



YORK ARCHAEOLOGICAL TRUST

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL INVESTIGATIONS, YORK FLOOD ALLEVIATION SCHEME, FLOOD CELL 11X STRENSALL: RIVER FOSS FLOOD STORAGE AREA

Site Location: Flood Cell 11X, Strensall
NGR: SE 65024 63189
Proposal: Erection of a new embankment to allow the flood cell to store water during flood events downstream. Excavation of a wetland pond to increase flood storage and act as a borrow pit for supply of earthwork materials.
Planning ref: N/A
Prepared for: Environment Agency
Document Number: 2019/147

Version	Produced by:		Edited by:		Approved by:	
	Initials	Date	Initials	Date	Initials	Date
1	CJ	27/09/2019	MS	10/10/2019	MS	14/10/2019
2			MS	14/10/2019	MS	14/10/2019
3			CJ	17/10/2019	MS	17/10/2019
4			MS	04/11/2019	MS	04/11/2019

Version	Approved on behalf of Local Authority by:	
	Curator	Date
1		

1 SUMMARY

- 1.1 As part of the Five Year Flood Management Plan for York (FMP), a new flood embankment is to be constructed at Flood Cell 11X, Strensall (SE 65024 63189). The scheme comprises the construction of a large earthen bank and a wetland pond, which will be used as a borrow pit for the supply of the scheme's materials.
- 1.2 This Written Scheme of Investigation (WSI) has been prepared in response to a Scope of Archaeological Investigations supplied by Stephen Kemp, Principal Archaeologist for the Environment Agency. The work will be carried out in accordance with the scope and this WSI, and according to the principles of the Institute for Archaeology (CIfA) Code of Conduct and all relevant standards and guidance.

2 SITE LOCATION & DESCRIPTION

- 2.1 The proposal site is located within agricultural land on either side of the River Foss, around 2km to the north-east of the village of Strensall (SE 65024 63189) (Figure 1). The area is a low-angle river vale lying between 15.65m AOD and 18.75m AOD. The site is bounded to the north and east by Lilling Low Lane whilst all other sides are bounded by agricultural land. Lilling Green Cottage Farm lies to the north-west of the site, whilst the U-Pass School of Motoring is located to the south-east. The site contains a number of unnamed water courses which appear as field ditches, including Black Dike drain to the south, and the south-western sector contains a small number of ponds.
- 2.2 The bedrock on site is of the Mercia Mudstone Group – Mudstone, sedimentary bedrock formed between 252.2 and 201.3 million years ago during the Triassic Period. Overlying the bedrock, from west to east, are superficial deposits of Sutton Sand Formation – Sand; Alluvium – Clay, silt, sand and gravel, and Alne Glaciolacustrine Formation – Clay silty. The Sutton Sand Formation was formed between 116 thousand years ago and the present during the Quaternary period and is formed of fine-grained silty sand. The Alluvium deposits were formed between 11.8 thousand years ago and the present during the Quaternary period and comprise of silty clay former river channels. The Alne Glaciolacustrine deposits were formed between 116 and 11.8 thousand years ago during the Quaternary period and are formed from laminated clay with silt and subordinate fine-grained sand beds with a little marginal sand and gravel (BGS accessed 27/09/2019).
- 2.3 Trial pits undertaken on the site in 2018 (Slater 2018) recorded the following natural deposits:

Trial Pits	Deposits (m BGL)			
	Sutton Sand Formation	Alluvial clays	Sands containing organic deposits	Glacial Boulder Clay
1	0.39m	0.41m	-	-
2	-	0.35m	1.6m	3m
3	-	0.25m	-	1.7m
4	-	0.3m	1.45m	-

5	-	0.3m	2m	2.8m
7	0.4m	-	-	1.1m
6	-	0.3m	1.4m	2m
8	0.32m	1.1m	-	1.3m
9	-	0.4m	2.2m	2.7m
10	0.3m	1m	3.7m	3.8m
11	-	0.31m	1.2m	2.41m
12	-	0.3m	1.2m	2.2m-
13	-	0.14m	-	-
14	0.44m	0.51m	-	-
15	-	0.37m	-	-
16	0.38m	-	-	2m
17	-	0.37m	-	-
18	0.26m	1.63m	1.71m	-
19	-	0.19m	-	-
20	0.32m	-	-	0.6m
21	0.5m	-	-	0.95m

3 DESIGNATIONS & CONSTRAINTS

- 3.1 There are no Scheduled Monuments or Listed Buildings within the site and it does not lie within a Conservation Area.
- 3.2 The site contains a number of former marl extraction pits now surviving as ponds.
- 3.3 There are overhead high voltage cables (400kv and 11kv) and five pylons crossing the site north of East Lilling Farm.

4 ARCHAEOLOGICAL / HISTORICAL INTEREST

- 4.1 The Vale of York was created as a major lake formed during the retreat of the last glaciers c. 12,000 years BP. As this lake slowly drained it created a landscape of mires, moorland and higher points that would have attracted Mesolithic human activity.
- 4.2 Very little is known about this area until the establishment of the Roman fortress at York, 12km to the south-west, but elsewhere in the Vale of York Iron Age settlements have been identified on areas of slightly raised ground bordered by marshes and, in this case, the early River Foss.
- 4.3 Geo-technical investigation has revealed potential earlier courses of the River Foss (Figure 3). If these are present, they could retain good environmental evidence of previous land use and human activity.

- 4.4 A number of cropmarks have been recorded within 1km of the site (Pastscape.org.uk accessed 16/10/2019) including a possible Bronze Age ring ditch which has been recorded around 500m north-east of the nearest trench (MON ID: 1182912). Other features can be seen close by, including a series of ditches, pits and a small enclosure measuring 10m by 6m (MON ID: 1182932) which could either form part of an Iron Age/Roman settlement, or be associated with the possible Bronze Age ring ditch. Around 300m east of the nearest trench, two parallel ditches of uncertain date were recorded measuring 70m long and 16 apart (MON ID: 1882933). It is thought the ditches could represent a form of boundary or trackway.
- 4.5 As part of the RCHME: Bolesford Project a Roman settlement was recorded to the west of Lilling Green Farm, around 850m to the nearest trench (MON ID: 918532 and 919014). The main part of the settlement was a double ditched enclosure measuring 78m by 71m externally and partitioned internally into compounds of varying sizes. The eastern side of the enclosure formed a boundary with a possible associated field system which was on the same alignment as the enclosure. The morphology of the site suggests a Roman date, and this is backed up by the presence of 4th century pottery in the north-west corner of the enclosure.
- 4.6 The site lies c.2.5km north-east of the village of Strensall, a settlement recorded in Domesday and thought by some to be associated with a 9th century reference to a place called 'Streonaeshalch' mentioned in conjunction with the AD 664 Synod of Whitby where the early Christian church of the Kingdom of Northumberland adopted a style of worship influenced by Rome rather than one developed in Ireland.
- 4.7 The deserted medieval settlement of East Lilling lies 2km to the north-east of the site. There is a low potential for medieval settlement activity in the proposal area.
- 4.8 The River Foss was canalised from its confluence with the River Ouse in York to Sheriff Hutton Bridge in the 1780s. The present course of the river derives from this period. The Navigation was closed up-stream of Layerthorpe in York by 1850.
- 4.9 The available historical mapping shows the development of the area from a mid-19th century enclosed landscape of small fields through gradual amalgamation to the larger agricultural fields currently present.
- 4.10 A series of geotechnical test pits and boreholes were monitored by YAT in 2018 (Slater 2018). Nothing of archaeological significance was recorded during these works.
- 4.11 A geophysical survey carried out in 2019 (Fortuny & Armstrong) of the site recorded an area characterised by extensive drainage in multiple orientations and patterns, indicating that the area has undergone significant land management. A palaeochannel was also recorded, on a north/south alignment across the centre of the site, characterised by meanders and oxbows.

5 AIMS

- 5.1 The aims of the evaluation are:
- to determine the extent, condition, character, importance and date of any archaeological remains present
 - to provide information that will enable the remains to be placed within their local, regional, and national context and for an assessment of the significance of the archaeology of the proposal area to be made
 - to provide information to enable the local authority to decide any requirements for

further archaeological mitigation for the site

6 EXCAVATION METHODOLOGY

6.1 The evaluation will comprise the following elements:

- Trial trenching
- Borehole monitoring
- Reporting

Please note that further stages of work or other mitigation measures could be required by the local authority, depending upon the results of the evaluation.

- 6.2 15 40m x 2m trenches will be excavated in the locations shown in Figure 2. Trenches will be stepped if necessary to excavate safely whilst ensuring their stated size at the base of the trench.
- 6.3 Should deposits exceed 1.20m in depth a sondage will be excavated at the end of each trench in order to record the lithological sequence. If organic deposits are encountered (silts and organic sands) bulk samples of 20L will be recovered for plant macrofossil and insect assessment if appropriate.
- 6.4 The trench locations will be accurately plotted by measurement to local permanent features shown on published Ordnance Survey maps using a GPS unit. All measurements will be accurate to +/-10cm, and the trenches locatable on a 1:2500 Ordnance Survey map to ensure our interventions can be independently relocated in the future.
- 6.5 Topsoil and subsoil materials will be removed by a mechanical digger fitted with a toothless bucket. Mechanical excavation equipment would be used judiciously, under archaeological supervision down to the top of archaeological deposits, or natural deposits, whichever is first identified. If archaeological material is present machining will cease and excavation will normally proceed by hand. Where deep homogenous deposits, or deposits such as rubble infill, are encountered, these may be carefully removed by machine with the approval of the North Yorkshire County Council (NYCC) Archaeologist and the Environment Agency Archaeologist.
- 6.6 The use of powered digging equipment may sometimes be appropriate to remove hard building materials or deep intrusions such as brick or concrete floors or footings. Powered digging equipment will only be used with the agreement of the North Yorkshire County Council (NYCC) Archaeologist and will not be used to cut arbitrary test pits through archaeological deposits.
- 6.7 All trenches will be sufficiently cleaned by hand to enable potential archaeological features to be identified and recorded. Areas will be recorded as sterile if devoid of archaeological material, the stratigraphic sequence will be recorded after which investigation of those areas will cease.
- 6.8 A sufficient sample of archaeological features and deposits will be stratigraphically excavated in the following manner to fulfil the evaluation aims and objectives:
- Discrete features will initially be half-sectioned, full excavation may follow if deemed necessary or appropriate
 - A minimum 25% proportion of the total length of linear features will be excavated in sections of not less than 1m in length
 - Relationships at junctions, interruptions or terminations of linear features will be sufficiently explored to determine relationships

- Structures will be investigated sufficiently to understand their form, function, extent and morphology, as well as their date and relationships to other features and deposits

7 RECORDING METHODOLOGY FOR EXCAVATION

- 7.1 All archaeological features will be recorded using standardised pro forma record sheets. Plans, sections and elevations will be drawn as appropriate and a comprehensive photographic record will be made where archaeological features are encountered.
- 7.2 Archaeological contexts will be planned at a basic scale of 1:50, with individual features requiring greater detail being planned at a scale of 1:20. Larger scales will be utilised as appropriate. Sections drawings will be made at a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids interpretation, structural remains will also be recorded in elevation.
- 7.3 Archaeological contexts will be allocated unique numerical identifiers and described in full on a pro forma context record sheet in accordance with conventional archaeological record methods. All records will be checked and indexes of records compiled.
- 7.4 All site photography will follow accepted archaeological photography guidelines. Work in progress, general views, groups of contexts or features, individual contexts and sections will be digitally photographed.
- 7.5 Areas devoid of archaeological material will be photographed and recorded as being archaeologically sterile. The natural stratigraphic sequence within these areas will be recorded.
- 7.6 All finds will be collected and handled following the guidance set out in the ClFA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds, and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.
- 7.7 All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication *First Aid for Finds*, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.
- 7.8 Other samples will be taken, as appropriate, in consultation with York Archaeological Trust specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.
- 7.9 Any human remains discovered will be left in situ, covered and protected pending notification of the discovery to the NYCC Archaeologist and the submission to the Ministry of Justice of an application for excavation. Exhumation of human remains will take place in compliance with environmental health regulations and only with a valid licence from the Ministry of Justice. An osteoarchaeologist will be available to give advice on site.

- Any **disarticulated** human remains discovered will be recovered and removed in appropriate packaging.
- Any **articulated** human remains that are found will be excavated in accordance with recognised guidelines (see 7.10) and retained for assessment.
- Any grave goods or coffin furniture will be retained for further assessment.

7.10 Human remains will be removed in accordance with the Burial Act 1857 and the Ministry of Justice exhumation licence, and with the guidance of CIfA Technical Paper 13 (1993) and APABE (2017).

8 GEOARCHAEOLOGICAL BOREHOLES

- 8.1 A total of 23 boreholes will be drilled to a depth of 5m BGL with a terrier rig, with material recovered in 1m plastic sleeves. The cores will be split at T&PA facilities and recorded by a geoarchaeologist using the Troels-Smith (1955) system of sediment classification (Appendix 1). The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are darkness (Da), stratification (St), elasticity (EI), dryness of the sediment (Sicc) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) and a stratigraphic breakdown of the deposits will be recorded on proforma log sheets. The logs will be supplemented by digital photography.
- 8.2 All borehole locations will be located using a Leica GNSS to National Grid co-ordinates and Ordnance Datum. The boreholes records will be entered into the existing Rockworks deposit model.
- 8.3 A total of four cores will be retained and stored until a planning decision has been made. If appropriate, they will then be subsampled for microfossil (i.e pollen). The remaining cores will be stored for a maximum of one year after which time discard permission will be sought. Grab samples may also be recovered from the trenches in order to characterise the Alne deposits. The sampling methodology, processing and recording will be undertaken within the guidelines laid out by Historic England (2002a and b).
- 8.4 A strategy for palaeoenvironmental assessment will be designed once the results of the fieldwork are known. This will be carried out in conjunction with radiocarbon dating in order to provide a baseline understanding of the depositional sequence, the preservation of palaeoenvironmental remains and the significance of the site.

9 SPECIALIST ASSESSMENT

- 9.1 The stratigraphic information, artefacts, soil samples, and residues will be assessed as to their potential and significance for further analysis and study. The material will be quantified (counted and weighted). Specialists will undertake a rapid scan of all excavated material. Ceramic spot dates will be given. Appropriately detailed specialist reports will be included in the report.
- 9.2 Materials considered vulnerable should be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues on or in pottery, and mineral-preserved organic material). Allowance will be made for preliminary conservation and stabilization of all objects and

a written assessment of long-term conservation and storage needs will be produced. Once assessed, all material will be packed and stored in optimum conditions, in accordance with Watkinson and Neal (1998), ClfA (2014) and Museums and Galleries (1992).

- 9.3 All finds will be cleaned, marked and labelled as appropriate, prior to assessment. For ceramic assemblages, any recognised local pottery reference collections and relevant fabric Codes will be used.
- 9.4 Allowance will be made for the recovery of material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary. This will be decided in consultation with Jennifer Morrison, Senior Archaeologist for the Environment Agency and the NYCC Archaeologist.

10 REPORT & ARCHIVE PREPARATION

- 10.1 An initial summary and recommendations will be submitted to the Environment Agency within two weeks of the completion of the site work.
- 10.2 Upon completion of the site work, a report will be prepared to include the following:
 - a) A non-technical summary of the results of the work.
 - b) An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
 - c) An account of the methodology and detailed results of the operation, describing structural data, archaeological features, associated finds and environmental data, and a conclusion and discussion.
 - d) A selection of photographs and drawings, including a detailed plan of the site accurately identifying the areas monitored, borehole and trench locations, selected feature drawings, and selected artefacts, and individual trench plans and sections.
 - e) Specialist artefact and environmental reports where undertaken, and a context list/index.
 - f) Details of archive location and destination (with accession number, where known), together with a context list and catalogue of what is contained in that archive.
 - g) A copy of the key OASIS form details
 - h) Copies of the Brief and WSI
 - i) Additional photographic images may be supplied on a CDROM appended to the report
- 10.3 A final report on the investigations will be expected by the 1st January 2020 unless otherwise agreed.
- 10.4 The report will be submitted in digital format to the commissioning body as well as direct to the NYCC Archaeologist for planning purposes and inclusion into the HER.
- 10.5 A field archive will be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs will be produced. York Archaeological Trust will liaise with the Yorkshire Museum prior to the commencement of fieldwork to establish the detailed curatorial requirements of the museum and

discuss archive transfer and to complete the relevant museum forms. The relevant museum curator would be afforded access to visit the site and discuss the project results.

- 10.6 The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the Local Authority and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.
- 10.7 Upon completion of the project an OASIS form will be completed at <http://ads.ahds.ac.uk/project/oasis/>.

11 POST-EXCAVATION ANALYSIS & PUBLICATION

- 11.1 The information contained in the evaluation report may enable decisions to be taken regarding the future treatment of the archaeology of the development site and any material recovered during the evaluation.
- 11.2 If further archaeological investigations (mitigation) take place, any further analyses (as recommended by the specialists, and following agreement with the NYCC Archaeologist may be incorporated into the post-excavation stage of the mitigation programme unless such analysis are required to provide information to enable a suitable mitigation strategy to be devised. Such analysis will form a new piece of work to be commissioned.
- 11.3 In the event that no further fieldwork takes place on the site, a full programme of post-excavation analysis and publication of artefactual and scientific material from the evaluation may be required by the NYCC Archaeologist. Where this is required, this work will be a new piece of work to be commissioned.
- 11.4 If further site works do not take place, allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.

12 HEALTH AND SAFETY

- 12.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.
- 12.2 A Risk Assessment will be prepared prior to the start of site works.

13 PRE-START REQUIREMENTS

- 13.1 The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.
- 13.2 The client will provide York Archaeological Trust with up to date service plans and will be responsible for ensuring services have been disconnected, where appropriate.

- 13.3 The client will be responsible for ensuring that any existing reports (e.g. ground investigation, borehole logs, contamination reports) are made available to York Archaeological Trust prior to the commencement of work on site.

14 REINSTATEMENT

- 14.1 Following excavation and recording the spoil from the trenches will be backfilled unless requested otherwise. The backfill material will be levelled and compressed as far as possible with the mechanical excavator bucket, but will not be compressed to a specification. York Archaeological Trust are not responsible for reinstating any surfaces, including reseeded, unless specifically commissioned by the client who will provide a suitable specification for the work.

15 TIMETABLE & STAFFING

- 15.1 The timetable will be agreed with the client.

- 15.2 Specialist staff available for this work:

- Human Remains – Malin Holst, York Osteology Ltd
- Palaeoenvironmental remains – John Carrott, Palaeoecology Research Services Ltd
- Head of Curatorial Services – Christine McDonnell, YAT
- Finds Researcher – Nicky Rogers, Freelance
- Pottery Researcher – Anne Jenner, YAT
- Finds Officers – Nienke Van Doorn, YAT
- Archaeometallurgy & Industrial Residues – Rachel Cubitt and Dr Rod Mackenzie, Freelance
- Conservation – Ian Panter, YAT

16 MONITORING OF ARCHAEOLOGICAL FIELDWORK

- 16.1 As a minimum requirement, the NYCC Archaeologist and Environment Agency Archaeologist will be given at least one week's notice of work commencing and will be informed prior to completion on site. Any changes to this WSI may only be made with the written approval of the NYCC Archaeologist and Environment Agency Archaeologist. The NYCC Archaeologist and Environment Agency Archaeologist will be afforded opportunity to visit the site during the works to inspect the site and the archaeological recording, and discuss the project and any further mitigation requirements. York Archaeological Trust will notify the NYCC Archaeologist and Environment Agency Archaeologist of any significant archaeological discoveries that are made during the course of the project.

- 16.2 With the client's agreement illustrated notices may be displayed on site to explain the nature of the works.

17 COPYRIGHT

- 17.1 York Archaeological Trust retain the copyright on this document. It has been prepared expressly for the Environment Agency, and may not be passed to third parties for use or for the purpose of gathering quotations.

18 BIBLIOGRAPHY

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For current Historic England guidance documents see:

<https://historicengland.org.uk/advice/latest-guidance/>

<https://historicengland.org.uk/advice/technical-advice/archaeological-science/>

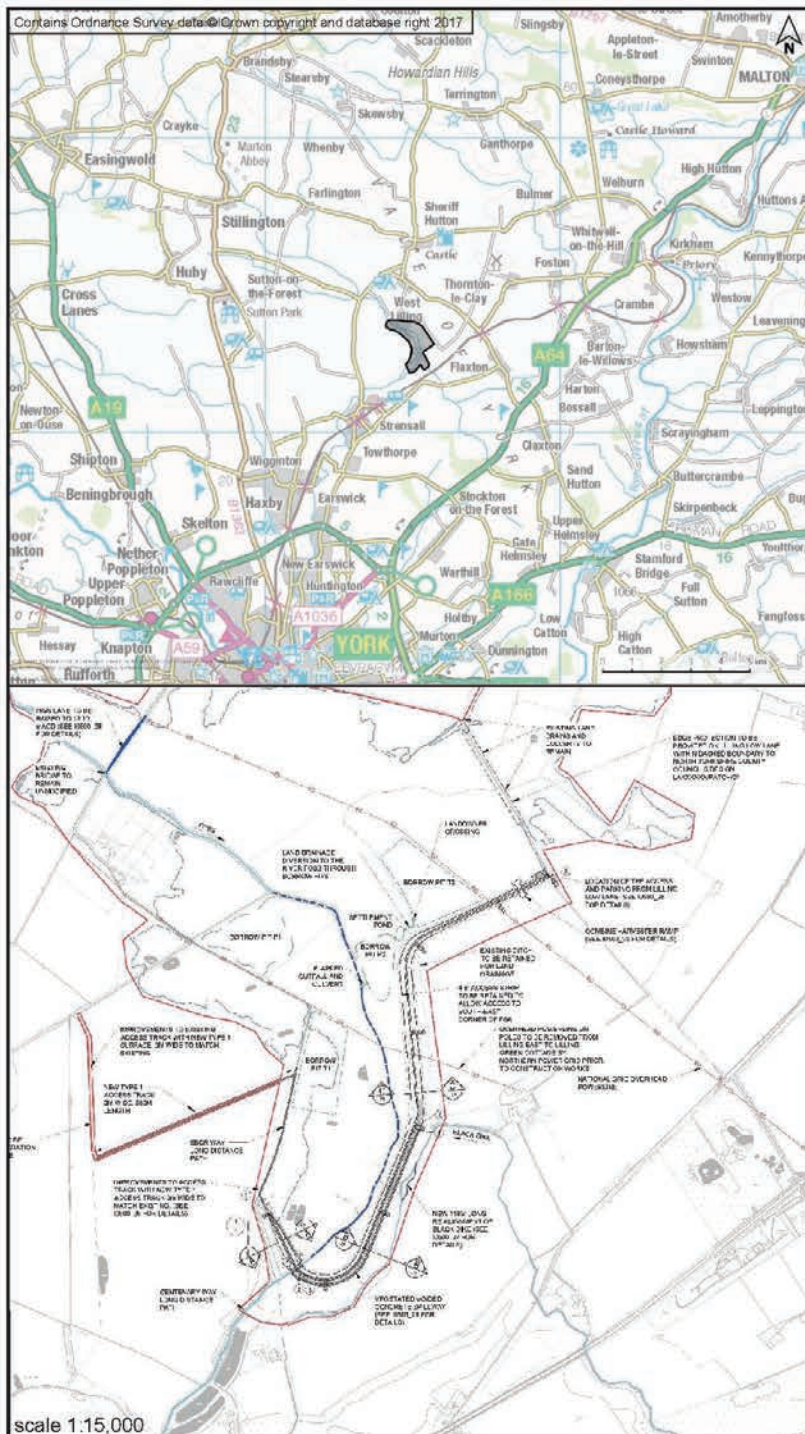
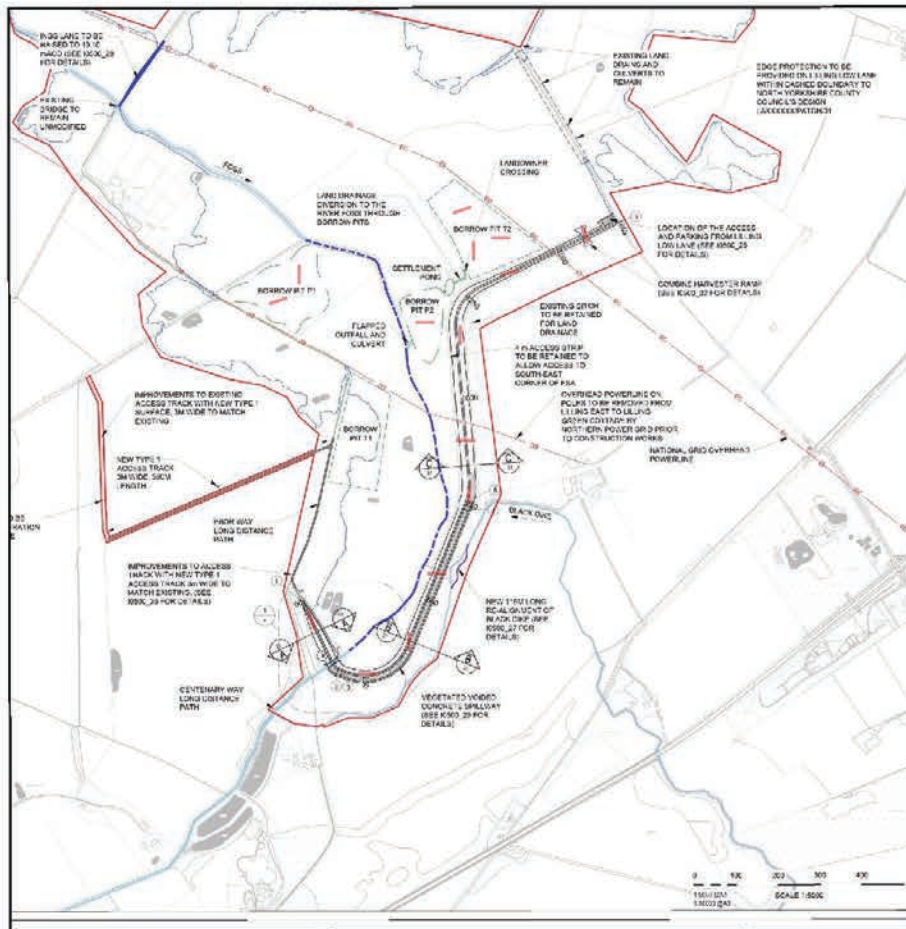


Figure 1 Site location and proposed works
 (taken from clients plan: ENV000381C-CAA-00-00-DR-C-10500-23 GA)



Trench (40m x 2m)

scale 1:15,000

Figure 2 Trench Locations
(taken from clients plan: ENV0000381C-CAA-00-00-DR-C-10500_23)

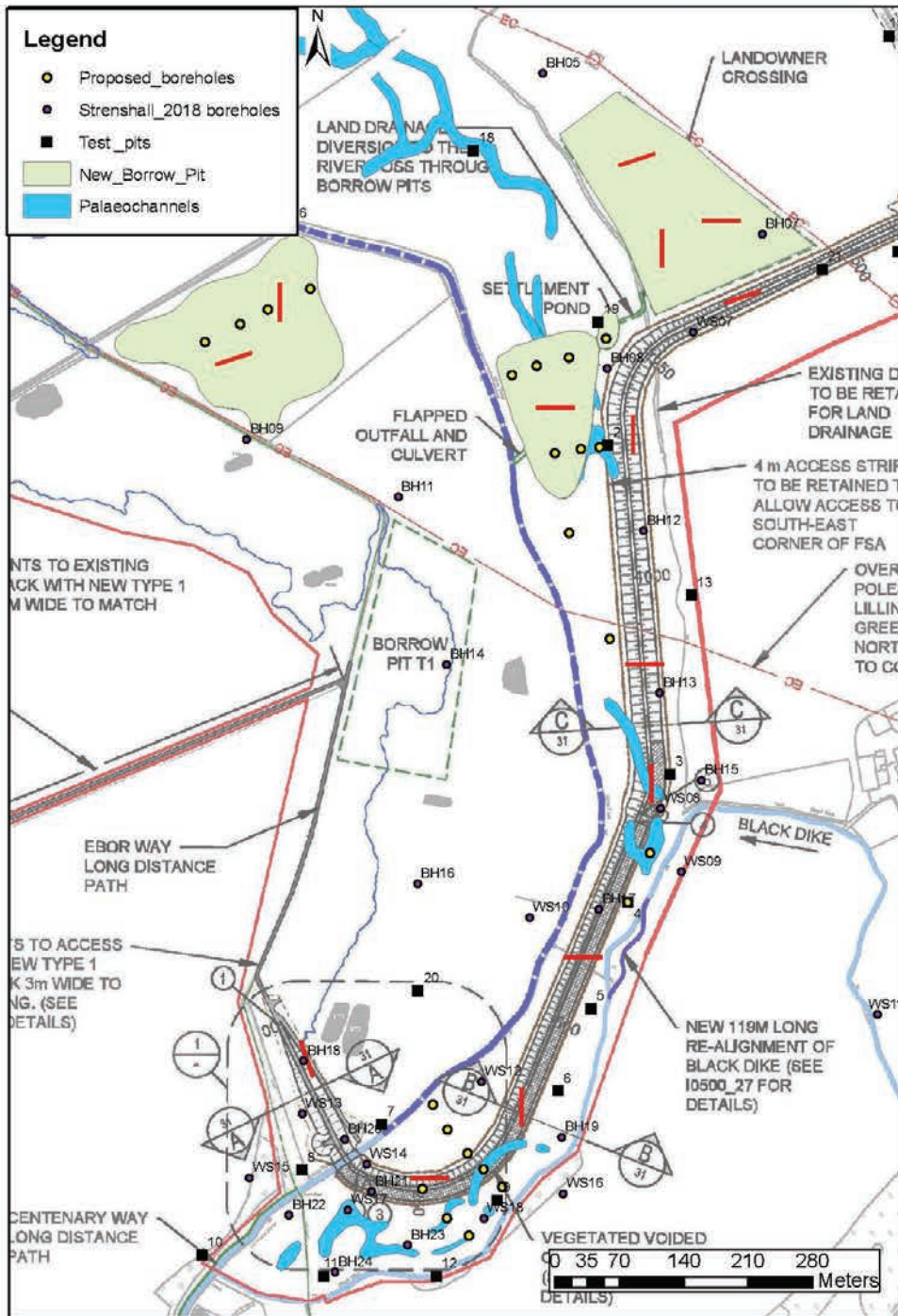


Figure 3 Borehole locations

APPENDIX 1 – BOREHOLE RECORDING METHODOLOGY

Darkness	Degree of Stratification	Degree of Elasticity	Degree of Dryness
nig.4 black	strf. well stratified	elas. very elastic	sicc. very dry
nig.3	strf.	elas.	sicc.
nig.2	strf.	elas.	sicc.
nig.1	strf.	elas.	sicc.
nig.0 white	strf. no stratification	elas. no elasticity	sicc. water

	Sharpness of Upper Boundary
lim.	< 0.5mm
lim.	< 1.0 & > 0.5mm
lim.	< 2.0 & > 1.0mm
lim.	< 10.0 & > 2.0mm
lim.	> 10.0mm

	<i>Sh</i>	<i>Substantia humosa</i>	Humous substance, homogeneous microscopic structure
<i>I Turfa</i>	<i>Tb</i>	<i>T. bryophytica</i>	Mosses +/- humous substance
	<i>Tl</i>	<i>T. lignosa</i>	Stumps, roots, intertwined rootlets, of ligneous plants
	<i>Th</i>	<i>T. herbacea</i>	Roots, intertwined rootlets, rhizomes of herbaceous plants
<i>II Detritus</i>	<i>Dl</i>	<i>D. lignosus</i>	Fragments of ligneous plants >2mm
	<i>Dh</i>	<i>D. herbosus</i>	Fragments of herbaceous plants >2mm
	<i>Dg</i>	<i>D. granosus</i>	Fragments of ligneous and herbaceous plants <2mm >0.1mm
<i>III Limus</i>	<i>Lf</i>	<i>L. ferrugineus</i>	Rust, non-hardened. Particles <0.1mm
<i>IV Argilla</i>	<i>As</i>	<i>A. steatodes</i>	Particles of clay
	<i>Ag</i>	<i>A. granosa</i>	Particles of silt
<i>V Grana</i>	<i>Ga</i>	<i>G. arenosa</i>	Mineral particles 0.6 to 0.2mm
	<i>Gs</i>	<i>G. saburralia</i>	Mineral particles 2.0 to 0.6mm
	<i>Gg(min)</i>	<i>G. glareosa minora</i>	Mineral particles 6.0 to 2.0mm
	<i>Gg(maj)</i>	<i>G. glareosa majora</i>	Mineral particles 20.0 to 6.0mm
	<i>Ptm</i>	<i>Particulaetestaemolioscorum</i>	Fragments of calcareous shells

Physical and sedimentary properties of deposits according to Troels-Smith (1955)



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