manufacturing sites within the field to the immediate south of the canal and west of Sidgreaves Lane, likely associated with a former clay pit to the south-east, within the same field though outside the Site Boundary, recorded within the HER dataset from historic Ordnance Survey mapping (PRN22357).

- 5.3.4 The area at the immediate south-eastern extent of the pipeline route, which includes proposed Access point 1, one of the temporary access routes for the scheme, has recently been subjected to archaeological geophysical survey as part of a planning condition for a housing development. This also incorporated some land within the present Site boundary for the pipeline, to include land where the findspots of four coins are mapped by the HER dataset (**HER PRN33579**, **HER PRN31632**, **HER PRN35677** and **HER PRN32230**) and an area of ridge and furrow had been identified (**HER PRN42946**). The geophysical survey results revealed discrete positive anomalies, some of which were located within the present Site boundary. These anomalies ranged in size from 2.5m to 5m and were interpreted as potential pit features of archaeological origin, although other sources, such as tree root hollows, were also postulated.
- 5.3.5 A subsequent trial trench evaluation took place in November 2023, based on the geophysical survey results as well as the potential raised from known HER sites (including findspot and areas of ridge and furrow within the present Site boundary, in addition to hollow ways, clay/marl pits and former field boundaries beyond the present Site boundary within the wider proposed housing development site further east). This revealed clay/marl pits and the hollow way and features associated with a 20th century piggery outside the present Site boundary but no features suggestive of prehistoric, Roman or medieval activity. It also showed that, as suggested by Google Earth imagery, most of the area within the present Site boundary had been affected by modern activity.

5.4 General Historical Background

Prehistoric

- 5.4.1 The earliest known evidence for human activity in the surrounding area perhaps comes from the identification of earthworks, also noted as cropmarks and soilmarks, and interpreted as potentially representing palaeolandscape features associated with areas of potential early archaeological activity (**HER PRN42949**). In addition, a circular cropmark has been identified within the study area, interpreted as a possible roundhouse or ring ditch of prehistoric or Roman date (**HER PRN42950**).

Romano-British

- 5.4.2 An earlier route of Darkinson Lane, to the south-east of the existing lane, has been identified, surviving as a hollow way on the edge of the slope overlooking the present Darkinson Lane, c. 30m east of the right of way and matching the lane continuing north of the road. It has been concluded, based on 13th century references and the nature

of a cambered section, that this may have Roman origins (**HER PRN15255**). A second, more definitive, Roman road is also known from the immediate vicinity, Roman Road 703, which linked Poulton-le-Fylde and Ribchester (**HER PRN26142**). The line of this Roman road is apparently clear in the area west of Ribchester at Woodland Farm, to Kirkham via Fulwood, but has no trace through Kirkham and only a hypothetical line from Kirkham to Poulton. Sections have been recorded at Grimsharg, but no trace was found at Burn Naze.

- 5.4.3 Further evidence for Roman activity in the 500m area comes from the discovery of a Roman headstud brooch of possible 3rd century date (**HER PRN31633**).

Medieval

- 5.4.4 Fieldname evidence 'millfield', along with the field observation of two timbers from Savick Brook bank, indicated the possible presence of a medieval mill in a field to the south of the brook (**HER PRN11890**). A trial trench evaluation did not encounter any evidence for a mill, although extensive ridge and furrow was revealed.
- 5.4.5 Also close to Savick Brook, historic mapping shows a group of small, narrow fields with associated access lanes, running down the slope between Lea Town and Savick Brook, many respecting ridge and furrow (**HER PRN11898**). The layout of these fields is typical of older enclosures created on an ad-hoc basis before the process of formal parliamentary 'inclosure' and are usually referred to as 'closes' or 'ancient inclosures' in 18th and 19th century enclosure acts. Aerial photography suggests that these fields are also present to the north of Darkinson Lane. Elements of medieval open field systems have also been identified fossilised within post medieval field systems to the north of Darkinson Lane (**HER PRN28362**).
- 5.4.6 Ephemeral earthwork features have been identified during previous archaeological investigations in the area, at the eastern extent of the present Site boundary, interpreted as probable ridge and furrow, aligned east/west with 4m between ridge to ridge (**HER PRN42946**). As this work was undertaken ahead of a development, this may no longer survive, and no remains were visible during the Site visit, the results of which suggested this area had been landscaped. Similar earthwork features were also identified as part of the same project further east, beyond the Site boundary (**HER PRN42947**). Further evidence for medieval agricultural activity in the study area has been identified from The Lower Lune, Lower Wyre and Lower Ribble environs Aerial Imagery and Mapping Project, to the west of the Site in the form of ridge and furrow (**HER PRN43331**) and medieval plough headlands and field boundaries (**HER**

PRN43375), to the north-west of the Site in the form of a hollow way (**HER PRN43376**), and to the east of the Site in the form of a pair of linear field boundaries (**HER PRN43377**).

- 5.4.7 Old Lea Hall, a Grade I listed building (**NHLE 1361663**), to the south of the southern extent of the Site, has its origins as a late medieval manor house, though it was extensively remodelled in the late 17th or early 18th century, and has an early 19th century addition (**HER PRN1330**).
- 5.4.8 Individual findspots of artefacts of the medieval period have also been encountered within 500m of the Site, and include a lead circular shaped non-heraldic personal seal matrix, dated 1200-1400 (**HER PRN31630**), a copper alloy harness strap or accessory ring with likely origin between 1200-1500 (**HER PRN42803**), a pierced silver coin predating 1585 (**HER PRN33579**), a medieval crucifix figure (**HER PRN2038**), and a wayside cross which has been relocated at least twice but survives as an upstanding, if modified, structure (**HER PRN1386**).

Post-medieval

- 5.4.9 The areas around Hoyles Lane and Sidgreaves Lane, in the parish of Lea, remained largely agricultural into the post medieval period. A number of dispersed farmsteads were established in this period, characteristic of the post medieval enclosed landscape and reflecting wider developments in agricultural land use at this time. These include Danes Pad (**HER PRN1390**), likely established in the late 17th or early 18th century, Singleton's Farm (now known as Yew Tree Cottage/Westleigh Cottage; **HER PRN1391**), constructed in 1712, Saddle, likely established as a farmstead in the 17th or 18th century, and later an inn (**HER PRN6251**), Quaker Lodge, likely established as a farmstead in the 17th or 18th century (**HER PRN6629**), an early 17th century stable block (**HER PRN13693**) and barn (**HER PRN17045**) associated with Old Lea Hall Farm, Clock House, shown on Yates's plan of 1786 (**HER PRN17048**), Highfield Farm, of likely 18th or 19th century date (**HER PRN20019**) with associated barn (**HER PRN23706**), an earlier incarnation of Clock House Farm, shown on Yates's plan of 1786 but replaced in the second half of the 19th century (**HER PRN39334**) with associated outbuildings (**HER PRN39352**), Lane Ends Farm, perhaps originally a barn established by 1838 (**HER PRN39340**), Earl's Farm, (**HER PRN39341**), Brewer House Farm (**HER PRN39347**), a farmstead at 82 Darkinson Lane (**HER PRN39353**), Bartle (**HER PRN39354**), and Wards Farm (**HER PRN39348**) also all established by 1838.

- 5.4.10 Agricultural features of the post medieval period have also been encountered in the study area, including an area of regular ridge and furrow north of Darkinson Lane (**HER PRN28362**). Former cottages are also known from the area, including Hillcrest, (**HER PRN39321**), Laburnum House (**HER PRN39332**) and Fiddler's Fold (**HER PRN39333**), all now demolished and the sites redeveloped, as well as extant structures including Bridge House, formerly Lea Holme, established by 1838 (**HER PRN39342**), Hoyle Farm, briefly known as School House Farm, then Hoyle's Farm again, shown on Yate's plan of 1786 (**HER PRN42967**) and Schoolhouse Farm, shown on 1838 tithe map. (**HER PRN42968**),
- 5.4.11 A number of features relating to access to the post medieval enclosed landscape are also known from the area, including Wads Bridge over Savick Brook, known from cartographic sources but not identified during an archaeological watching brief (**HER PRN6256**), a second bridge which once crossed Savick Brook (**HER PRN11888**), a third bridge which crossed Savick Brook (**HER PRN11889**), since replaced by a modern bridge over the 2002 Ribble Millennium Link, and a toll gate, associated with the private road from Preston to Freckleton, established after an agreement of 1781 to formalise a short-cut and charge for access (**HER PRN6659**) with associated bridge (**HER PRN11887**).
- 5.4.12 Another post medieval development was the encouragement for wider access to education (although this wasn't compulsory until the 1880s), and Lea School, known from the 1838 tithe map, may have been established in the area as early as 1784, to educate the growing rural population (**HER PRN6628**).
- 5.4.13 Individual findspots recorded in the area further attest to land use and activity throughout the post medieval period. These include a silver hammered groat from the reign of Mary (c. 1553-4; **HER PRN35678**), a lead alloy lion mount, probably from a cistern, fountain or rainhead (**HER PRN42793**), two hammered silver groats from Elizabeth I's reign (1558-1603; **HER PRN31632** and **HER PRN35677**), a gold posy ring of probable 16th or 17th century origin (**HER PRN 22712**), a clipped shilling from the reign of Charles I (1625-1649; **HER PRN33576**), a copper alloy toy watch body (**HER PRN42800**), a copper alloy commemorative medallion dating to 1885 (**HER PRN42798**), a copper alloy trade penny token (**HER PRN42801**) and a copper alloy probable rein guide (**HER PRN42805**).
- 5.4.14 No major industrial developments affected the area in the post medieval period, although malt kilns are known in the vicinity (**HER PRN6630**), depicted on Hennes's

plan of 1828, as are a high number of clay and marl pits (**HER PRN22340**, **HER PRN22341**, **HER PR**) and, **HER PRN 22356**, **HER PRN 22357**, **HER PRN22358**, **HER PRN22364** and **HER PRN22366**). The Lancaster Canal, ultimately linking Kendal to Preston, with sections first opened in 1797, crosses the Site (**HER PRN10337**), with associated road bridges (**HER PRN13474** and **HER PRN13475**), turn bridge (**HER PRN39336**), culvert (**HER PRN39349**), stone bridge (**HER PRN39351**), syphon pipe (**HER PRN39350**), canal milestone (**HER PRN39345**), warehouse (**HER PRN39335**) and former Canal Company cottages (**HER PRN39337**) with associated access track and bridge (**HER PRN39338**). The canal was the direct result of the rise of industry in the wider area and associated requirement for improved transportation links. It continued to operate until 1850, though was superseded by the Preston and Wyre Railway, which opened in 1840 and also crosses the Site (**HER PRN10610**). This includes an associated railway milepost (**HER PRN39346**).

- 5.4.15 Indirect effects of the industrial revolution are also evidenced in the area, for example Westleigh House, a grand private residence built for Adam Leigh, a mill owner (**HER PRN30867**), and its associated landscape park (**HER PRN39687**). Access Point 3 is proposed just to the west of this.

Modern

- 5.4.16 20th century heritage assets are also recorded in the vicinity, including a World War II military camp or depot identified from aerial photography of the 1940s and 1960s, with associated pillboxes adjacent to the road (**HER PRN40062**). Modern aerial imagery indicates that all structures seem to have since been cleared and the site is extensively wooded although the access track survives.
- 5.4.17 Westleigh House, formerly owned by Adam Lea and family, was purchased by Lancashire County Council in 1956 and was the headquarters of the county's emergency planning, provided with an emergency shelter/nuclear bunker partially within the basement and mostly under the rear garden, and this was only closed and sold on in 2007 (**HER PRN30867**).
- 5.4.18 The Ribble Link Navigation Canal was established in 2002, effectively canalising the route of Savick Brook (**HER PRN24928**) and links the previously isolated Lancaster Canal to the main national waterway network.
- 5.4.19 A major modern development in the vicinity of the Site was the construction of the Preston Western Distributor, elements of which run to the immediate west of the Site

and East/West Link Road to the immediate south. This has impacted the previously largely rural character of the area.

5.5 Cartographic Sources

- 5.5.1 Antiquarian County maps show that Hoyles Lane, Sidgreave Lane, Darkinson Lane and the turnpike road between Preston and Kirkham to the south were in existence by 1786 (Plate 1). A farmstead, south of Hoyles Lane is annotated 'Hoyles' on Yate's plan of 1786 and must indicate the origins of the road name. Clock House farmstead is also annotated and depicted, as are a number of other structures fronting Sidgreaves Lane and Darkinson Lane as well as Lea Hall, to the west of Sidgreaves Lane. A track/road is shown heading south-eastwards from Darkinson Lane, west of Lea Hall, crossing Savick Brook, to reach the main turnpike road between Preston and Kirkham opposite 'New House' later known as New Lea Hall.
- 5.5.2 Greenwood's map of 1818 (Plate 2) shows much the same broad layout as the earlier map, although by this date the Lancaster Canal, ultimately linking Kendal to Preston, elements opening in 1797, is depicted crossing the Site (**HER PRN10337**). Greenwood's map is also the earliest to annotate the school east of Sidgreaves Lane, Lea School, although this is thought to have been established as early as 1784 (**HER PRN6628**). Additional structures are depicted to the south of the school, either side of Sidgreaves Lane, included some annotated Maltkilns, though Lea Hall is no longer shown.
- 5.5.3 Hennet's 1828 map (Plate 3) shows that few changes occurred since 1818, although even more structures are depicted either side of Sidgreaves Lane, as well as a probable farmstead to the west, close to the formerly depicted Lea Hall, comprising an L-shaped structure and outbuildings to the north-west.
- 5.5.4 The earliest map encountered during this assessment to show the Site in any detail is the tithe map of the Hamlet of Lea in the Parish of Preston (IR 29/29/18/195), published in 1838 (GM12914-003). Overall, the tithe map shows that the area remained largely agricultural into the mid-19th century.
- 5.5.5 The accompanying Apportionment for the Hamlet of Lea 1838 (IR 30/29/18/195) includes information such as field name evidence, which may suggest the presence of former historic structures. These include Further Ditch Croft, Rarer Ditch Croft, Smithy Croft, Darkinson Croft, and Cutler Croft, which may suggest the presence of medieval structures fronting the road, or medieval agricultural features to the rear, particularly a former smithy. In addition, Barn Meadow might suggest the presence of a former field barn, Fold Shop, which might suggest the presence of a structure, Buildings &

Orchards, which might suggest surviving remnants of former buildings, and Mill Field, might suggest a former mill. The latter seems unlikely, however, as this area was targeted by a trial trench evaluation which encountered no evidence for a mill, though it did reveal extensive ridge and furrow. Below is a summary of the information from the tithe apportionment for the main proposed sewer pipeline route:

Plot	Owner	Occupier	Name	Use	
299	Richard Harrison	James Middlehurst	Pasture	Pasture	
296			Meadow	Meadow	
295			Gregson Meadow	Wheat	
294		Peter Bibby	Barn Meadow	Meadow	
288		Henry Crane	Orchard Great	Orchard	
289			Wharles Meadow	Meadow	
286			Buildings & Orchards	-	
285			Wharles Field	Pasture	
284		John Smith	John Taylor	Further Ditch Croft	Meadow
283			Rarer Ditch Croft	Meadow	
40	John Smith		Wheat Field	Stubble	
83	Thomas Mitchell		Mill Field	Wheat & Fallows	
84			Mean Meadow	Fallows	
278	Richard Harrison	Henry Crane	Plantation	Wood	
279			Stoney Butts	Wheat	
277			Allance Fields	Pasture	
272	The Devises under the will of Henry Crook etc.	Thomas Hall	New Hey Sides	Wheat	
272a			Part of New Hey Sides	Wheat	
201			Great New Hey Sides	Clover	
219			Smithy Croft	Meadow	
270	Richard Harrison	Joseph Bryning	Bills New Hey Sides	Wheat	
271			Meadow Bottom	Beans	
263			Bills New Hey Sides	Pasture	
264			Darkinson Croft	Pasture	
216	Richard Singleton	Richard Singleton	Hash	Meadow	
217			Hey	Meadow	
218			Fold Shop	Pasture	
228			Garden	Garden	
212	John Gradwell	Edward Barrow	Cutler Croft	Pasture	
231	Sir Henry Bold Hoghton (Baronet)	Thomas Edsforth	Bryers Shoot	Wheat	
233			Cooban Hill & Cobby	Fallows	
105			West Meadow	Clover	
238		William Ward & John Ward	Holm Meadow	Fallows	
239		Middle Hasty	Meadow		
104		Thomas Edsforth	Further Hasty	Pasture	
87			Diamond	Pasture	
86			Diamond Meadow	Meadow	
37			Little Lea	Fallows	
38			Orchard End	Meadow	
39			Lower Fidler Field	Pasture	
85			William Sharples	Little Diamond	Meadow

5.5.6 Below is a summary of the tithe apportionment information for the areas to be affected by the proposed temporary access routes. Most of the access routes are located within the same fields as defined above for the main sewer route, except for Access points 3 and 4. Access Point 3 encroaching in a field with the potential to have once contained a barn:

Access Point	Plot	Owner	Occupier	Name	Use
1	239	Sir Henry Bold Hoghton (Baronet)	William Ward & John Ward	Middle Hasty	Meadow
3	429	James Threlfall	James Threlfall	Lower Barn Field	Oats
4	337	The Late James Brown	James Noblett	Pasture	Pasture
	338	John Smith	John Taylor	West Acre	Pasture
5	284	John Smith	John Taylor	Further Ditch Croft	Meadow
6a	201	The Devises under the will of Henry Crook etc.	Thomas Hall	Great New Hey Sides	Clover
6b	270	Richard Harrison	Joseph Bryning	Bills New Hey Sides	Wheat

5.5.7 Historic Ordnance Survey mapping indicates that some field amalgamation had occurred in the late 19th century, between 1838 (GM12914-003) and 1893 (GM12914-004), notably in the south-eastern part of the Site and in the northern part of the Site, with the loss of an east-west aligned field boundary within the Site itself to the north of the canal, west of Access point 4 and of a north-west to south-east aligned boundary at the far northern extent of the proposed pipeline route. A large number of field boundaries had also disappeared to the east, in the area between Access points 3 and 4, in this period. Otherwise, the landscape remained much the same by the late 19th century.

5.5.8 By 1911 (GM12914-004) no other changes had occurred, though by 1932, a piggery, Little Wadhurst Piggeries had been established in the field north of Access point 1, immediately to the south of Savick Brook, removed by 1938. In addition, in this period (between 1911 and 1932), the former north-west south-east aligned lane extending from Darkinson Lane to the south-west of Access points 6a and 6b had been lost. This former access track is known from historic mapping (Yates 1786 etc) and is identified within the HER as a possible Roman road or medieval hollow way (HER PRN15255). It survives as a double line of hedges and a mature tree, visible from Darkinson Lane at the time of the site visit (*confer* 5.9.4; Plate 26).

5.6 Aerial Photographs

5.6.1 Aerial photographs dated to between 2000 and 2023, viewed on Google Earth, show the modern developments within the vicinity of the proposed sewer works. By 2000, Hoyles Lane itself was almost completely infilled along its southern frontage, with

some development on the north side too (Plate 4). Between 2015 and 2017, housing developments had begun to extend from the north of the north side of Hoyles Lane, and such developments were still underway at the time of the Site visit in July 2023. The changes occurring to Savick Brook as a result of the Ribble Link Navigation Canal is also shown by comparisons between images of December 2020 and December 2022, which shows the extent of the area affected. Otherwise, much of the area remained largely unaffected until the construction of the Preston Western Distributor, and East/West Link Road, the impacts of which are shown on images dated to May 2021 (Plate 5).

5.7 Historic Landscape Characterisation

5.7.1 The land within the boundary of the Site is entirely recorded as Ancient Enclosure, by Lancashire's Historic Landscape Characterisation project (Lancashire County Council 2017). This type is characterised by an irregular enclosure pattern with sinuous or wavy edged field boundaries and winding lanes or tracks connecting a dispersed settlement pattern. It was established prior to c AD1600. The principal archaeological components of Ancient Enclosure are:

'the boundaries that define the enclosed land, the predominantly dispersed settlement pattern and the pattern of roads and trackways that connect them. Hedges (typically mixed in nature compared with the single species, usually quickset hawthorn, increasingly found in Post-Medieval Enclosure and, particularly, Modern Enclosure), walls, banks (and mixtures thereof) and drainage ditches typify the boundaries of small to medium irregular fields, most of which appear to derive from the enclosure of individually farmed holdings. Occasionally the remains of early ridge and furrow survive, indicating a past use as part of an arable regime. The settlement pattern is focused upon the individual farms and hamlets which, alongside churches, tend to be the oldest buildings (generally 16th century and later), although they are seldom the first on each site. Buildings tend to be predominantly brick- or stone-built, but some may retain the timber framing of earlier periods. Building types are varied and include farms (438 listed examples), domestic houses (244 listed) and barns (98 listed). In places modern infill and augmentation has expanded the original hamlet to create commuter villages (such as Woodplumpton or Grimsargh). Connecting the farms and hamlets both to their fields and to other resources, such as woodland, mossland and nearby market towns, are a network of roads and tracks. Occasionally, on higher ground these have eroded down into the subsoil to create holloways, whereas on the lower, wetter ground they have been placed upon low causeways. Most are hedged and tarmaced, but some survive as farm tracks, green lanes and footpaths. Many are irregular in form and are complemented by an extensive network of irregular footpaths and bridleways. The type is characterised by a large variety of archaeological

features (visible and hidden) from all periods, including medieval moats (27, or 87% of those registered on the SMR), deserted medieval settlements (28, or 55%), deer-parks (40%), quarries, limekilns and crosses.'

5.7.2 The Historic Landscape Characterisation has listed methodologies to consider, to enhance and safeguard this landscape character type:

- *'Encourage the retention of smaller, irregular fields and the maintenance of the boundaries and associated structures (walls, hedges, ditches, gateposts and stone stiles) that define them.*
- *Encourage the retention of areas of surviving ridge and furrow through the maintenance of an appropriate pastoral regime.*
- *Further information and surveys are required to understand this HLC type, its origins and development. In particular assessments are needed to quantify and qualify historic farm buildings, surviving boundaries and historic routeways and particular patterns of interrelationship of these elements to each other. This information can then be used to guide future management proposals and appropriate conservation measures and to target scarce resources.*
- *The importance of this HLC type as the remnant of a much more extensive and commonplace landscape in the Lancashire area should be borne in mind when planning for new development and in determining planning applications'.*

5.8 LiDAR

5.8.1 LiDAR Composite 2020 50cm-1m DTM Hillshade has been analysed as part of this assessment (see Drawing GM12914-005). This shows a small area of ridge and furrow in an area to the south of Darkinson Lane, where the proposed pipeline route changes course and heads south. On the tithe map, this was in field 218, known as Fold Shop in 1838, and likely part of the medieval field system associated with Lea to the west. A little further east, the route of the former hollow way / access track, known from historic mapping and known to have been removed by 1932, but surviving as a double line of hedges and a mature tree, visible from Darkinson Lane at the time of the site visit (confer 5.9.4; Plate 26) is visible. Other areas of broad ridge and furrow are clear within the proposed pipeline route to the immediate north and south of the canal, south of Access point 5, with narrower ridge and furrow to the east, east of Access point 4, which may be later in origin. The former field boundary, known from historic mapping, north of the canal and south-west of Access point 5 is also clearly identifiable on LiDAR. This was identified during the site visit, as an east-west aligned ditch with four mature trees dotted along it (confer 5.9.3; Plate 17).

5.9 Site Visit

- 5.9.1 A Site visit was undertaken on the 25th July 2023. The site visit was undertaken in clear, dry conditions and from publicly accessible areas. Photographs taken during the visit and referenced below are presented as plates in Appendix 1.
- 5.9.2 Modern housing occupied much of the north side of Hoyles Lane (Plate 6), with areas to the north still under development (Plate 7). Opposite the junction where Hoyles Lane meets Sidgreaves Lane, the northernmost field within the redline boundary was in use for horse grazing and its eastern and southern boundaries comprised hedgerows (Plates 8 and 9). The field to the immediate south, grazed by cattle, also retained a hedgerow as its boundary with Sidgreaves Lane for much of its length (Plate 10), although the southern extent of this field has been affected by recent works, with a wide access gate, new pavement to Sidgreaves Lane and an area of recent planting (Plate 11). This extends at the eastern edge of the field to the immediate south, which is also laid to pasture (Plate 12). A hedgerow separates these two fields (Plate 13).
- 5.9.3 To the south, the new road alignment here is apparent, and the proposed sewer line crosses Sidgreaves Lane through land formerly used as a carparking and fringe land to the road system, recently newly planted (Plate 14). The area to the south of the new roundabout here has also been recently planted along its northern and eastern boundaries (Plate 15). The southern boundary of this field to the south of the roundabout, laid to pasture, is bounded by a hedgerow (Plate 16), separating it from a larger field to the south. Within this larger field, an east-west aligned ditch was visible with four mature trees dotted along it, matching the location of a former field boundary known from the Tithe Award map of 1838 (Plate 17). The western boundary of these two fields north of the canal is also formed by a hedgerow, as is the southern part of the eastern boundary (Plate 18). The proposed sewer line will then cross the Lancaster Canal (HER PRN10337; Plate 19) and, included in the proposed redline boundary here, a stone bridge carrying a farm track over a watercourse and adjacent to a culvert (HER PRN39349) under the canal (HER PRN39351) is recorded. These are visible on private land north of the canal.
- 5.9.4 The northern boundary of the field south of the canal is formed by a hedgerow (Plate 20), as is the eastern boundary, and comprises pasture. There was no obvious trace of the postulated route of part of Roman Road 703, which connected Ribchester and Poulton-le-Fylde (HER PRN26142; Plate 21). The route of the proposed sewer line then heads south from the western extent of this field, north of the mainline railway, less

visible from publicly accessible areas (Plate 22). The route crosses beneath the railway line, into pasture west of Red Oak Stables, used for horse grazing (Plate 23), and the boundary between this area and Darkinson Lane is formed by a hedgerow, and a hedgerow also bounds the south side of Darkinson Lane (Plate 24). To the south of the lane, the fields comprise pasture and are bounded by hedgerows (Plate 25), and some have stone gateposts at the entry points to the lane. A double line of hedges and a mature tree and at the approximate location of the former access track known from historic mapping (Yates 1786 etc) in the vicinity of the recorded earthwork remains of a possible Roman road or medieval hollow way (HER PRN15255) was visible from Darkinson Lane (Plate 26). Further south-west, where Darkinson Lane neared the new Preston Western Distributor/ Edith Rigby Way evidence of recent disturbance was visible by the presence of hardstanding and recent planting (Plates 27, 28 and 29).

- 5.9.5 Further south, the areas proposed for the sewer line were assessed from the public footpath adjacent to Savick Brook/ the Ribble Link Navigation Canal on its south side. The area to the north of Savick Brook, east of the new Preston Western Distributor/ Edith Rigby Way appear to have been landscaped and heightened to accommodate the road (Plate 30). Hedgerows bound either side of the path to the east of the elevated overpass (Plate 31), the area to the south across much of this area being scrub land, affected by the road scheme (Plates 32 and 33). The area of probable ridge and furrow (HER PRN42946) in this area was not visible, and presumably has been removed by construction works associated with the new roads. To the south, adjacent to the cycle path, recent disturbance has also occurred (Plate 34), although further west, the L-shaped piece of land forming the southern extent of the proposed sewer line appears to have been less affected and is a narrow stretch of pasture bounded by hedgerows (Plate 35). At the south-western extent of the route, to the immediate south of Savick Brook, a hedgerow bounds the path, and the area is dominated by reedy marshland (Plate 36). Further east, to the west of the cycle path, the land is laid to pasture (Plate 37), and a row of pylons crosses this area.

6 ARCHAEOLOGICAL POTENTIAL

6.1 Summary of Potential

6.1.1 Based on the known archaeology and baseline information, the potential of the Site may be summarised as follows:

6.1.2 **Prehistoric** – within the search area, the prehistoric period is represented by features interpreted as representative of prehistoric activity 90m east of the southern extent of the scheme, with an additional possible roundhouse 150m further east of that. However, a trial trench evaluation targeting the nearest feature in November 2023 did not reveal any evidence for prehistoric activity. As such, there is a **low** potential for prehistoric features to be present within the Site.

6.1.3 **Romano-British** – from the wider search area, the Roman period is represented by a single findspot. However, within the area to be crossed by the proposed sewage pipeline, a hollow way, noted during the site visit, visible on LiDAR, and known from historic mapping from at least the 18th century, has been postulated as a possible Roman road (HER PRN15255), though it could have medieval origins, possibly associated with Lea. A more definite Roman road has been projected, crossing the scheme to the south of the canal, west of Sidgreaves Lane (HER PRN26142), though no trace is visible at surface level and no features are discernible on LiDAR. As such, it is judged that there is a **moderate** potential for Roman assets associated with the road to be present within the Site.

6.1.4 **Medieval** – field name evidence from the Tithe Map of 1838 may indicate the presence of former medieval structures fronting the road (Further Ditch Croft, Rarer Ditch Croft, Smithy Croft, Darkinson Croft, and Cutler Croft), or medieval agricultural features to the rear, and certainly suggests these areas within the Site were cultivated during the medieval period. This is corroborated by areas of ridge and furrow, recorded in the wider area in the HER dataset, but also noted within the Site itself, particularly to the south of Darkinson Lane and in the vicinity of the canal near Access point 5. Lea Town has medieval origins, and Old Lea Hall was established as a manor house in the later period, and a number of findspots of medieval items have been found in the area. In addition, the hollow way cited above as potentially Roman may instead have medieval origins, and this extends within the Site boundary to the south of Darkinson Lane. As such, there is a **moderate** potential for medieval features to be present within the Site. Such remains if present, however, are likely to relate to agricultural activity or the hollow way, and as such, would likely be of low significance.

- 6.1.5 **Post-medieval** – the areas around Hoyles Lane and Sidgreaves Lane, in the parish of Lea, remained largely agricultural in nature into the post medieval period. Tithe mapping of 1838 shows the field pattern, and this remained largely unchanged into the 20th century, though with some field amalgamation and boundary losses, including to the north of the canal near Access Point 5, and in the vicinity of Access Points 3 and 4. A number of clay/marl pits are also known from the area. The canal itself dates to this period, elements first opening in 1797 (HER PRN10337), operating until 1850, superseded by the Preston and Wyre Railway (HER PRN10610) which also crosses the site. The industrial revolution brought wealth to the area, and a grand residence, Westleigh House (HER PRN30867), with associated landscaped park (HER PRN39687) was established for a local millowner, just to the east of Access point 3 in this period. As such, there is a **moderate** potential for post-medieval assets. Such remains if present, are likely to relate to agricultural activity, in the form of former field boundaries, or perhaps small-scale extraction, such as clay/marl pits, and as such, would likely be of low significance.
- 6.1.6 Overall, modern activity in the form of the canalisation of Savick Brook, residential developments along Hoyles Lane, and the construction of the Preston Western Distributor and East/West Link Road have impacted areas of the site, which will have impacted sub-surface archaeological remains in these areas. This is particularly applicable to the areas south of Savick Brook and the western extent of the proposed sewage route and also towards the northern extent of Sidgreaves Lane, in the vicinity of Avice Pimblett Way.

7 ARCHAEOLOGY - IDENTIFICATION AND ASSESSMENT OF IMPACTS

7.1 Introduction

7.1.1 The proposed development has the potential to cause direct impacts. Direct impacts would be caused by ground disturbance to potential assets of an archaeological nature.

7.1.2 It is anticipated that the proposed development will cause ground disturbance through:

- Excavations for the new sewer alignment, where required;
- Excavations for the new access points; and
- Soil stripping for temporary laydown areas and compounds.

7.2 Direct (Construction) Impacts

7.2.1 Appendix 2 describes the methodology for assessing the magnitude of impact and the overall significance of impact to the archaeological resource.

7.2.2 Construction activity would impact on any buried remains, if present.

7.2.3 A moderate potential has been identified for Roman, medieval and post medieval remains in the vicinity of the Site. As cartographic evidence has shown that much of the area to be directly impacted by the sewer line works lies within agricultural land either side of roads, any remains are likely to be agricultural in nature, and any finds, likely the result of casual losses from adjacent road users. If so, these would be of low significance, retaining limited historic interest. Where the sewer route and associated access routes and compound areas are located away from areas recently affected by modern developments, the potential for encountering remains would be higher. Construction activity would impact upon any buried remains, if present, which would result in a major magnitude of impact which, on an asset of low importance, would equate to an impact of **slight or moderate adverse** significance.

Historic Landscape Character Area

7.2.4 There is potential for impacts to the historic landscape character area as a result of these works. The land to be affected by the scheme is recorded as 'Ancient Enclosure' which is consistent with the medieval potential of the area revealed by this assessment. Methodologies have been defined to help protect this character area type, and elements of these could be considered at the construction phase to minimise impacts, including: retaining (or reinstating) any affected boundaries (walls,

hedges, ditches, gateposts, stone stiles; avoiding areas of surviving ridge and furrow, minimising impacts to the identified hollow way south of Darkinson Lane. It should be noted, however, that more major recent alterations to the landscape have occurred as a result of the major road networks in the vicinity. As such an impact of **slight adverse** significance is anticipated.

Historic Hedgerows

- 7.2.5 Historic hedgerows (see Appendix 4) are of medium historic importance, referencing and informing upon the historic enclosure of the landscape. With regards to historic hedgerows, it is not anticipated that there will be a requirement to remove any hedgerow in its entirety. However, where this is required, this may result in a small loss equating to **slight adverse** significance of effect. In the event that it is reinstated, long-term impacts to hedgerow would be neutral.

8 ARCHAEOLOGY - MITIGATION

- 8.1.1 In this instance the 'field evaluation' referred to within paragraph 194 of the NPPF would not be considered necessary at the pre-determination stage of any forthcoming planning application; it being reasonably assumed that if evaluation was a prerequisite of all applications potentially affecting archaeological remains then this would be expressly stated within the policy. As it is not, the 'where necessary' should be applied proportionally, most likely being required on sites where remains of potential high (national) importance could be located which could preclude development. On the baseline presented here there is no evidence to indicate the presence of remains of national importance.
- 8.1.2 It is anticipated that archaeological fieldwork, if required, could be delayed as a condition to consent for any forthcoming application. It could be undertaken as mitigation works, as a phased programme if considered necessary, in accordance with a Written Scheme of Investigation. This Written Scheme of Investigation, to be prepared in consultation with the Local Planning Archaeologist, could also be included within the condition for planning consent. The archaeological fieldwork, if required, could take the form of targeted watching briefs during the construction phase, on groundworks undertaken at the access points, or areas identified with higher potential to retain sub-surface archaeological remains, dependent on consultee advice. This would, in consideration of the Planning Practice Guidance, be reasonable and proportionate on reflection of the information presented within the baseline data which indicates that there is no evidence to suggest the presence of remains within the boundary of the Site which could preclude development.

9 ARCHAEOLOGY - ASSESSMENT AGAINST PLAN POLICY

9.1 Legislation

9.1.1 The proposals would not directly affect a Scheduled Monument or other remains of national importance and therefore would not engage the Ancient Monuments and Archaeological Areas Act (1979) or the Planning (Listed Building and Conservation Areas) Act (1990).

9.1.2 With regards to historic hedgerows, it is not anticipated that there will be a requirement to remove any hedgerow in its entirety. However, where this is required, this may result in a small loss equating to **slight adverse** significance of effect. In the event that it is reinstated, long-term impacts to hedgerow would be neutral.

9.2 Policy

9.2.1 In accordance with paragraph 194 of the NPPF this assessment has described the significance of potential buried remains which could be affected by the proposals. This report constitutes the appropriate desk-based assessment required.

9.2.2 Application of local policy EN8 of the *Preston Local Plan 2012-2026*, will be engaged due to potential for impacts to archaeological remains. It is considered that remains, if present, within the Site boundary would not be of national significance and therefore would not trigger application of the policy levels directed towards designated heritage assets. As such, any remains if present within the Site would be considered to be non-designated heritage assets. Therefore, due to the impracticability of the preservation of the remains *in situ*, there will likely be a requirement for the adequate provision for excavation and / or recording before or during the development.

10 HERITAGE – BASELINE INFORMATION

10.1 Designated Heritage Assets

10.1.1 Information on designated heritage assets was complimented by GIS information downloaded from Historic England (Historic England, 2023).

10.1.2 Asset details were gathered on the parameters as set out below.

- World Heritage Sites – within 1km of the Site;
- Scheduled Monuments – within 1km of the Site;
- Grade I and Grade II* Listed Buildings – within 1km of the Site;
- Grade II Listed Buildings – within 1km of the Site;
- Registered Park and Gardens – within 1km of the Site;
- Conservation Areas – within 1km of the Site; and
- Historic Battlefields – within 1km of the Site.

10.1.3 Within the search area the following designated heritage assets are present:

- One Grade I Listed Building; and
- Ten Grade II Listed Buildings.

10.1.4 These are summarised below, in Table 2:

Table 2: Designated Heritage Assets Within the Search Area		
Reference (NHLE)	Name	Designation
1165066	Canal Bridge Number 9, Quaker’s Bridge	Grade II listed
1165091	Clock House, early 19 th century house	Grade II listed
1073512	Canal Bridge Number 18	Grade II listed
1073513	Leyland Bridge Farmhouse, dated 1651 on porch	Grade II listed
1164105	Canal Bridge Number 22	Grade II listed
1361664	Cross on corner at Junction with Lea	Grade II listed
1165074	Part of Raikes Farmhouse, probably later 17 th century	Grade II listed
1361663	Old Lea Farmhouse, late 17 th or early 18 th century	Grade I listed
1073511	Stable Block south of Old Lea Farmhouse, early 17 th century or earlier	Grade II listed
1317477	Barn south-east of Old Hall Farmhouse, early 17 th century or earlier	Grade II listed
1165029	Barn, north of New Hall, c.1700	Grade II listed

10.1.5 Of the heritage assets listed in Table 2 it is anticipated that the asset types listed below would not be affected by the proposals (significance is sustained). This is due to their significance lying wholly/predominantly within their fabric and/or the lack of change which the proposals would cause in respect to elements of setting which contribute towards their significance. These types of assets would not therefore be taken forward within the Heritage Statement i.e., the types of assets listed below are considered scoped out of further assessment:

- Assets in built up areas, or set at such as distance from the development, resulting in cones of view to/from are not significant (applicable to NHLE 1165091, NHLE 1073512, NHLE 1073513, NHLE 1164105, NHLE 1361664 and NHLE 1165074);
- Distant farmhouses with no historic links to the land within the footprint of the site (applicable to NHLE 1361663, which, although historically linked to the land, this link has been physically severed by the modern A583 road); and
- Ancillary farm buildings to which an understanding and a perception of is restricted to the principal farmhouse and/or the immediate rural backdrop which would be unaffected (applicable to NHLE 1165029, NHLE 1317477 and NHLE 1073511).

10.1.6 Subsequent to this filtering process, the asset listed below in Table 3 was subjected to field observations to determine the necessity for assessment of their significance in accordance with NPPF and Historic England Good Practice Advice 3 ‘The Setting of Heritage Assets’ (2017) and Advice Note 12 ‘Statements of Heritage Significance’ (2019). These assets are shown on Drawing GM12914-002.

Reference (NHLE)	Name	Designation
1165066	Canal Bridge Number 9, Quaker’s Bridge	Grade II listed

10.1.7 Designated assets not listed in the table directly above are considered scoped out of assessment within this Heritage Statement.

11 ASSESSMENT OF SIGNIFICANCE AND SETTING

11.1 Introduction

11.1.1 A description of the interests held by Canal Bridge Number 9 is presented below. It is discussed in proportion with the value of the asset and as far as is necessary in order to determine the importance of setting to the significance of the asset and the potential effect of the proposals on this.

11.2 Canal Bridge Number 9: Quaker's Bridge (NHLE 1165066)

Archaeological and Historic Interest

11.2.1 The archaeological interest of the structure relates to the physical evidence that the fabric contains which would inform upon its origins.

11.2.2 Canal Bridge Number 19: Quakers Bridge, was constructed in the 1790s to carry Sidgreaves Lane over the Lancaster Canal, and the engineer was John Rennie. Similar, almost identical bridges lie within the study area, to the east (Canal Bridge number 18, NHLE 1073512), and to the west (Canal Bridge Number 22, NHLE 1164105), and originally there were over 170 bridges along the entirety of the route to Kendal. Not all survive, and interestingly, from the bridge numbers, two appear to have been lost within the study area itself (Nos. 20 and 21).

Architectural and Artistic Interest

11.2.3 Unlike other listed structures which may evolve over time and preserve elements of former use within their fabric, the canal bridge still carries Sidgreaves Lane over the canal, and thus survives much as it was built, meaning that the fabric only retains physical evidence of its origins, and not its evolution. In addition, as one of over 170 along the same canal, its rarity value and architectural and artistic interest is low.

Contribution of Setting

11.2.4 The immediate setting of the bridge, over the Lancaster Canal and carrying Sidgreaves Lane, respects its historic origins. Until quite recently, the agricultural, rural setting of this early industrial transportation route was also, largely retained, although this was eroded by the introduction of its successors, first the railway, c. 250m to the south, in the 19th century, and then, much more recently, the new Preston Western Distributor/ Edith Rigby Way, to the west, in 2023. The increasingly built-up nature of Hoyles Lane and Cottam to the east, has also encroached on this rural setting.

11.2.5 However, the canal bridge can still be appreciated, in its largely as-built condition, from the canal path at canal level to the east and west.

12 MITIGATION

- 12.1.1 Potential harm to the significance of a heritage asset can be minimised through the recognition of sensitive receptors within sympathetically designed schemes such that built form is demonstrably positioned in order to reduce adverse impacts and through the creation of long-term visual/acoustic screening for example. Such designs applicable to this development are discussed in Sections 13 and 14 below.
- 12.1.2 As the proposed development is for a new sewer alignment, there will be no direct impacts to the canal bridge, with much of the impact being temporary and short-term and only occurring during the construction phase of the project. Once the sewer pipeline has been installed, ground will be reinstated, and laydown and compound areas and temporary access routes will be reverted to agricultural land (except the area proposed for a temporary haulage road between Access points 3 and 4, for which a housing development has been approved). Thus, it is envisaged that the landscape will revert to much the same as it had been previously.

13 HERITAGE IMPACT ASSESSMENT

13.1.1 The potential indirect impacts to the significance of the Canal Bridge as a consequence of the infrastructure within the Site is discussed below.

Canal Bridge Number 9: Quaker's Bridge (NHLE 1165066)

13.1.2 The proposed development would introduce change within the extended setting of the structure, which has been minimised through design by the use of a temporary haul road to the east and not direct use of the bridge during groundworks. Most of the changes introduced to its setting, therefore, would be temporary, restricted to the groundworks associated with the introduction of the new sewer pipe under permitted development, and would not extend beyond the intrusive phase of works. The changes would be visual and arise due to the intervisibility between the structure. The change would affect the historical and current rural setting, although this has already been partially eroded by transportation developments since the late 18th century, and by recent and future housing developments.

13.1.3 Having considered the nature and extent of the significance of the asset, including the contribution made by setting to this significance, it is concluded that the harm to significance arising from the above change would equate to 'less than substantial harm'. This is based on the following moderating grounds:

- The significance of the setting is derived from its presence over the canal, and carrying Sidgreaves Lane, and no permanent changes will effect this;
- The long-term indirect impacts of the infrastructure proposals will be minor.

14 HERITAGE - ASSESSMENT AGAINST PLAN POLICY

14.1 National Policy and Legislation

14.1.1 With reference to Section 66 of the Planning (Listed Buildings and Conservation Areas Act) (1990) and the 'special regard' referenced as being required in respect to a Listed Building or its setting, no direct harm has been identified. The proposals would not therefore be in contravention of the 1990 Act.

14.1.2 In accordance with paragraph 194 of the NPPF this assessment has described the significance of designated heritage assets which could be affected by the proposals. This report constitutes the appropriate heritage assessment required in full accordance with paragraph 194.

14.1.3 Relevant national planning policy is presented by paragraph 202 of the NPPF.

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.

14.1.4 In anticipation of the proposed development resulting in less than substantial harm to the significance of Canal Bridge Number 9: Quaker's Bridge (NHLE 1165066), a Grade II listed structure, this requires the consideration of public benefits offered by the proposed development within any planning balance.

14.1.5 The proposed development has been judged to cause harm to the significance of the Canal bridge through changes within its setting. The identified harm would however be less than substantial in effect and limited in scale and timescale and should be weighed against the public benefits offered by the scheme. Public benefits to consider include the following:

- Provision of enhanced sewerage system and reduction in blockages;
- Minimised risk of discharge as a result of heavy rain;
- Minimised risk of flooding.

14.1.6 Preston's Local Plan 2012-26 (Preston City Council 2015, 108-109) states that proposals affecting a heritage asset or its setting will be permitted where they... *'accord with national policy on the historic environment and the relevant Historic England guidance...) act as a catalyst for the regeneration of the area in accordance with the Council's objectives for regeneration... are accompanied by a satisfactory Heritage Statement that fully explains the impact of the proposal on the significance of the heritage asset'*.

15 CONCLUSIONS - ARCHAEOLOGY & HERITAGE

- 15.1.1 This assessment, undertaken with due respect to guidance published by Historic England and with the utilisation of terminology in full accordance with the National Planning Policy Framework, has described the significance of designated and non-designated heritage assets potentially affected by the proposals.
- 15.1.2 The assessment concludes there will be at most, limited less than substantial harm to the significance of the Grade II structure of Canal Bridge Number 9: Quaker's Bridge (NHLE 1165066). No harm to the significance of any other designated heritage assets within the vicinity of the Site has been identified. In accordance with the NPPF, this less than substantial harm will need to be weighed against the public benefits offered by the proposals, which are listed in Section 14 above.
- 15.1.3 In consideration of archaeology, known heritage assets within the Site boundary may be affected, including a hollow way of probable medieval origin (**HER PRN 15255**), part of the route of a postulated Roman road (**HER PRN26142**) and areas of ridge and furrow. This assessment has also concluded there is potential for additional, associated archaeological remains within the Site which may originate from the Roman, medieval and post-medieval periods. The nature of these finds is unknown, but they are unlikely to represent settlement activity; the medieval and post-medieval, if present, may be represented by agricultural features.
- 15.1.4 Overall, there is no evidence for archaeological remains of high (national) significance to be present within the Site. As such there is no evidence to reasonably indicate the potential for the presence of archaeological remains which would preclude development. Therefore, it is anticipated that archaeological fieldwork, if required, could be delayed as a condition to consent for any forthcoming application.
- 15.1.5 The proposals are anticipated to be in accordance with legislation and national and local planning policy on archaeological and heritage grounds.

16 GLOSSARY

Archaeological Interest There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them

Source: Historic England Conservation Principles 2017 (consultation draft)

Architectural Interest The properties of a place resulting from and revealing the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types

Source: Historic England Conservation Principles 2017 (consultation draft)

Artistic Interest The influence of human imagination and skill to convey meaning through all forms of creative expression on the physical properties of a place and its setting or on their associations and appreciation. Artistic interest may relate to the influence of a place on art as well as the use of skill and design embodied in its fabric

Source: Historic England Conservation Principles 2017 (consultation draft)

Harm Changes for the worse, here primarily referring to the effect of inappropriate interventions on the heritage interest of a place that reduces their values to society

Source: Historic England Conservation Principles 2017 (consultation draft)

Historic Interest The connections between a place and past lives and events

Source: Historic England Conservation Principles 2017 (consultation draft)

Significance The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting

Source: NPPF 2021

Setting of a heritage asset The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral

Source: NPPF 2021

17 BIBLIOGRAPHY

British Geology Service (2023) *Geology of Britain Viewer*. Available at <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.

CifA (2020) *Standards and Guidance for Historic Environment Desk-Based Assessment*, Reading: Chartered Institute for Archaeologists.

Defra. (2002) *Amendment to the Hedgerow Regulations 1997: A guide to the law and good practice – amendment 2002*.

Department for Levelling Up, Housing and Communities (2023) *National Planning Policy Framework*.

Historic England. (2017) *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning: 3*. Historic England

Historic England. (2019) *The Statements of Heritage Significance: Analysing Significance in Heritage Assets – Historic England Advice Note 12*. Historic England

Historic England. (2020) *National Heritage List for England downloadable GIS data*. Historic England

Lancashire County Council (2017), *Lancashire Historic Landscape Characterisation*, Lancashire County Council

Preston City Council (2015), *Preston Local Plan, 2012-2026: Site Allocation and Development Management Policies*, Preston City Council: Preston

Cartographic Sources

Yate's Plan of Lancashire, 1786

Greenwood's Plan of Lancashire, 1818

Hennet's Plan of Lancashire, 1828

Plan of the Hamlet of Lea, Tithe Award Plan, 1838

First Edition Ordnance Survey mapping, 25 inches to 1 mile scale, 1893

Second Edition Ordnance Survey mapping, 25 inches to 1 mile scale, 1911

Archival Documents (Lancashire Record Office)

Reference	Title
DDPR/144/7	Plan of the River Ribble from Red Scarr to the bottom of Clifton Marsh" by R. Porter of Goosnargh. Shows locations of fishing stakes in the river and sketches adjacent features on land, including the town of Preston, Tulketh Hall and Lea Hall. 1756
DDCL/583	Agreement: Sir Henry Hoghton of Walton, bart. and Thomas Clifton of Lytham, esq. -- for making a new road between Lea and Clifton, 1 May 1781. With plan titled 'Map of Savock', 14 September 1781
DDX 610/53	Plan of estates at Lea, with schedule, 1864

Appendix 1
Plates

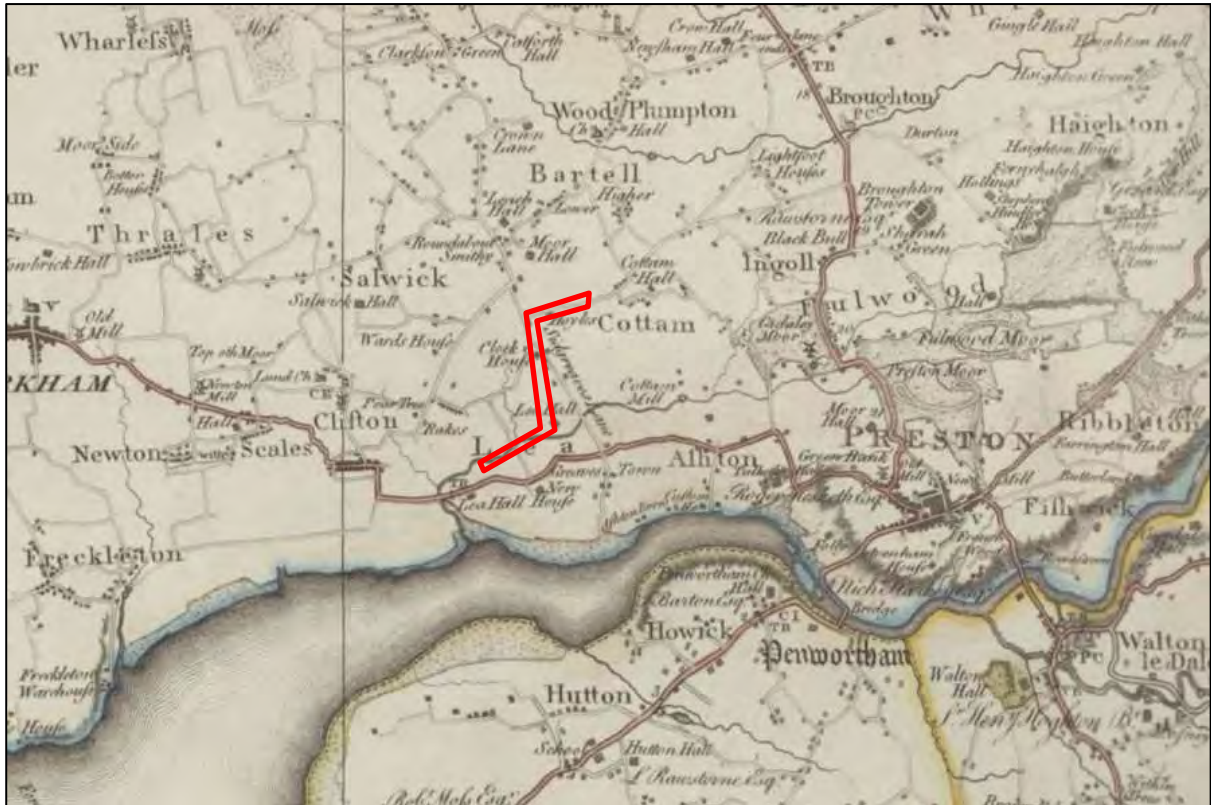


Plate 1: Yate's Plan of 1786



Plate 2: Greenwood's Plan of 1818

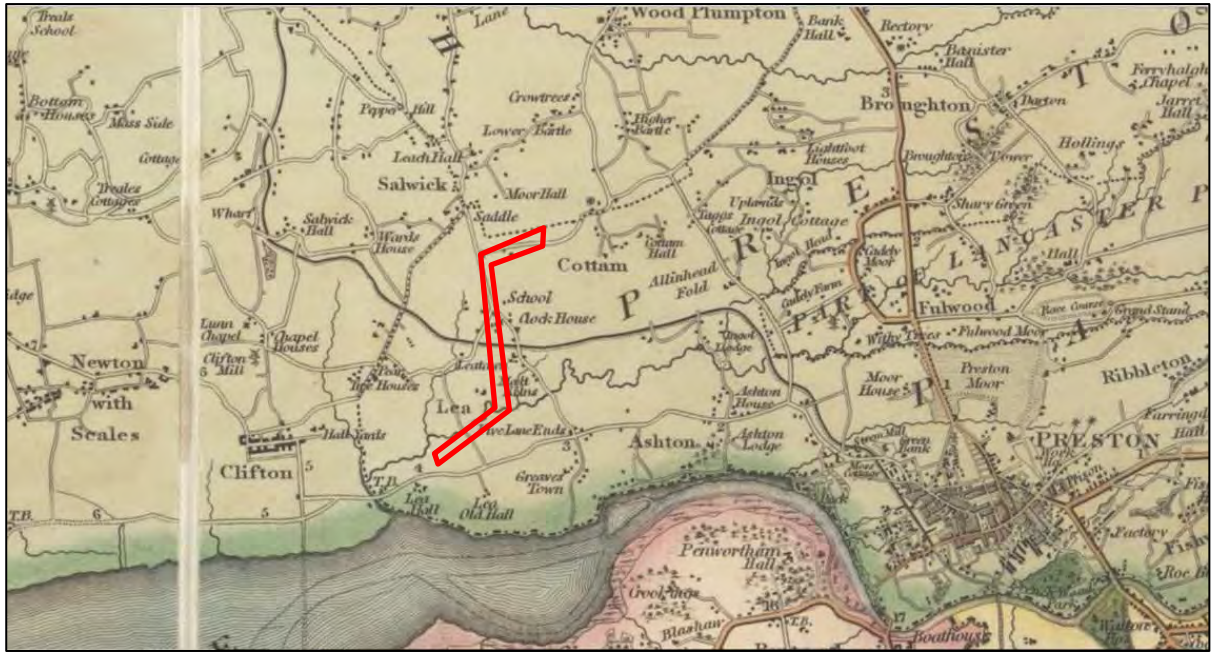


Plate 3: Hennet's Plan of 1828



Plate 4: Google Earth imagery, 2000: Hoyles Lane



Plate 5: Google Earth imagery, 2021: Western distributor



Plate 6: View along Hoyles Lane, facing west-south-west



Plate 7: Housing development to rear of Hoyles Lane from Sidgreaves Lane, facing north



Plate 8: Hedgerow on west side Sidgreaves Lane, facing north-west



Plate 9: Hedgerows on west side Sidgreaves Lane, facing north-west



Plate 10: Hedgerows on west side Sidgreaves Lane, facing south-west



Plate 11: Field west of Sidgreaves Lane, facing north-west



Plate 12: Field west of Sidgreaves Lane, facing south-west



Plate 13: Hedgerow dividing fields west of Sidgreaves Lane, facing west



Plate 14: Land south-west of school, west of Sidgreaves Lane, facing north-east



Plate 15: Land south of new roundabout, facing east



Plate 16: Hedgerow boundary to field south of new roundabout, facing west



Plate 17: Possible former field boundary marked by mature trees and adjacent ditch, north of canal, facing south-west (Access point 5, Sidgreaves Lane)



Plate 18: Hedgerow boundary to road, facing south



Plate 19: Lancaster Canal from bridge with hedgerows to north and south, facing west-south-west



Plate 20: Lancaster Canal and bridge, with hedgerows to north and south, facing east-north-east



Plate 21: Field through which postulated Roman road should run (HER PRN26142), facing west



Plate 22: Route of proposed pipeline from railway bridge, facing west-north-west



Plate 23: Hedgerow boundary north of Darkinson Lane at Red Oak Stables, facing north-west



Plate 24: Hedgerow boundaries north and south of Darkinson Lane in the vicinity of Access points 6A and 6B, facing south-west



Plate 25: Fields south of Darkinson Lane, facing north-east



Plate 26: Hollow Way (HER PRN15255) south of Darkinson Lane, facing south



Plate 27: Area of disturbance south of Darkinson Lane, facing south



Plate 28: Area of disturbance south and north of Darkinson Lane, facing west



Plate 29: Area of disturbance north of Darkinson Lane, facing north-west



Plate 30: Area of disturbance north of Savick Brook/ the Ribble Link Navigation Canal, facing north



Plate 31: Hedgerows either side of path south of Savick Brook/ the Ribble Link Navigation Canal, facing east-north-east



Plate 32: Disturbed area south of path, south of Savick Brook/ the Ribble Link Navigation Canal, facing west-south-west



Plate 33: Disturbed area south of path, south of Savick Brook/ the Ribble Link Navigation Canal, facing east-north-east



Plate 34: Disturbed area east of cycle path, south of Savick Brook/ the Ribble Link Navigation Canal, facing north



Plate 35: Southern extent of Site, facing west-north-west



Plate 36: Reedy marshland at south-western extent of Site, facing south



Plate 37: Area west of cycle path, south of Savick Brook/ the Ribble Link Navigation Canal, facing south-west

Appendix 2
Archaeology Impact Assessment Methodology

In ascribing levels of **importance** to heritage assets, the Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England 2020) has been used, see Table 1 below.

The **magnitude of impact** is measured from the condition that would prevail in a ‘do nothing’ scenario and it is assessed without regard to the importance of the receptor (Highways England, 2020).

The worst magnitude of impact would be Loss of resource and/or quality and integrity of resource and severe damage to key characteristics, features or elements.

In ascribing the magnitude of impact, guidance presented in the Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England 2020) has been used, see Table 2 below.

The **significance of impact** is devised by cross referencing the importance of the receptor with the magnitude of the impact, see Table 3. In some cases the significance of impact is shown as being one of two alternatives. In these cases a single description should be decided upon with reasoned judgement for that level of significance chosen.

Table 1: Establishing the importance of a heritage asset	
Value (sensitivity)	Typical description
Very High	Very high importance and rarity, international scale and very limited potential for substitution.
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England 2020)

Table 2: Establishing the magnitude of impact		
Magnitude of impact (change)		Typical description
Major	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Moderate	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.

Table 2: Establishing the magnitude of impact		
Magnitude of impact (change)		Typical description
Minor	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.
No change		No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England, 2020)

Table 3: Establishing the significance of impact						
Value/Importance	Very High	Neutral	Slight	Moderate/large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral/slight	Slight	Moderate	Moderate or large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight
		No change	Negligible	Minor	Moderate	Major
Magnitude of impact						

Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England, 2020)

Table 4: Significance categories	
Significance Category	Typical Description
Very large	Effects at this level are material in the decision-making process.
Large	Effects at this level are likely to be material in the decision-making process.
Moderate	Effects at this level can be considered to be material decision-making factors.
Slight	Effects at this level are not material in the decision-making process.
Neutral	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring, Revision 1 (Highways England, 2020)

Appendix 3

Heritage Impact Assessment Methodology

The NPPF stipulates that a description of the significance of each asset potentially affected by the proposed development should be provided in order to satisfy the requirements of the NPPF (Para 189).

The significance of a heritage asset is defined within the National Planning Policy Framework (NPPF) as ‘the value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic.

For a definition of these ‘interests’ a useful reference document is Historic England’s Conservation Principles for the Sustainable Management of the Historic Environment (2008). The terms used in this document roughly equate to those specified within the NPPF; ‘evidential’ equating to archaeological, ‘historical and communal’ equating to historic and ‘aesthetic’ equating too architectural and artistic. A consultation draft of a revised Conservation Principles (Historic England 2017) reverts to the NPPF terminology and specifically provides a definition of archaeological interest, architectural interest, artistic interest and historic interest (see glossary).

Assessment of Setting

As stated within the NPPF ‘*significance derives not only from a heritage asset’s physical presence but also from its setting*’ (MHCLG 2021, Annex 2 page:72).

In respect of identifying the importance of setting to the identified significance of a heritage asset, Historic England’s good practice guidance presented in the Setting of Heritage Assets (Historic England GPA 3 2017) will be utilised; specifically, the five-step approach to assessment:

- Step 1 – Identify which heritage assets and their settings may be affected;
- Step 2 – Assess the degree to which settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3 – Assess if any change to the setting identified would affect the appreciation/ understanding of an asset’s significance (there may be no change);
- Step 4 – Explore ways to maximise enhancement and avoid or minimise harm;
- Step 5 – Make and document the decision and monitor outcomes.

A non-exhaustive list provided within the document (2017:11) identifies themes such as:

- Physical Surroundings;
 - Topography;
 - aspect;
 - functional relationships and communications;
 - history and degree of change over time; and
 - sense of enclosure, seclusion, intimacy or privacy.
- Experience
- views from, towards, through, across and including the asset;
- intentional inter-visibility with other historic assets and natural features; and
- sense of enclosure, seclusion, intimacy or privacy.

Assessment of Impact

17.1.1 The NPPF stipulates three levels of potential impact to designated heritage assets. The NPPF references these as:

- Substantial harm;
- Less than substantial harm; and
- No harm (Significance is sustained or enhanced).

17.1.2 Planning Practice Guidance (PPG) discusses how to assess substantial harm where it states '*In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting*' (Para 19).

17.1.3 The application of the terms 'substantial' and 'less than substantial' is made on professional judgement and experience. The level of impact expressed by this assessment will be either no harm, less than substantial harm or substantial harm.

Appendix 4

Historic Hedgerows

In determining which if hedgerows are important on archaeological or historic grounds The Hedgerow Regulations (1997) state the following criteria.

The Hedgerow Regulations 1997 Schedule 1 Part II - Archaeology & History

1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose “historic” means existing before 1850.
2. The hedgerow incorporates an archaeological feature which is—
 - (a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979; or
 - (b) recorded at the relevant date in a Sites and Monuments Record.
3. The hedgerow—
 - (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and
 - (b) is associated with any monument or feature on that site.
4. The hedgerow—
 - (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or
 - (b) is visibly related to any building or other feature of such an estate or manor.
5. The hedgerow—
 - (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts; or
 - (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system—
 - (i) is substantially complete; or
 - (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act, for the purposes of development control within the authority’s area, as a key landscape characteristic.

Criteria 1

There are no parish boundaries within the Site boundary. Therefore, no hedgerows within the Site would be classified as important under Paragraph 1 criteria.

Criteria 2

There are no scheduled monuments recorded within the footprint of the Site. Therefore, no hedgerows within the Site would be classified as important under Paragraph 2 criteria.

Criteria 3

There are no archaeological sites recorded within the footprint of the Site associated with hedgerows. Therefore, no hedgerows within the Site would be classified as important under Paragraph 3 criteria.

Criteria 4

The land within the footprint of the Site is not known to have been associated with a pre-1600 AD estate. Therefore, no hedgerows within the Extension Site would be classified as important under Paragraph 4 criteria.

Criteria 5

In assigning a hedgerow as historic the phrase 'pre-dating the Inclosure Acts' should be taken to mean before 1845 (Defra 2002)¹. Maps suitable to assess the presence of important hedgerows under this criteria comprise the following:

- The Hamlet of Lea Tithe Award Map of 1838

¹ Defra. (2002) Amendment to the Hedgerow Regulations 1997: A guide to the law and good practice – amendment 2002

DRAWINGS

STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL

Desk Lodge
2 Redcliffe Way
Bristol
BS1 6NL
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310