

Report



Archaeological Monitoring and Recording Report: Geo-technical pits at Atlas Street, St Helens

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Contents

List of Plates	2
Summary	2
Acknowledgements	3
1 Introduction	4
<i>Project Background</i>	4
<i>The Site, Location and Geology</i>	4
2 Objectives	5
<i>Aims and Scope</i>	5
3 Copyright	5
4 Archaeological and Historical Context	6
<i>Introduction</i>	6
5 Methodology	7
<i>Introduction</i>	7
<i>Artefacts, Human Remains, Treasure and Environmental Sampling</i>	7
<i>Post-Excavation Analysis</i>	8
<i>Archives and Deposition</i>	8
<i>ADAS Project Team</i>	8
6 Results	8
7 Discussion and Conclusions	13
8 References	15
<i>Online Resources</i>	15
Appendix A: Context Descriptions	xvi
Appendix B: The Finds	xxii
Appendix C: Oasis Report Form	xxiii
Plates	xxv

List of Figures

Figure 1: Location of the Proposed Development.

Figure 2: Recorded Heritage Assets and Previous Archaeological Investigations.

Figure 3: Geotechnical Trial Pit Locations

Figure 4: Geotechnical Trial Pit Locations on the 1894 OS County Series Lancashire and Furness Map

List of Plates

Plate 1: Oblique view of the north facing section of TP105.

Plate 2: View of the north-west facing section of TP106.

Plate 3: Oblique view of the west facing section of TP107.

Plate 4: Oblique view of the west facing section of TP108.

Plate 5: Oblique view of the east facing section of TP109.

Plate 6: View of the south facing section of TP110 showing brick structure (10007).

Plate 7: Working shot of TP111 looking south.

Plate 8: View looking north-west of TP118.

Plate 9: Working shot of TP119 looking south-west.

Plate 10: View of the west facing section of TP120.

Plate 11: Oblique view of the north facing section of TP121.

Plate 12: View of TP123 looking south-west.

Plate 13: Oblique view of TP124 looking north.

Plate 14: View of TP125 looking west.

Quality Assurance

ADAS Project Code	Accession Code	Local Authority HER No.	Planning Ref.	OASIS Reference No.	Site Code
1050186 PE/DO13 Atlas Street, St Helens	TBC	N/A	P/2017/0634/FUL	adasukt1- 308631	ATLAS17

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Revision History

Revision	Date	Amendment

Summary

In December 2017 ADAS carried out an archaeological watching brief for Torus 62 Development Company Ltd of groundworks for geotechnical trial pits on land bounded by Corporation Street, Pocket Nook Street, and Atlas Street (centred on NGR: SJ 5187 95513; Figure 1).

The archaeological monitoring was carried out as part of a programme of archaeological works agreed with the local authority archaeologist to address the archaeological condition attached to the planning permission. Planning consent was granted for the construction of a five storey building comprising 130 extra care apartments with associated highway works and landscaping (Planning Ref: P/2017/0634/FUL).

The evidence from the trial pitting indicates that ground levels across the southern half of the Site have been raised using imported material. The trial pitting (TP104 to TP12, TP129 and TP130) shows that there is approximately 1 m of mixed soil and brick rubble which also contains sections of uPVC window frame, sealant tubes across the southern half of the Site. These deposits seal intact brick and concrete surfaces *in situ*. They are likely to date to the latter half of the 19th century and have the potential to seal the remains of the earlier copper works.

The ground level at the northern end of the Site appears to have changed relatively little in the last twenty-five years, with floor surfaces and stubs of walls still visible on the ground surface. There is a slope running east-west across the Site which marks this change in ground level. At the time of the trial pitting the slope was generally obscured by dense vegetation.

The walls and floor surfaces at ground level at the northern end of the Site are likely to relate to the later 19th century activity on that part of the Site as they seal a thick deposit composed almost entirely of crushed copper slag. This is likely to be a waste product of the Pocket Nook Copper Works which was reused as ground make-up when the works was re-developed. The dump of copper slag is at least 1 m thick and is associated with walls constructed of cast copper slag which are likely to relate to the Pocket Nook works. It should be noted that only short sections of these possible walls were exposed and the trial pits began to flood at the point where they were exposed (Figure 4).

The available evidence suggests that the near surface remains are relatively late 19th components of St Helens' industrial landscape. It is considered highly likely that deeper buried remains relating to the 18th century industrial landscape of St Helens are sealed below these higher deposits and have the potential to be well preserved. It is recommended that further archaeological strip map and sample excavation be undertaken on the northern part of the Site prior to any further development. This is primarily due to the presence of shallower, near surface structural remains possibly relating to the former Pocket Nook Smelting Works in that part of the Site.

Acknowledgements

This archaeological watching brief was commissioned by Torus 62 Development Company Ltd, and thanks are due in this regard. Fieldwork was carried out by Mark Adams. The report and supporting illustrations were prepared by Andrew Brown, and checked by Diarmuid O'Seaneachain. The archive was compiled by Andrew Brown.

1 Introduction

Project Background

- 1.1.1 In December 2017 ADAS carried out an archaeological watching brief for Torus 62 Development Company Ltd of groundworks for geotechnical trial pits on land bounded by Corporation Street, Pocket Nook Street, and Atlas Street (centred on NGR: SJ 5187 95513; Figure 1).
- 1.1.2 The archaeological monitoring was carried out as part of a programme of archaeological works agreed with the local authority archaeologist to address the archaeological condition attached to the planning permission. Planning consent was granted for the construction of a five storey building comprising 130 extra care apartments with associated highway works and landscaping (Planning Ref: P/2017/0634/FUL).
- 1.1.3 The archaeological monitoring works are part of a staged programme of archaeological works to assess and mitigate by recording the impact of the development on the potential buried archaeological resource of the site. The programme of works comprises:
- a) Archaeological monitoring and recording of geotechnical trial pits on the Site.
 - b) Following the archaeological monitoring of the geotechnical trial pits a strip, map and sample excavation will be carried out over the area of highest archaeological potential which will be impacted by the footprint of the main building on the northern part of the Site
- 1.1.4 This report will discuss and assess the results of the archaeological monitoring of the geo-technical trial pits only.
- 1.1.5 ADAS were instructed to prepare a Written Scheme of Investigation (WSI) to carry out the required archaeological works and record any archaeological remains during the monitoring of the groundworks (ADAS 2017).
- 1.1.6 The fieldwork followed the *Standard and Guidance for an archaeological watching brief* (ClfA 2014), *the Management of Archaeological Projects 2* (English Heritage 1991) and the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (EH 2006) and the RSK Technical Manual (RSK 2018).

The Site, Location and Geology

- 1.2.1 The development area (the Site) consists of land bounded by Corporation Street, Pocket Nook Street and Atlas Street (centred on NGR: SJ 51847 95513, Figure 1).
- 1.2.2 The development area is currently comprised of overgrown grass and scrubby vegetation growing on a demolished former industrial site. It is bordered by trees/hedgerows on the northern part of the Site, by an area of hardstanding in the central and southern part of the Site and by the disused St Helens Canal along the western boundary. The development covers an area of approximately

2.2 hectares. The ground level in the northern part of the Site is approximately 29 m AOD and rises to approximately 30 m AOD across the southern part of the Site.

- 1.2.3 The underlying geology along the scheme is recorded as mudstone, siltstone and sandstone of the Pennine Middle Coal Measures Formation overlain with Diamicton Till deposits from the Devensian Period (BGS 2018). Borehole data from the Site (SJ59NW364- St Helens Atlas Street TP4) recorded 1.80 m of made ground before the test pit was terminated due to severe water ingress. A second borehole (SJ59NW366- St Helens Atlas Street R1) records 4.50 m of made ground overlying weathered grey mudstone and sandstone with strong sandstone bands (ibid 2018). This mudstone and sandstone layer has been interpreted as the natural substrate within the Site boundary.

2 Objectives

Aims and Scope

- 2.1.1 The aims of this watching brief were:

- *To ensure that any archaeological features/deposits exposed during groundworks associated with the development area were identified, recorded and interpreted to an acceptable standard;*
- *To ensure that any significant discoveries of artefactual evidence were recorded and analysed to an acceptable standard;*
- *The specific aim of the fieldwork was to identify and record any unknown buried archaeological remains or artefacts that may be associated with the former Pocket Nook Works, Atlas Foundry and Waterloo Foundry industrial complexes.*
- *To assess the potential for further buried remains associated with the former Pocket Nook Works to be preserved in-situ within the footprint of the proposed development.*
- *To ensure that the fieldwork took place within, and contributes to the goals of the Archaeological Research Framework for North-West England (Brennand et al 2007).*
- *To report the results as appropriate.*

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4 Archaeological and Historical Context

Introduction

- 4.1.1 Historic England and the local council record no World Heritage Sites, Grade I, Grade II* or Grade II Listed Buildings, Registered Parks and Gardens, Designated Wrecks, Designated Battlefields or Architectural Conservation Areas within 250m of the development area.
- 4.1.2 A search of local HER records indicated four non-designated heritage assets recorded either within the Site boundary or immediately adjacent to it (Merseyside HER 2017; Figure 2).
- 4.1.3 The earliest recorded structure on the Site available from historic records is the site of a railway swing bridge (MME8020) for the Gerrard's Bridge Branch railway line. This swing bridge is located immediately outside the north-western Site boundary alongside the canal. The railway is recorded as appearing on the Parr Parish Tithe map of 1843 and again on the 1849 Ordnance Survey OS map crossing the canal via a Railway Turn Bridge. The Gerrard's Bridge branch of the line was originally a single track line with the swing bridge pivoting on the eastern bank of the canal. During the 1860's the railway and bridge were enlarged with a double track. HER records indicate that the site is derelict with access via Pocket Nook Street (Merseyside HER 2017).
- 4.1.4 HER historic records show that to the immediate south of the Site the former St Helens Chemical Works (MME8034) was previously owned by a Mr William Henry Balmain. He created the first industrial complex on the Site in 1852 which went on to increase in size over the next decade. However, by 1865 Mr Balmain was declared bankrupt and subsequently the Site was taken over by the St Helens Chemical Company Ltd. The Site had been demolished and cleared by 1986 except for the chimney. This was brick built, approximately 10 m tall and 3 m square with an induction hole at the base. The Site appears on the 1st edition 1894 OS map as a building labelled as 'Barton Works' but labelled as 'Chemical Works' on the 1908 OS map. The Site is not labelled on the 1928 OS map and does not appear at all on the OS map from 1959 (Merseyside HER 2017).
- 4.1.5 The third non-designated heritage asset recorded by the HER refers to the site of the former Waterloo Foundry (MME8054) in the northern part of the Site. Originally known as the Pocket Nook Smelting Works and built in 1854 as a copper works by Alexander Robertson Arnott, the firm was taken over in 1896 with some of the buildings becoming the Atlas Foundry. The foundry had a boundary wall built of copper slag and brick and a lintel over a doorway was inscribed 'PNSW 1854'. The site was demolished in 2000 (Merseyside HER 2017; Adams 1999).

- 4.1.6 The Atlas Street Foundry (MME8033) to the immediate south-east of the Site was originally founded in 1847 by the firm of Robinson and Cook. The business at first was small scale however it had doubled in size within ten years. In 1896 the Varleys took over the Atlas Street Foundry and the Pocket Nook Smelting Company to expand into. The foundry continued in use until the late 1980's and was eventually demolished in the late 1990's (Merseyside HER 2017; Adams 1999).
- 4.1.7 The Merseyside HER records the 18th Century Sankey Navigational Canal (MME15003) to the immediate west of the Site. The HER records the site of a bridge (MME8025) located approximately 54 m to the north of the Site boundary. Further to the west of the historic canal are the sites of a 19th century glass bending works (MME8058), and the Hardshaw Glass Works (MME8059), and a former coal pit (MME14975) located over 150 m to the west of the Site boundary on Hall Street. The site of the St Helens Goods Station (MME14979) and another coal pit (MME8028) are also recorded by the Merseyside HER over 180 m to the south-west of the Site Boundary (Merseyside HER 2017).
- 4.1.8 In 1999 an archaeological desk-based assessment was carried out in advance of proposed development on the Site (EME2165). The assessment indicated that there was a high potential industrial archaeological remains related to the Atlas Foundry and the Pocket Nook Smelting Works to be present within the Site boundary (Merseyside HER 2017; Adams 1999).

5 Methodology

Introduction

- 5.1.1 The fieldwork followed the methodology set out within the Written Scheme of Investigation (ADAS 2017). An archaeologist monitored the excavation of geo-technical test pits within the Site boundary over two consecutive days in December 2017..
- 5.1.2 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with the Chartered Institute for Archaeologists *Standard and Guidance: Archaeological watching brief 2014*.

Artefacts, Human Remains, Treasure and Environmental Sampling

- 5.1.3 No artefacts or human remains were encountered during the watching brief. No archaeologically significant deposits were disturbed by the groundworks, so no environmental sampling was undertaken.

Post-Excavation Analysis

5.1.4 No archaeological artefacts or deposits were encountered during the watching brief, and therefore no post-excavation analysis was required.

Archives and Deposition

5.1.5 The archive is currently held by ADAS at their offices in Milton Park. No artefacts were recovered during the monitoring and therefore no artefacts will need to be deposited with an approved local museum. A paper archive will be deposited with the National Museums Liverpool within six months of the completion of the fieldwork under an accession number which will be issued upon deposition. A summary of information from this project, set out within Appendix C, will be entered onto the OASIS database of archaeological projects in Britain. An OASIS form, ID reference adasuklt1-308631 has been provisionally completed and will be submitted at the time of completion.

ADAS Project Team

5.1.6 Fieldwork was undertaken by Mark Adams. The report was written by Andrew Brown. The illustrations were prepared by Andrew Brown. The archive was compiled and prepared for deposition by Andrew Brown. The project was managed for ADAS by Diarmuid O'Seaneachain.

6 Results

6.1.1 This section provides an overview of the monitoring results; detailed summaries of the recorded contexts and finds are to be found in Appendix A.

6.1.2 A total of thirty-four geo-technical trial pits (TP101-TP130) were excavated over two days (4th and 5th December 2017). Fourteen of the trial pits (TP105- TP111, TP118- TP121, and TP123- TP125) were monitored (Figures 3 and 4; Plates 1-14). Trial Pits RB101-RB104, TP101-104, TP112-117, and TP122 were excavated before they could be monitored.

Trial Pit 105

6.1.3 Trial Pit 105 measured approximately 5 m by 1 m and was excavated to a depth of 1.80 m (See Plate 1).

6.1.4 The upper fill of the pit consisted of loose topsoil and demolition rubble and ash 1.80 m thick (105001).

6.1.5 A possible brick surface (105002) was encountered at a depth of 1.80 m at the base of the pit. No other archaeologically significant features or artefacts were observed or recovered.

Trial Pit 106

6.1.6 Trial Pit 106 measured approximately 5 m by 1 m and was approximately 1.40 m deep (See Plate 2).

6.1.7 The upper fill of this pit (106001) consisted of loose soil containing concrete rubble and re-bar to a depth of 1.40 m. This deposit also contained plastic bags and is likely to be material that has been dumped on the Site since 1999.

6.1.8 A possible brick floor (106002) was observed at the base on the south side of Pit 106. No other archaeologically significant features or artefacts were observed.

Trial Pit 107

6.1.9 Trial Pit 107 measured approximately 4.80 m by 1.20 m and was approximately 2.90 m in depth (Plate 3).

6.1.10 The upper fill of this pit consisted of 1.50 m of loose topsoil and rubble containing plastic sealant tubes (107001). This deposit sealed a very compact layer of yellow clay (7002) 0.20 m thick which in-turn overlay a white clay layer (107003) approximately 1.20 m thick to the base of the pit.

6.1.11 Brick work of un-frogged bricks (107004) was observed on the northern side of the pit. However, due to the depth and narrowness of Pit 107 this feature could not be investigated further.

Trial Pit 108

6.1.12 Trial Pit 108 measured approximately 4.90 m by 1.20 m and was approximately 3 m in depth (Plate 4).

6.1.13 The upper fill of this pit consisted of topsoil and rubble (108001) containing UVPC widow frame fragments, frogged bricks and modern sealant tubes 1.50 m thick. This sealed a yellow clay layer (108002) approximately 0.30 m thick which overlay a greenish white silty clay (108003) layer containing un-frogged bricks 1.20 m thick to the base of the pit.

6.1.14 The base of Pit 108 was flooded by water entering it from a redundant drain. The stratigraphic sequence of Pit 1088 matched the sequence seen in Trial Pit 107.

Trial Pit 109

6.1.15 Trial Pit 109 measured approximately 5 m by 1.50 m and was approximately 2.40 m in depth (Plate 5).

- 6.1.16 The upper fill of the pit consisted of topsoil and rubble (109001) which contained modern rubbish/detritus. This sealed a layer of white clay (109002). Measurements for the thickness of these deposits could not be taken due to the pit sides becoming unstable.
- 6.1.17 A brick built wall (109003) was observed in the north-eastern corner of the pit, the base of which was at an estimated depth of approximately 1.90 m. As discussed above accurate measurements could not be taken due to the instability of the pit sides.

Trial Pit 110

- 6.1.18 Pit 110 measured approximately 2.20 m by 1.90 m wide and was approximately 2.10 m in depth (Plate 6).
- 6.1.19 The upper fill of the pit consisted of 0.40 m of topsoil and rubble (10001) overlying 0.20 m deposit of black ash and cinders (10002). These layers sealed a deposit of dumped yellow clay 1.50 m thick and contained iron slag fragments throughout (10003). This yellow clay layer overlay further dumped deposits of ash and clinker (10004) and a pinkish- white clay (10005).
- 6.1.20 These deposits overlay a brick concrete floor (10006) at the base of the pit and abutted against a brick wall [10007] approximately 0.37 m wide and located at the western end of Pit 110. The brick wall was constructed of machine made, frogged bricks which were bonded in Portland cement.

Trial Pit 111

- 6.1.21 Pit 111 measured approximately 5 m by 1.80 m wide and was approximately 2.10 m in depth (Plate 7).
- 6.1.22 The upper fill of the pit consisted of loose topsoil and brick rubble with copper slag (111001) throughout. The excavation was stopped when a solid obstruction, possibly a concrete floor surface (111002) was encountered across the base of the pit.

Trial Pit 118

- 6.1.23 Pit 118 measured approximately 4.50 m by 1 m and was 0.55 m deep (Plate 8).
- 6.1.24 The upper fill of the pit consisted of loose topsoil and brick rubble (118001) just 0.55 m thick sealing a concrete floor (118002). The rubble consisted of a mixture of un-frogged, hand-made bricks, metal sheeting and 20th century brick fragments.

Trial Pit 119

- 6.1.25 Pit 119 measured approximately 1.50 m by 1 m wide and was approximately 1.50 m deep (Plate 9).
- 6.1.26 The upper fill of the pit consisted of loose topsoil and rubble consisting of frogged and un-frogged bricks with patches of yellow and white fire clay (119001) 0.40 m thick. Below this the deposits consisted of 80-90% crushed copper slag fragments (119002). The water table was encountered at a depth of 1.50 m below ground level and the excavation was abandoned.

Trial Pit 120

- 6.1.27 Pit 120 measured approximately 2 m by 1.20 m wide and was approximately 1.40 m in depth (Plate 10).
- 6.1.28 The upper fill of the pit consisted of 0.40 m of a very dark brown humic topsoil with occasional brick fragments (120001). Below this layer was a compact dark grey ash layer 0.20 m thick (120002). This ash layer in turn overlay another humic dark greyish brown soil (120003) approximately 0.70 m thick. Below this was a layer of very compact yellow silty clay (120004) approximately 0.10 m thick which sealed a layer of rubble consisting of un-frogged brick fragments (120005).
- 6.1.29 At this depth the pit became flooded. Nevertheless, the remains of an *in-situ* structure orientated north-east to south-west and built from cast copper slag blocks (120006) and a possible brick wall (120007) were observed. The possible brick wall was also aligned approximately north-south. Its width could not be measured as it was only partially revealed in the western side of the pit.

Trial Pit 121

- 6.1.30 Pit 121 measured approximately 2.50 m by 1.20 m wide and was approximately 0.90 m in depth (Plate 11).
- 6.1.31 The upper fill of the pit consisted of 0.70 m of topsoil and rubble and glass fragments (121001). This sealed a very compact layer of grey ash (121002) which varied in thickness from east where it was 0.05 m thick becoming 0.20 m thick to the west.
- 6.1.32 This ash layer in turn sealed a badly decayed sandstone block (121003) which may represent the remains of a furnace chimney which historic mapping indicated was located at this approximate location.

Trial Pit 123

- 6.1.33 Pit 123 measured approximately 2.50 m by 1.60 m wide and was approximately 1.80 m in depth (Plate 12).
- 6.1.34 The top fill of the pit consisted of 0.20 m of brown humic topsoil (123001) which overlay 0.20 m of brick rubble (123002). This in turn overlay 0.20 m of lenses of black and white ash (123003) which sealed 0.50 m of crushed slag and soil (123004). Below this layer was 0.50 m of crushed brick, slag and soil (123005) which lay on a layer of pale yellowish brown sand (123006) at the base of the pit.
- 6.1.35 No archaeological features were observed within the pit.

Trial Pit 124

- 6.1.36 Trial Pit 124 measured approximately 1.80 m by 1.20 m wide and was approximately 1.80 m in depth (Plate 13).
- 6.1.37 The upper fill of the pit consisted of 1.10 m of topsoil (124001) over lying a concrete slab (124002). Beneath the concrete was a loose deposit of waterlogged crushed brick and copper slag (124003).
- 6.1.38 A single skin brick wall (124004) comprised of un-frogged bricks entered the eastern side of the pit and was aligned north-west to south-east before turning and exiting the western side of the pit on a south-west to northeast alignment. A stone railway sleeper (124005) was also observed by the side of the pit.

Trial Pit 125

- 6.1.39 Trial Pit 125 measured approximately 2.20 m by 1.10 m wide and was 0.40 m in depth (Plate 14).
- 6.1.40 The top fill of the pit consisted of topsoil (125001). However, excavation of the pit was terminated at 0.40 m deep when an iron pipe was encountered. The base of the pit exposed a pale greenish yellow clay (125002) that had been encountered in previous trial pits.
- 6.1.41 No archaeological features were encountered within the pit.

7 Discussion and Conclusions

- 7.1 The evidence from the trial pitting indicates that ground levels across the southern half of the Site have been raised using imported material. The trial pitting (TP104 to TP12, TP129 and TP130) shows that there is approximately 1 m of mixed soil and brick rubble which also contains sections of uPVC window frame, sealant tubes across the southern half of the Site. These deposits seal intact brick and concrete surfaces *in situ*. They are likely to date to the latter half of the 19th century and have the potential to seal the remains of the earlier copper works.
- 7.2 The ground level at the northern end of the Site appears to have changed relatively little in the last twenty-five years, with floor surfaces and stubs of walls still visible on the ground surface. There is a slope running east-west across the Site which marks this change in ground level. At the time of the trial pitting the slope was generally obscured by dense vegetation.
- 7.3 The walls and floor surfaces at ground level at the northern end of the Site are likely to relate to the later 19th century activity on that part of the Site as they seal a thick deposit composed almost entirely of crushed copper slag. This is likely to be a waste product of the Pocket Nook Copper Works which was reused as ground make-up when the works was re-developed. The dump of copper slag is at least 1 m thick and is associated with walls constructed of cast copper slag which are likely to relate to the Pocket Nook works. It should be noted that only short sections of these possible walls were exposed and the trial pits began to flood at the point where they were exposed (Figure 4).
- 7.4 Cast slag blocks were a common building material in St Helens in the late 18th and 19th century. The Stanley Bank Copper Works (1772-1814) which lay to the north of the Site boundary was producing them and many of the boundary walls in the town were once built with them, although the vast majority have disappeared and are now quite rare. The ubiquity of this material suggests that the Pocket Nook works could have been constructed using blocks cast by other smelters. Indeed historic data supplied by the Merseyside HER indicates that the boundary wall of the Pocket Nook Smelting Works was built from copper slag building blocks (Merseyside HER 2017; Figure 4).
- 7.5 The available evidence suggests that the near surface remains are relatively late 19th components of St Helens' industrial landscape. It is considered highly likely that deeper buried remains relating to the 18th century industrial landscape of St Helens are sealed below these higher deposits and have the potential to be well preserved. It is recommended that further archaeological strip map and sample excavation be undertaken on the northern part of the Site prior to any further

development. This is primarily due to the presence of shallower, near surface structural remains possibly relating to the former Pocket Nook Smelting Works in that part of the Site.

8 References

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(Merseyside HER 2018) Merseyside HER Data supplied December 2017

Appendix A: Context Descriptions

Trial Pit 105

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
5001	Layer	Topsoil with rubble and ash	➤ 5	➤ 1.20	1.80
5002	Surface?	Brick surface	➤ 5	➤ 1.20	Unknown

Trial Pit 106

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
6001	Layer	Topsoil Rubble and ash	➤ 5	➤ 1	1.40
6002	Structure	Brick surface	➤ 5	➤ 1	Unknown

Trial Pit 107

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
7001	Layer	Loose topsoil and rubble	➤ 4.80	➤ 1.20	1.50
7002	Layer	Stiff yellow clay	➤ 4.80	➤ 1.20	0.20
7003	Layer	White clay	➤ 4.80	➤ 1.20	1.20
7004	Structure	Brick work structure?	Unknown	Unknown	Unknown

Trial Pit 108

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
8001	Layer	Loose topsoil and rubble	➤ 4.90	➤ 1.20	1.50
8002	Layer	Stiff yellow clay	➤ 4.90	➤ 1.20	0.30
8003	Layer	White clay	➤ 4.90	➤ 1.20	1.20

Trial Pit 109

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
9001	Layer	Loose topsoil and rubble	➤ 5	➤ 1.50	Unknown
9002	Layer	White clay	➤ 5	➤ 1.50	Unknown
9003	Layer	Possible Brick wall	➤ 5	➤ 1.50	Unknown

Trial Pit 110

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
10001	Layer	Loose topsoil and rubble	➤ 2.90	➤ 1.90	0.40
10002	Layer	Compact black ash	➤ 2.90	➤ 1.90	0.20
10003	Layer	Yellow clay	➤ 2.90	➤ 1.90	1.50
10004	Layer	Black ash and clinker	➤ 2.90	➤ 1.90	Unknown

10005	Layer	White Clay	➤ 2.90	➤ 1.90	Unknown
10006	Structure	Brick surface?	➤ 2.90	➤ 1.90	Unknown
10007	Structure	Brick wall	➤ 2.90	➤ 1.90	Unknown

Trial Pit 111

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
11001	Layer	Loose topsoil and rubble, copper stained compacted slag blocks	➤ 5	➤ 1.20	2.10
11002	Structure	Concrete floor surface	➤ 5	➤ 1.20	Base of Pit

Trial Pit 118

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
18001	Layer	Loose topsoil and rubble	➤ 4.50	➤ 1	0.55
18002	Layer	Concrete floor	➤ 4.50	➤ 1	Base of pit

Trial Pit 119

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
19001	Layer	Loose topsoil and brick rubble with clay patches.	➤ 1.50	➤ 1	0.40

19002	Layer	Loose soil with 80-90% crushed copper slag fragments	➤ 1.50	➤ 1	1.10
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Trial Pit 120

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
120001	Layer	Very dark brown humic topsoil	➤ 2	➤ 1.20	0.40
120002	Layer	Compact dark grey- black ash	➤ 2	➤ 1.20	0.20
120003	Layer	Dark grey- brown humic layer	➤ 2	➤ 1.20	0.70
120004	Layer	Very compact/ stiff yellow silty clay	➤ 2	➤ 1.20	0.10
120005	Layer	Rubble- Un-frogged brick fragments	➤ 2	➤ 1.20	0.20
120006	Structure	Structure built from copper slag blocks?	➤ 2	➤ 1	Unknown
120007	Structure	Brick wall of un-frogged bricks?	➤ 2	➤ 1.20	Unknown

Trial Pit 121

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
121001	Layer	Loose topsoil and rubble	➤ 2.50	➤ 1.20	0.70
121002	Layer	Compact grey ash	➤ 2.50	➤ 1.20	0.05-0.20
121003	Layer	Decayed sandstone block	➤ 2.50	➤ 1.20	Base of pit

Trial Pit 123

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
123001	Layer	Dark brown humic topsoil	➤ 2.50	➤ 1.60	0.20
123002	Layer	Brick fragments, demolition rubble	➤ 2.50	➤ 1.60	0.20
123003	Layer	Lenses of black and white ash	➤ 2.50	➤ 1.60	0.20
123004	Layer	Crushed copper slag and soil	➤ 2.50	➤ 1.60	0.50
123005	Layer	Crushed brick, slag and soil	➤ 2.50	➤ 1.60	0.50
123006	Layer	Clean, yellow brown sand	➤ 2.50	➤ 1.60	Base of pit

Trial Pit 124

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
124001	Layer	Loose topsoil	➤ 1.80	➤ 1.20	1
124002	Layer	Concrete (Broken at southern end of trial pit)	➤ 1.80	➤ 1.20	0.30
124003	Layer	Waterlogged crushed brick and copper slag fragments	➤ 1.80	➤ 1.20	➤ 1.50
124004	Structure	Brick wall?	➤ 1.80	➤ 0.80	➤ 1
124005	Structure	Stone railway sleeper	➤ 1.80	➤ 1.20	Unknown

Trial Pit 125

No.	Type	Description	Length (m)	Width (m)	Depth/ Thickness (m)
125001	Layer	Loose topsoil and rubble	➤ 2.20	➤ 1.10	0.40
125002	Pipe	Cast iron pipe encountered	➤ 2.20	➤ 0.15	Unknown
125003	Layer	Stiff light greenish yellow clay	➤ 2.20	➤ 1.10	Unknown

Appendix B: The Finds

No artefacts were identified during the course of the archaeological monitoring.

Appendix C: Oasis Report Form

OASIS ID: adasuklt1-308631

Project details

Project name	Archaeological Monitoring and Recording Report: Geo-technical pits at Atlas Street, St Helens
Short description of the project	In December 2017 ADAS carried out an archaeological watching brief for Torus 62 Development Company Ltd of groundworks for geotechnical trial Pits on land bounded by Corporation Street, Pocket Nook Street, and Atlas Street (centred on NGR: SJ 5187 95513). The available evidence suggested that the near surface remains are relatively late 19th components of St Helens' industrial landscape. It is considered highly likely that deeper buried remains relating to the 18th century industrial landscape of St Helens are sealed below these higher deposits and have the potential to be well preserved. It is recommended that further archaeological strip map and sample excavation be undertaken on the northern part of the Site prior to any further development. This is primarily due to the presence of shallower, near surface structural remains possibly relating to the former Pocket Nook Smelting Works in that part of the Site.
Project dates	Start: 04-12-2017 End: 05-12-2017
Previous/future work	No / Yes
Any associated project reference codes	ATLAS17 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 13 - Waste ground
Monument type	NONE None
Monument type	NONE None
Significant Finds	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	MERSEYSIDE ST HELENS ST HELENS Atlas Street, St Helens
Postcode	WA9 1LN
Study area	0 Square metres
Site coordinates	SJ 51870 95513 53.453916914973 -2.724876693177 53 27 14 N 002 43 29 W Point

Project creators

Name of Organisation	RSK ADAS Ltd
Project brief originator	City/Nat. Park/District/Borough archaeologist

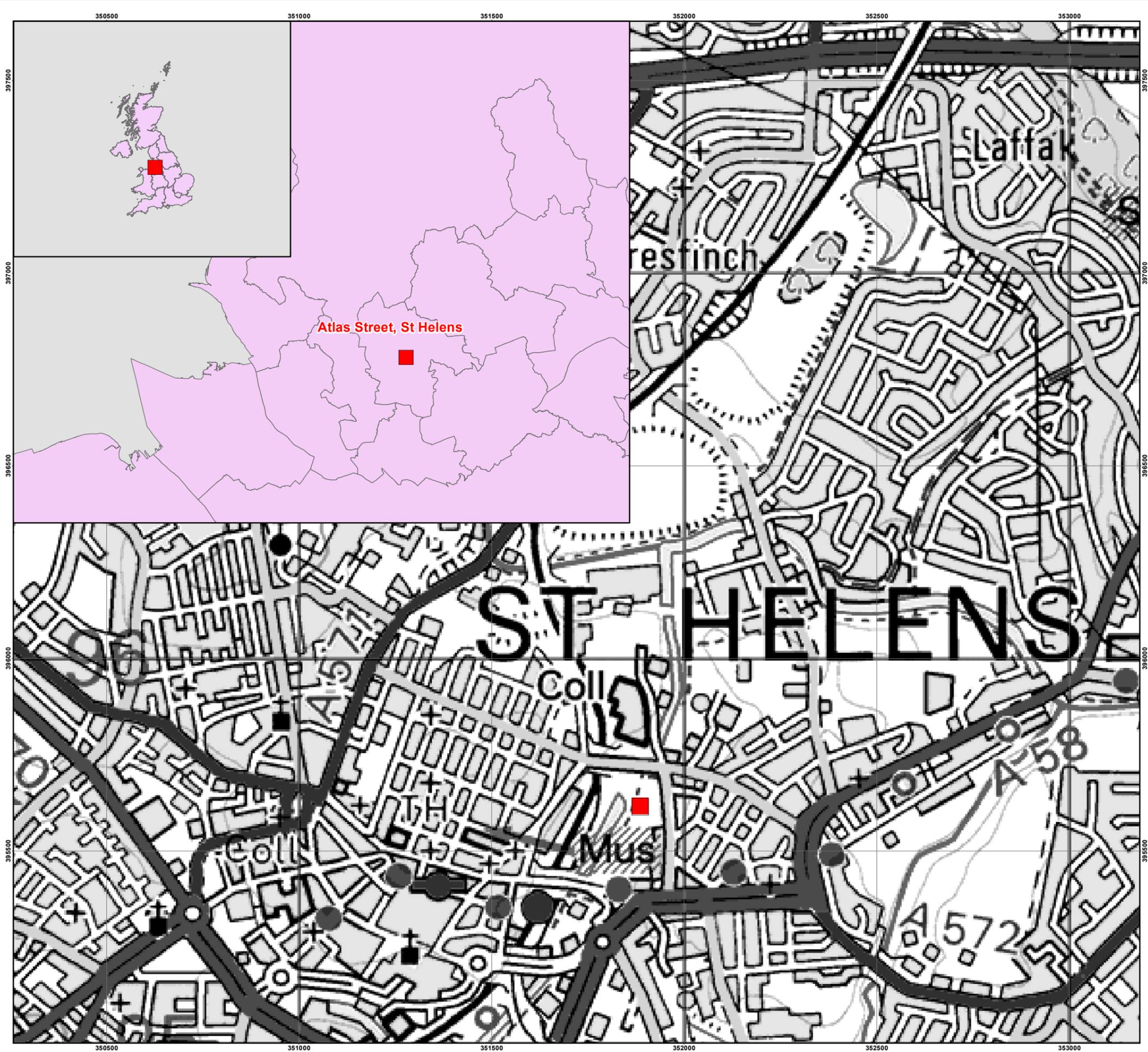
Project design originator	RSK ADAS Ltd
Project director/manager	Diarmuid O Seaneachain
Project supervisor	Mark Adams
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Torus 62 Development Housing Group

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Liverpool Museum
Digital Contents	"none"
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	Liverpool Museum
Paper Contents	"none"
Paper Media available	"Context sheet", "Notebook - Excavation", ' Research', ' General Notes', "Photograph"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Monitoring and Recording Report: Geo-technical pits at Atlas Street, St Helens
Author(s)/Editor(s)	Brown, A.
Date	2018
Issuer or publisher	RSK ADAS Ltd
Place of issue or publication	Milton Park
Entered by	Andrew Brown (andrew.brown@adas.co.uk)
Entered on	8 February 2018



**Torus 62 Development
Company Ltd**

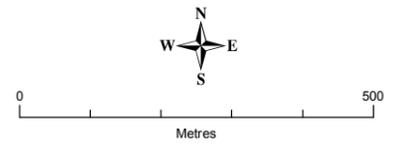
Atlas Street, St Helens

**Figure 1: Location of the
Proposed Development**

 Site Location

Drawn by: Andrew Brown Date: 08.02.2018

Verified By: Diarmuid O Seaneachain Date: 08.02.2018



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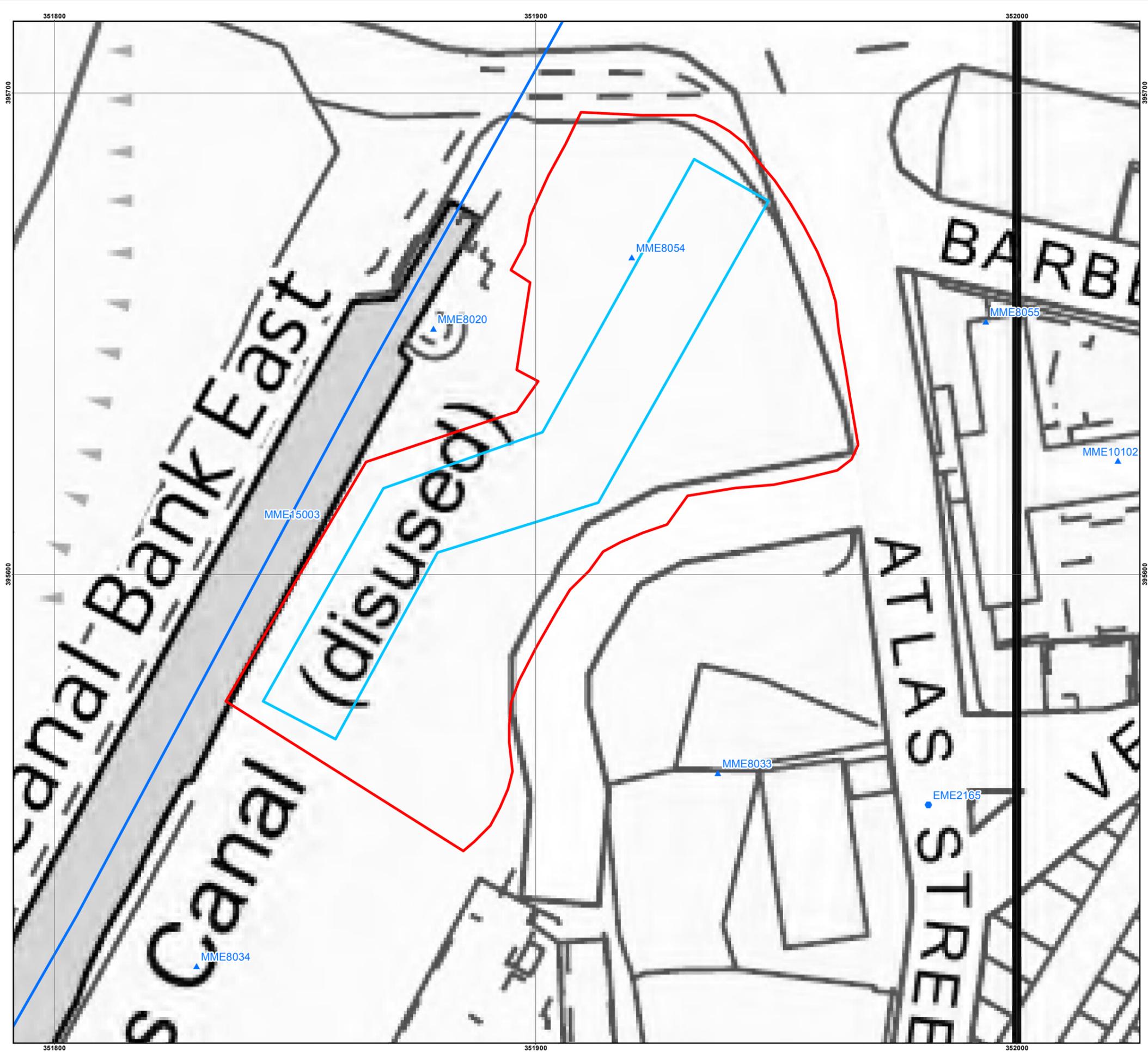


Torus 62 Development Company Ltd

Atlas Street, St Helens

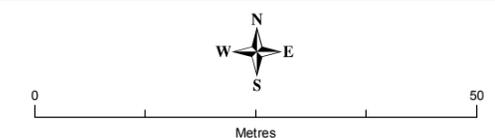
**Figure 2: Recorded Heritage Assets
and Previous Archaeological
Investigations**

-  Site Boundary
-  Proposed Buildings Outline
-  HER Heritage Asset Point
-  HER Heritage Asset Polyline
-  HER Event Point



Drawn by: Andrew Brown Date: 08.02.2018

Verified By: Diarmuid O Seaneachain Date: 08.02.2018



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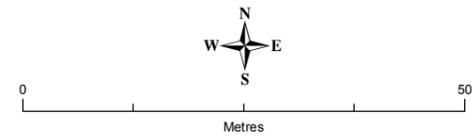
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Atlas Street, St Helens

Figure 3: Geotechnical Trial Pit Locations

- Site Boundary
- Proposed Buildings Outline
- ◆ Geotechnical Trial Pits

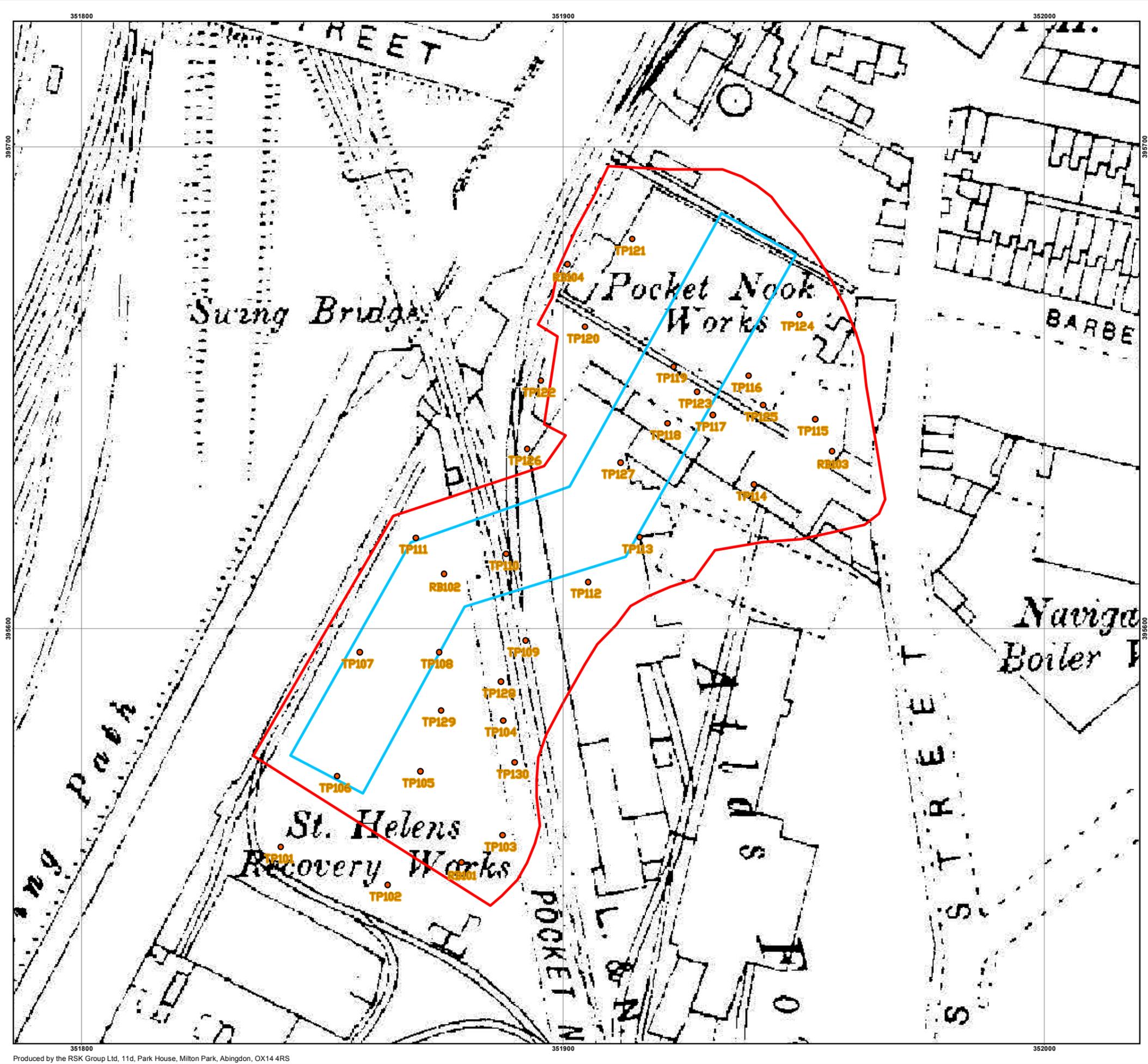
Drawn by: Andrew Brown Date: 08.02.2018
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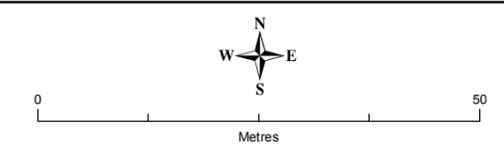
Torus 62 Development Company Ltd

Atlas Street, St Helens

Figure 4: Geotechnical Trial Pit Locations on the 1894 OS County Series Lancashire and Furness Map

- Site Boundary
- Proposed Buildings Outline
- ◆ Geotechnical Trial Pits

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Plates



Plate 1: Oblique view of the north facing section of TP105.



Plate 2: View of the north-west facing section of TP106.



Plate 3: Oblique view of the west facing section of TP107.



Plate 4: Oblique view of the west facing section of TP108.



Plate 5: Oblique view of the east facing section of TP109.



Plate 6: View of the south facing section of TP110 showing brick structure (10007).



Plate 7: Working shot of TP111 looking south.



Plate 8: View looking north-west of TP118.



Plate 9: Working shot of TP119 looking south-west.



Plate 10: View of the west facing section of TP120.



Plate 11: Oblique view of the north facing section of TP121.



Plate 12: View of TP123 looking south-west.



Plate 13: Oblique view of TP124 looking north.



Plate 14: View of TP125 looking west.