# An Archaeological Evaluation at Knowsley Street/Angouleme Way, Bury, Greater Manchester

Site Code: KNB 07

Central National Grid Reference: SD 8030 1035

Commissioned by:
CRE8 Management Limited
1A Portland Buildings
127-129 Portland Street
Manchester
M1 4PZ

Tel: 0161 236 7688

On behalf of:
Ask Developments Limited
Deansgate Quay
Deansgate
Manchester
M3 4LA

Contractor:
Pre-Construct Archaeology Limited
Northern Office
Unit N19a Tursdale Business Park
Durham
DH6 5PG

Tel: 0191 377 1111





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# CONTENTS

Appendix D

# List of Figures and Plates

			page	
1.	NON-TECHNICAL SUMMARY			
2.	INTRODUCTION			
3.	PLANNING BACKGROUND			
4.	AIMS AND OBJECTIVES			
5.	ARCHAEOLO	GICAL AND HISTORICAL BACKGROUND	8	
6.	GEOLOGY AND TOPOGRAPHY 12			
7.	ARCHAEOLOGICAL METHODOLOGY 13			
8.	THE ARCHAE	OLOGICAL SEQUENCE	27	
9.	CONCLUSION	IS AND RECOMMENDATIONS	35	
10.	REFERENCES			
11.	ACKNOWLEDGEMENTS AND CREDITS 33			
ļ	APPENDICES			
	Appendix A	Stratigraphic Matrices		
	Appendix B	Context Index		
	Appendix C	Site Photographs, Plates C1-C10		

Historic Prints/Photographs, Plates D1-D6

## List of Figures and Plates

Plate C7

Plate C8

Plate C9

ist of Figur	es and Plates	
		page
Figure 1	Site location	4
Figure 2	Trench location	5
Figure 3a	Ordnance Survey 1910	14
Figure 3b	Ordnance Survey 1930	14
Figure 4	Trench 1, plan	17
Figure 5	Trench 1, section	18
Figure 6	Trench 2, plan	19
Figure 7	Trench 2, section	20
Figure 8	Trench 3, plan	21
Figure 9	Trench 3, section	22
Figure 10	Trench 4, plan	23
Figure 11	Trench 4, section	24
Figure 12	Trench 5, plan	25
Figure 13	Trench 5, section	26
Site Photogra	aphs, Plates C1-C10, form Appendix C	
Plate C1	Trench 1, from the north-west. Trench view, overhead from Knowsley Street bridge	
Plate C2	Trench 1, from the south-west. Trench view, structure [1015] in foreground	
Plate C3	Trench 1, from the north-east. Structure [1006] detail	
Plate C4	Trench 2, from the north-east. Trench view, with wall [2010]	
Plate C5	Trench 2, from the south-east. Structure [2008]/[2009]/[2010] detail	
Plate C6	Trench 3, from the north-east. Trench view, overhead from the access road	

Historic Prints/Photographs of Knowsley Street station, Plates D1-D6, form Appendix D

Plate C10 Trench 5, from the north-west. Surface [5007] and wall [5005]/[5006] detail

Plate D1	Artist's impression, c. 1850, looking west at Knowsley Street bridge
Plate D2	Locomotive on 'Down' platform, September 1953, looking north-west
Plate D3	Eastern goods yard/sidings, 1967, looking west
Plate D4	Locomotive on 'Up' platform, August 1970, looking north-west
Plate D5	'Up' platform, October 1970, looking south-east
Plate D6	'Up' platform and partly demolished station buildings, 1971, looking north-west

Trench 3, from the north-west. Surface [3004] and wall [3008] detail

Trench 4, from the south-west. Trench view, timber [4008] in foreground

Trench 5, from the south-west. Trench view, surface [5004] in rearground

#### 1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological field evaluation was undertaken June-July 2007 by Pre-Construct Archaeology Limited at a site off Knowsley Street, Bury, Greater Manchester. The central National Grid Reference for the site is SD 8030 1035. The project was commissioned by CRE8 Management Limited on behalf of Ask Developments Limited, ahead of a mixed-use development.
- 1.2 The overall development site is located off Knowsley Street in the centre of Bury and has an area of 1.5 hectares. It comprises a roughly rectangular block of land, bounded by Angouleme Way to the north, by Knowsley Street bridge to the west and by railway lines to the east and south. Only the southernmost portion of the overall site was subject to archaeological evaluation, this being a car park with an area of c. 3,400 square metres, bounded to the north by a steeply sloping access road off Knowsley Street.
- 1.3 Prior to the evaluation, a desk-based assessment had concluded that the site lies within an area of archaeological interest, particularly for the industrial era. Specifically, the southern portion of the overall site was formerly occupied by Knowsley Street railway station, built in 1848 by the Lancashire and Yorkshire Railway Company, but which was closed in 1951 and subsequently demolished in the early 1970s. Map regression showed that the main station buildings, the platform for trains bound for Manchester and beyond, and part of an extensive goods yard lay within the southern portion of the site and thus identified the potential for subsurface archaeological remains of the industrial era as moderate to high.
- 1.4 The evaluation was undertaken as a condition of planning permission on the advice of the Greater Manchester Archaeological Unit, acting in its capacity as archaeological advisor to Bury Metropolitan Borough Council. Five trenches were investigated in the car park area, all sited to determine the presence or absence of archaeological remains of the former station buildings and associated features.
- 1.5 Trench 1 was located in the south-western corner of the site, beside Knowsley Street bridge, to investigate the area formerly occupied by the westernmost station buildings. It revealed well-preserved structural remains representing these buildings, with brick walls, including a cellar light, and flagstone surfaces surviving at relatively shallow depths.
- 1.6 Trench 2 was located in the southern central portion of the site, to examine the area formerly occupied by the central part of the northern platform and a range of associated platform buildings. It revealed well-preserved structural remains representing the platform buildings, with brick walls and the masonry of a door threshold surviving at relatively shallow depths.
- 1.7 Trench 3 was located in the northern central portion of the site to examine the area formerly occupied by a station outbuilding. It revealed well-preserved structural remains representing this building, with brick walls and an internal stone sett surface surviving at relatively shallow depths. A probably contemporary stone sett road surface was also exposed, south of and external to the building, while an area of timber decking exposed to the west of and external to the building, was potentially an earlier feature than the building.

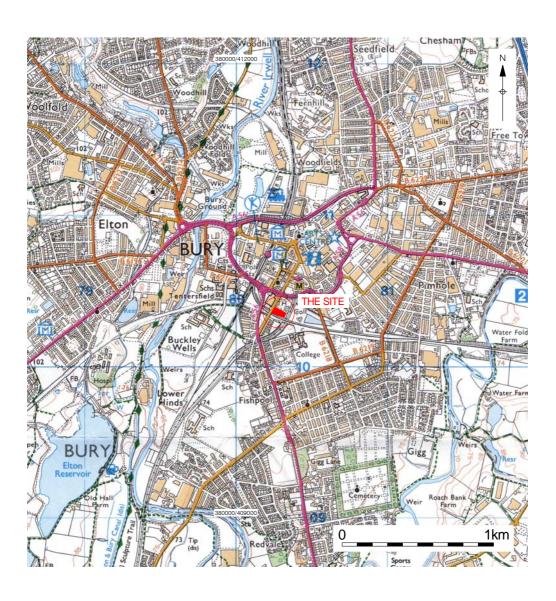
- 1.8 Trench 4 was located in the north-eastern portion of the site to examine a former goods yard/sidings area. It revealed a well-preserved timber sleeper and possible track-bed, alongside a stone sett road surface, all surviving at relatively shallow depths.
- 1.9 Trench 5 was located in the south-eastern portion of the site to examine the area formerly occupied by the eastern end of the range of northern platform buildings. It revealed well-preserved structural remains representing these buildings, with brick walls and flagstone surfaces surviving at relatively shallow depths, most of the structural elements representing part of a row of internal WC cubicles.
- 1.10 In summary, all five trenches exposed sub-surface structural remains, representing either former station buildings or elements of the adjacent goods yard/sidings area. At all locations, survival of these remains was very good to excellent and the remains were encountered typically at depths of 0.30-0.50m below the existing tarmac surface of the car park. The findings of the evaluation indicate that structural remains of the former station will extend across the majority of the car park area.

#### 2. INTRODUCTION

- 2.1 This report details the results of an archaeological field evaluation undertaken by Pre-Construct Archaeology Limited (hereinafter PCA) at a site off Knowsley Street, Bury, Greater Manchester. The fieldwork was undertaken between June 20<sup>th</sup> and the July 11<sup>th</sup> 2007. The central National Grid Reference of the site is SD 8030 1035 (Figure 1).
- 2.2 The overall development site has an area of *c*. 1.5 hectares and comprises a roughly rectangular block of land bounded to the north by Angouleme Way, by Knowsley Street to the west and by railway lines to the east and south. The larger, northern portion of the overall site is mostly grassed-over sloping ground, bounded to the south by a steeply-sloping road that gives access to a low-lying, level car park, *c*. 3,400 square metres in size, occupying the southern portion of the overall site. This car park, overlooked from the west by Knowsley Street bridge, was the area subject to the archaeological evaluation herein described.
- 2.3 The work was commissioned by CRE8 Management Limited, on behalf of the developer, Ask Developments Limited, and followed an archaeological desk-based assessment (DBA) undertaken in 2005. This concluded that the southern part of the overall development site had moderate to high potential for post-medieval industrial era remains, particularly those of the former (19th century) Knowsley Street railway station, but low potential for remains of earlier archaeological eras. On the basis of the assessment findings, the Greater Manchester Archaeological Unit advised the Local Planning Authority, Bury Metropolitan Borough Council, that an archaeological field evaluation should be undertaken at the site. The evaluation was, therefore, undertaken as a condition of planning permission for a mixed-use development of the overall site.
- 2.4 The evaluation comprising the investigation of five trial trenches (Trenches 1-5) was undertaken according to a Written Scheme of Investigation (WSI) prepared by PCA and approved by the GMAU in advance of the work. The main aim of the evaluation was to determine the location, extent, date, character and condition of any archaeological remains at the site, thereby allowing the impact of the development proposals upon the archaeological resource to be assessed and an appropriate mitigation strategy to be formulated.
- 2.5 At the time of writing, the site archive from the evaluation, comprising written, drawn, and photographic records and a small assemblage of artefactual material, is housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. When complete, the project archive will be deposited at The Manchester Museum, The University of Manchester, Oxford Road, Manchester M13 9PL, under the site code KNB 07.
- 2.6 The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the archaeological evaluation is: preconst1-29161.

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<sup>&</sup>lt;sup>1</sup> Pre-Construct Archaeology Limited 2005a.



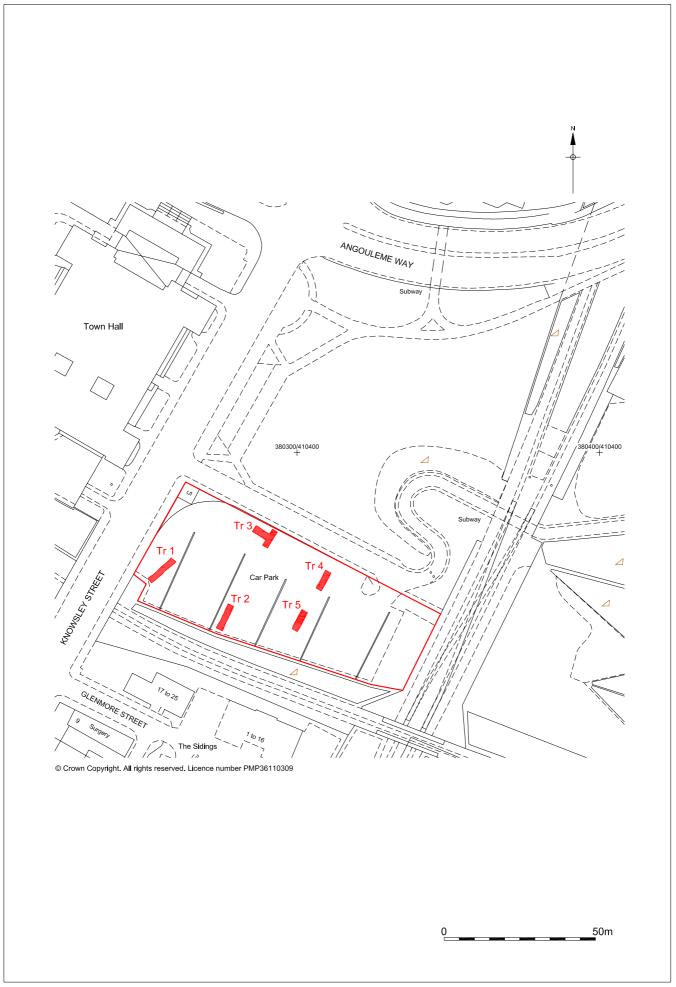


Figure 2. Trench location Scale 1:1250

#### 3. PLANNING BACKGROUND

- 3.1 A planning application (reference number 47200) was submitted by Ask Developments Limited to the Local Planning Authority (LPA), Bury Metropolitan Borough Council (BMBC), for mixed-use development of the overall site, which, for planning purposes, is known as 'land off Knowsley Street, Townside – Phase 1A, Bury'.
- 3.2 The need for early consultation in the planning process in order to determine the impact of development schemes upon the archaeological resource is identified in the document 'Planning Policy Guidance Note 16: Archaeology and Planning' (PPG 16). The Greater Manchester Archaeological Unit (GMAU) has responsibility for archaeological development control throughout Greater Manchester and in this instance act as archaeological advisors to BMBC.
- 3.3 The Unitary Development Plan (UDP) of BMBC, adopted in 1997, contains policy 'EN3 Archaeology' with sub-sections 'EN3/1 Impact of Development on Archaeological Sites' and 'EN3/2 Development Affecting Archaeological Sites' setting out the stance of the LPA on archaeological matters. The site lies just south of the Bury Town Centre Conservation Area, but is known to have potential archaeological importance. Accordingly, the GMAU determined that archaeology would be a material consideration in the determination of the planning application and advised BMBC that the aforementioned archaeological desk-based assessment (DBA) should be undertaken to form a baseline consideration of the archaeological potential of the site. In addition, an historic built environment impact assessment was undertaken.<sup>3</sup>
- 3.4 The DBA concluded that the site has moderate to high potential for post-medieval industrial archaeological remains, since it was formerly occupied by the historically important Knowsley Street railway station, founded in 1848 and once part of the Lancashire and Yorkshire Railway, and demolished in 1970. For all other archaeological eras, the site was considered to have low potential.
- 3.5 The GMAU therefore advised, by way of a condition No. 21 in this instance of planning permission, that no development could take place until the applicant had secured the implementation of a programme of archaeological work in accordance with a Written Scheme of Investigation (WSI) approved by the LPA. PCA compiled the aforementioned WSI for an archaeological field evaluation, a document that set out the background to the project and the proposed methodology for preliminary archaeological investigation of the site. The scheme was approved by the GMAU, on behalf of BMBC, in advance of the fieldwork element of the project.
- 3.6 The evaluation was required in order to determine the location, extent, date, character and condition of any archaeological remains at the site. For the purposes of archaeological development control, its aim was to assess the potential of the archaeological resource at the site in order to inform a decision regarding an appropriate mitigation strategy.

<sup>&</sup>lt;sup>2</sup> Department of the Environment 1990.

<sup>&</sup>lt;sup>3</sup> Pre-Construct Archaeology Limited 2005b.

#### 4. AIMS AND OBJECTIVES

- 4.1 In broad terms, the archaeological evaluation aimed to establish the location, nature, extent, date and significance of any archaeological remains at the site as evidenced by any buried deposits, structures and features and any artefactual and ecofactual evidence that they may contain.
- 4.2 The specific objectives of the archaeological evaluation relate to usage of the site as the historically important Knowsley Street railway station from 1848 until its demolition in the 1970s. With this in mind, the evaluation aimed:
  - to determine whether or not any undisturbed archaeological deposits, structures or features related to the station survive within the car park;
  - to determine the degree of survival, condition, state of preservation and extent of any archaeological remains related to the station;
  - to determine the approximate date or date range of any archaeological remains related to the station, by means of artefactual or other evidence;
  - to determine the degree of complexity of the horizontal and/or vertical stratigraphy present;
  - to determine or confirm the likely range, quality and quantity of any artefactual evidence present;
  - to determine the potential of the site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present.
- 4.3 Additional aims and objectives of the project were:
  - to compile a site archive consisting of all site and project documentary and photographic records, as well as artefactual and palaeoenvironmental material recovered;
  - to compile a report that contains an assessment of the nature and significance of the stratigraphic, artefactual, archaeological and palaeoenvironmental data.
- 4.4 Trial trenches were used to investigate the archaeological potential and assess the impact of the development on the archaeological resource.
- 4.5 The evaluation aimed to provide sufficient data to enable an appropriate mitigation strategy to be devised in order to minimise the impact of the proposed development upon the archaeological resource.

#### 5. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 An archaeological desk-based assessment (DBA) of the site was undertaken by PCA in 2005. This included an examination of all entries in the Greater Manchester Sites and Monuments Record (SMR) in the vicinity of the site. In addition, SMR information was supplemented by other documentary and cartographic sources. A summary of the potential for each archaeological era is included below, with most information having been extracted from the DBA, which should be consulted for full details and references.
- 5.2 Additional information on Knowsley Street railway station was gathered through additional research by the report authors during the undertaking of the archaeological evaluation. 'Railways in and around Bury" by Jeffrey Wells and two articles by Michael Blakemore in successive issues of 'Back Track' journal<sup>5</sup> provided the bulk of the information about the station, summarised below in sub-section 5.8. A selection of historic prints and photographs from these sources has been included within this report (see Appendix D).
- 5.3 There are no Scheduled Ancient Monuments or listed buildings on the site, although it does lie within the setting of a number of listed buildings. The site lies just south of the Bury Town Centre Conservation Area.

#### 5.4 **Prehistoric**

5.4.1 There is very little evidence for prehistoric activity in the Bury area. Therefore, the potential for evidence of the various prehistoric eras at the site was considered low.

#### 5.5 Roman

5.5.1 Known Roman activity in the Bury area is concentrated along or near the Roman road running between Manchester and Ribchester. This is some distance from the site, however, which, combined with the lack of entries for this period in the SMR, was taken as implying that there was little activity in the immediate vicinity. Accordingly, the potential for Roman remains at the site was considered low.

#### 5.6 Saxon

5.6.1 Although the place name of Bury is thought to have its origins in the Saxon period, very little evidence for this period has been recorded in the local area. The potential for Saxon remains at the site was, therefore, considered low.

#### 5.7 Medieval

5.7.1 The hamlet of Bury was known to be a small-scale settlement in the medieval period. The focus was probably centred further north than the study site, near Bury Castle, this being the fortification of a medieval manor house. With the exception of this monument, no remains of the medieval period have been encountered in the local area. It is likely that the site itself lay on the periphery of the medieval hamlet, possibly agricultural/pasture land. In sum, the potential for evidence of the medieval period at the site was considered low.

<sup>4</sup> Wells 1995.

<sup>&</sup>lt;sup>5</sup>Blakemore 2003a and 2003b.

#### 5.8 Post-medieval

- 5.8.1 The Bury area had a long established wool spinning and weaving industry prior to the arrival of cotton goods to Lancashire in the 17th century. In 1733, with the invention of the 'flying shuttle' by John Kay, the textile industry in the area was revolutionised and another significant development followed in 1753 with the invention of the 'spinning mule' by Samuel Crompton.
- 5.8.2 Central Lancashire quickly became established as a cotton manufacturing area, relying on its abundant water supplies and supplies of American cotton brought in by sea from the port of Liverpool. Two rivers in particular, the Irwell and the Roch, shaped the development of the area in enabling the cotton industry to grow and prosper, with other industries, including paper making, tanning, forging and engineering soon following. Numerous mills were built adjacent to a developing network of canals throughout the region, this offering an ideal and efficient method of transportation of bulk cargo and it was the Manchester, Bolton and Bury Canal Company (MBBCC) which first carried coal into Bury in 1796.
- 5.8.3 With industrialisation gathering pace, the canal system in Central Lancashire was soon being complemented with some elements replaced entirely by a railway network. Indeed in 1831, the MBBCC, fearful for its future, became the Manchester, Bolton and Bury Canal Navigation and Railway Company (MBBCNR). Development of the railways in the region was a complex process involving the founding and amalgamation of numerous companies, the most relevant details of which are summarised below.
- The Manchester and Bolton railway line was opened in 1838, although trains did not actually run into Manchester until 1844 and Bury had to wait until September 1846 before a train stopped in the town. This was the work of the East Lancashire Railway (ELR), which linked its line to the Manchester and Bolton line at Clifton, with the train running northwards to the station at Rawenstall. The ELR had been formed in 1845 by amalgamation of the Manchester, Bury and Rossendale Railway and the Blackburn, Burnley, Accrington & Colne Extension Railway. At the time of the inaugural journey of the ELR in September 1846, the site of Bolton Street station was a building site, with the station not being completed until probably the summer of 1847. A short distance from Bolton Street station, the Liverpool and Bury Railway had been striking through Bury from west to east and although its new station site adjacent to John Street (later Knowsley Street) was established by this time, the station itself was not to open for more than two years.
- 5.8.5 In 1846, the aforementioned MBBCNR amalgamated with the Manchester and Leeds Railway, which had itself just amalgamated with the Liverpool and Bury Railway, and the following year the ensemble restyled itself the Lancashire and Yorkshire Railway (LYR). In 1848 new railway lines arrived at the town connecting with Heywood to the east and Trinity Street station in Bolton to the west. An important addition in central Bury was a curving east to north line so joining the west to east route with the south to north route in the town. This curve was located between the ELR's Bolton Street station and the LYR's Knowsley Street station (or simply Bury station as it was then known). A complication was that the west to east and the south to north routes were not allowed to intersect on the level, so the Liverpool to Bury line had to dip below the ELR line to the west of Knowsley Street station, a feature known locally as 'the Hump', but officially 'the Hollow'.

- 5.8.6 These developments undoubtedly made a significant impact on parts of the town through construction, tunnelling, excavating, disturbance to existing properties, stopping off streets and closing premise by compulsory purchase. The town survey by W. Benson in 1845 shows the area of the site immediately prior to this upheaval, with both John Street (the predecessor of Knowsley Street) and Queen Street meeting Duke Street (the line of what is now the sloping access road into the site) but not continuing beyond it, all within the relatively uncomplicated early Victorian street layout. By 1847 the LYR had control of Bury station and immediately put in place plans for redevelopment of the site - a company record from 1848 mentions the awarding of a contract to build a new wooden station house. This was accompanied by Bury Town Council extending John Street to the south to join Manchester Road at Buckley Wells then being renamed Knowsley Street. This route incorporated the new Knowsley Street bridge to carry the road over the railway lines, with the hub of the station, i.e. the portion on the site herein described, set at a lower level to the east and confined within stone retaining walls to the east and north. Although an artistic impression of the new station shortly after it was built indicates buildings of grand design on the north side of the lines (Plate D1), the earliest station buildings may actually have been less architecturally impressive.
- 5.8.7 By 1860, the ELR had been absorbed by the LYR. Between 1866 and 1888, Bury station was officially known as 'Market Place', although many documents from the period refer to it simply as Knowsley Street. The station was on the cross-country route between Rochdale and Bolton and throughout the second half of the 19th century enjoyed a lavish service of through trains to Liverpool, Wigan and the Lancashire coast. The route was also heavily used by east-west freight traffic avoiding Manchester. There were two platforms, one served by an 'Up' line (on the north side of the tracks and taking trains south-eastwards to Manchester), the other of island form and initially accessible only by crossing the main lines served by a 'Down' line (south of the tracks and taking trains westwards to Bolton).
- During the second half of the 19th century and the early 20th century, Knowsley Street station was amended and altered to suit both the passenger and freight demands of Bury, with many of the alterations represented by various archive plans within the Greater Manchester County Record Office. On the passenger platforms, canopies were erected in at least three different stages. 1875 saw the addition of a bridge (possibly the inclined gangway described below) for Lord Derby. Widening of the line arrangements took place in 1891 so that four lines passed through between the 'Up' and 'Down' platforms, with the through lines in the middle. By this time, the 'Up' platform was longer (230 yards), extending eastwards to a narrow lengthy goods shed, the two structures divided by a goods siding. This platform possessed the main amenities for passengers: booking office, waiting rooms, left luggage office, parcels office and WCs (Plate D2 shows the 'Up' platform in 1953).

- Access was from Knowsley Street via a brick entrance building which led down a staircase to a booking hall and covered footbridge, this possibly erected *c.* 1893. Alternatively, a covered inclined L-shaped gangway suitable for wheeled conveyances offered access to the booking hall from further north along Knowsley Street (these elements appear in the rearground of Plate D4). The highest part of this gangway ran down the south side of the sloping access road that survives at the site, this being the line of the former Duke Street. Construction of the aforementioned footbridge against the eastern side of the 1848 road bridge allowed safe access to the 'Down' platform (160 yards long) (Plate D6), which may have also been accessible directly from Knowsley Street. It was this footbridge that collapsed under the weight of hundreds of football supporters 19th of January 1952, with two fatalities and scores of injured.
- 5.8.10 By the early 20th century, the goods handling facilities at Knowsley Street were some of the largest in terms of area in the town. Extensive cattle wagon sidings were in place by 1899, with pens to provide temporary accommodation to cattle arriving for the Bury Corporation Abattoir, immediately to the north of the site. All the elements of the station are shown on the 1910 edition of the Ordnance Survey map, with extensive sidings and goods yards, including numerous goods sheds, extending to the east of the passenger terminal, beyond the boundary of the site, as far as Heywood Street South, Market Street Bridge spanning the widened yard by a set of four arches. The aforementioned narrow goods shed at the eastern end of the 'Up' platform was replaced in c. 1912 by a large brick cotton warehouse, the building notable for having a 40 ton electric overhead crane. This building and the goods yard/sidings appear on many 20th century photographs of the station (e.g., Plate D3)
- 5.8.11 Knowsley Street station closed in 1970 (Plate D5). Since then the site has remained as open land, with the area subject to archaeological evaluation being in use as a car park in recent times. Map regression shows that the car park corresponds with the area formerly occupied by most of the 'Up' platform and associated buildings and most of an area occupied by sidings and assorted outbuildings to the rear of the platform buildings. Accordingly the potential for sub-surface remains of the former Knowsley Street station was considered moderate to high.

#### 6. GEOLOGY AND TOPOGRAPHY

#### 6.1 Geology

- 6.1.1 The Metropolitan Borough of Bury lies within the valley of the River Irwell and its tributaries. In general the underlying solid geology of the area comprises lower Coal Measures overlying Millstone Grit, both of the Carboniferous era.<sup>6</sup>
- 6.1.2 Superficial deposits in the area of the town itself generally comprise glacial boulder clay and glacial sand and gravels of the Quaternary Age.<sup>7</sup>

## 6.2 Topography

- 6.2.1 The general topography of the area of the River Irwell and its tributaries is of ground sloping southwards from the open and exposed Rossendale Hills of the West Pennines towards the relatively flat and more urbanised Manchester plain.
- 6.2.2 The overall development site lies on the southern margin of the historic core of Bury. The larger, northern portion of the overall site is largely undeveloped, for the most part comprising a grassed area sloping away to a subway and Metrolink railway lines that bound the site to the east, with wooded/vegetated areas along its eastern and northern boundaries. This northern area is bounded to the south by a steeply-sloping access road, formerly Duke Street in the early Victorian street layout. At its eastern end, this road now gives access to the level car park occupying the southern portion of the site. To the south, the car park is bounded by the roughly east-west railway line that runs below the arch of Knowsley Street bridge; this line now runs along an embankment several metres higher than the surface of the car park, allowing it to run above the lines of the roughly north-south Metrolink railway lines which skirt the site to the east. The easternmost portion of the car park is covered by a band of trees, beyond which lies the aforementioned Metrolink corridor.
- 6.2.3 Immediately to the west of the site itself, the surface of Knowsley Street stands at c. 95m OD, while the surface of the car park in which the evaluation was conducted lies at c. 86-87m OD. These relative heights give an indication of the height of the masonry walls delimiting Knowsley Street bridge and bound the car park to the west. All this broadly suggests that much excavation took place in the mid 19th century to create a level area upon which Knowsley Street station was built.

<sup>&</sup>lt;sup>6</sup> British Geological Survey 1975.

<sup>&</sup>lt;sup>7</sup> British Geological Survey 1970.

#### 7. ARCHAEOLOGICAL METHODOLOGY

#### 7.1 Trial Trenching

- 7.1.1 The archaeological fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute of Field Archaeologists. PCA is an IFA-Registered Organisation.
- 7.1.2 The archaeological field evaluation comprised five trenches, Trenches 1–5, the locations of which were determined through discussions between PCA and the GMAU and set out in the approved WSI for the evaluation. The car park forming the southernmost portion of the overall development area was the 'site' of the evaluation. Trench locations were largely determined by Ordnance Survey mapping from 1910 and 1930, which show detail of the buildings and railway-related features of the portion of Knowsley Street station within the site.
- 7.1.3 Trench 1 was located towards the south-western corner of the site, and measured 10.76m NE-SW by 2.0m wide. Its purpose, based on the above-mentioned Ordnance Survey mapping, was to investigate the area occupied by the westernmost end of a range of buildings fronting onto the 'Up' platform and an adjacent rectangular NW-SE aligned building. It had been intended to investigate a trench 20.0m in length at this location, however, due to practical considerations at the time of trench opening, this trench had to be shortened and its alignment slightly amended.
- 7.1.4 Trench 2 was located in the central southern portion of the site and measured 9.40 NNE-SSW by 2.0m wide. It was located, again based on the aforementioned Ordnance Survey mapping, to examine the area occupied by the central part of the northern 'Up' platform and the adjacent range of platform buildings (Plates D4 and D5).
- 7.1.5 Trench 3 was located in the central northern portion of the site and measured 6.20m NE-SW, with a 5.98m extension running at right angles from the mid point of its western side, both elements being 2.0m wide. This was positioned to examine the area occupied by a single storey range of station outbuildings, as shown on the aforementioned Ordnance Survey mapping and historic photographs of the station (e.g. this building appears on the extreme right of Plate D4).
- 7.1.6 Trench 4 was located in the north-eastern portion of the site and measured 6.76m NNE-SSW by 2.0m wide. It was located, based on the aforementioned Ordnance Survey mapping, to investigate an area occupied by a goods yard/sidings to the north of the 'Up' platform buildings.
- 7.1.7 Trench 5 was located in the south-eastern portion of the site and measured 7.12m NNE-SSW x 2.0m wide. It was positioned, again based on the aforementioned Ordnance Survey mapping, to investigate the area occupied by the eastern end of the range of buildings associated with the 'Up' platform.

<sup>&</sup>lt;sup>8</sup> IFA 2001.

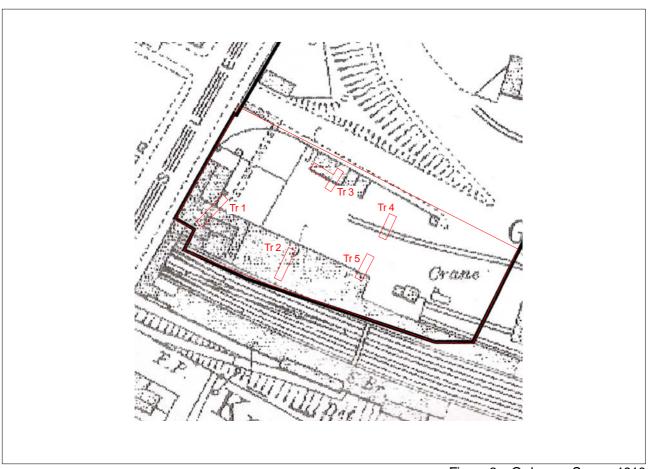


Figure 3a. Ordnance Survey 1910 Approximate scale 1:1,000

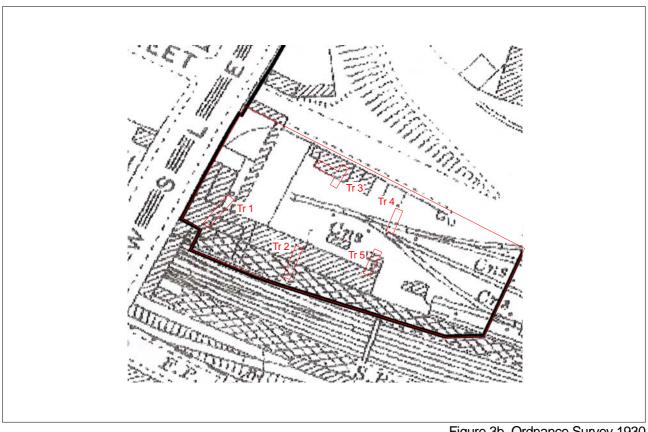


Figure 3b. Ordnance Survey 1930 Approximate scale 1:1,000

- 7.1.8 Ground reduction was undertaken using a JCB 3CX back-acting excavator. A hydraulic breaker was used to break out the existing tarmac ground surface. A wide-blade ditching bucket (nontoothed) was utilised and this work was carried out directed by the supervising archaeologist. Overburden and archaeologically insignificant material was removed gradually by the machine, in spits of approximately 0.10m thickness, down to the first significant archaeological horizon. Spoil was mounded away from the edge of each trench by the machine.
- 7.1.9 Subsequent excavation and recording was undertaken in accordance with recognised archaeological practice and following methodology set out in PCA's field recording manual. Following machine clearance, the sections and the base of each trench were cleaned using appropriate hand tools, where this was possible. A representative sample of all archaeological features and deposits identified were hand excavated to enable their date, nature, condition and extent to be described. Sections of the trenches were drawn at a scale of 1:10 and the base of each trench was planned at a scale of 1:20 relative to a baseline established along the trench.
- 7.1.10 Archaeological deposits, features and structures were recorded on pro-forma context sheets using unique numeric based context records. The height of all principal strata and features were calculated relative to Ordnance Datum and indicated on the appropriate plans and sections.
- 7.1.11 Within appropriate archaeological horizons, partial excavation and cleaning and recording of deposits were preferred to full excavation, and were practised wherever possible. No archaeological deposits were entirely removed by evaluation unless this was unavoidable.
- 7.1.12 A photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological operation mounted. Photographs included a graduated metric scale where appropriate.
- 7.1.13 Temporary Bench Marks (TBMs) were established on the site from existing survey information based on Ordnance Survey data. The TBMs had values of 86.50m OD and 86.69m OD.

#### 7.2 Post-Excavation

7.2.1 The site's stratigraphic data is represented by the written, drawn and photographic records. In total, 103 archaeological contexts were defined in the evaluation trenches (Appendix B). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix A). A written summary of the archaeological sequence was then compiled, as described below in Section 8. The artefactual material from the site comprised a single coin, a bronze penny from the reign of George V (1910-1936), dated 1918. Of only intrinsic interest, no specialist conservation work or assessment of this object was undertaken, although it has been retained as part of the site archive.

<sup>&</sup>lt;sup>9</sup>PCA 1999.

- 7.2.2 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from stratified, well-dated contexts indicative of the representative features and deposits covering the main phases of usage of the site, with reference to the specific objectives of the evaluation. However, no bulk sampling was deemed appropriate or necessary during the course of the fieldwork.
- 7.2.3 Survival of all materials from archaeological fieldwork depends upon suitable storage. The complete project archive comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and the single artefactual 'find' will be packaged for long term curation according to relevant guidelines. As stated above, the single 'find' did not require specialist stabilisation or an assessment of its potential for conservation research. The depositional requirements of the receiving body, in this case the Manchester Museum will be met in full.

<sup>&</sup>lt;sup>10</sup> UKIC 1990.

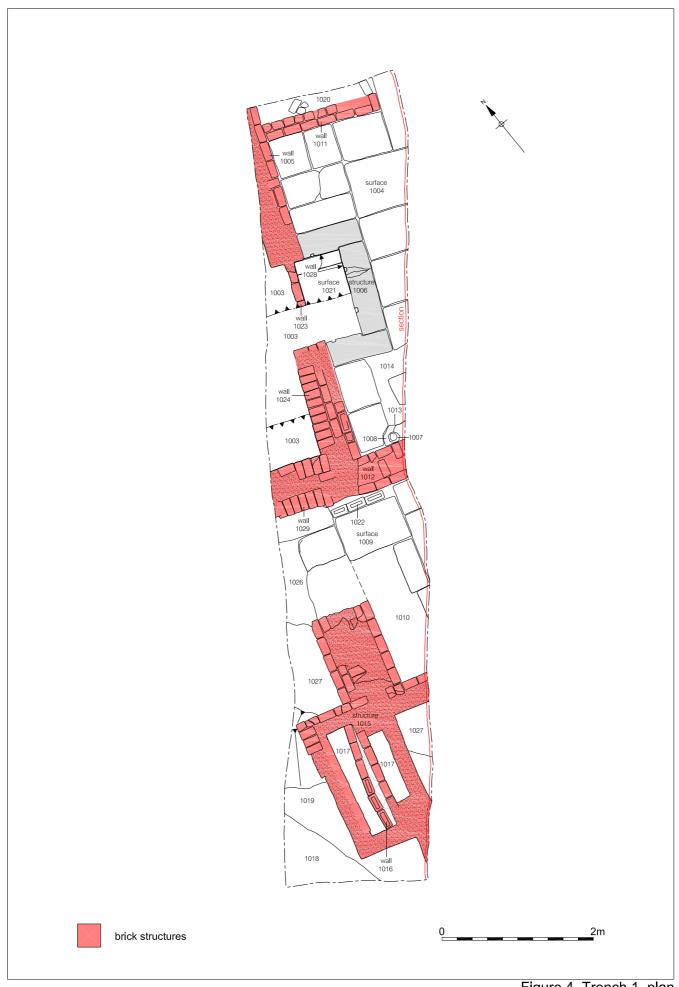


Figure 4. Trench 1, plan Scale 1:50

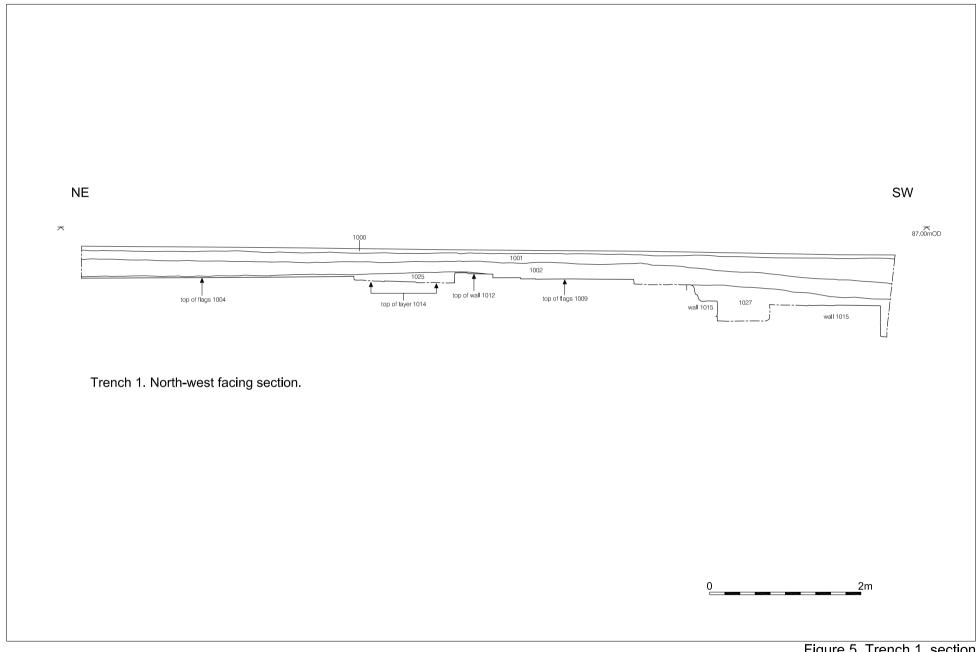


Figure 5. Trench 1, section Scale 1:50



Figure 6. Trench 2, plan Scale 1:50

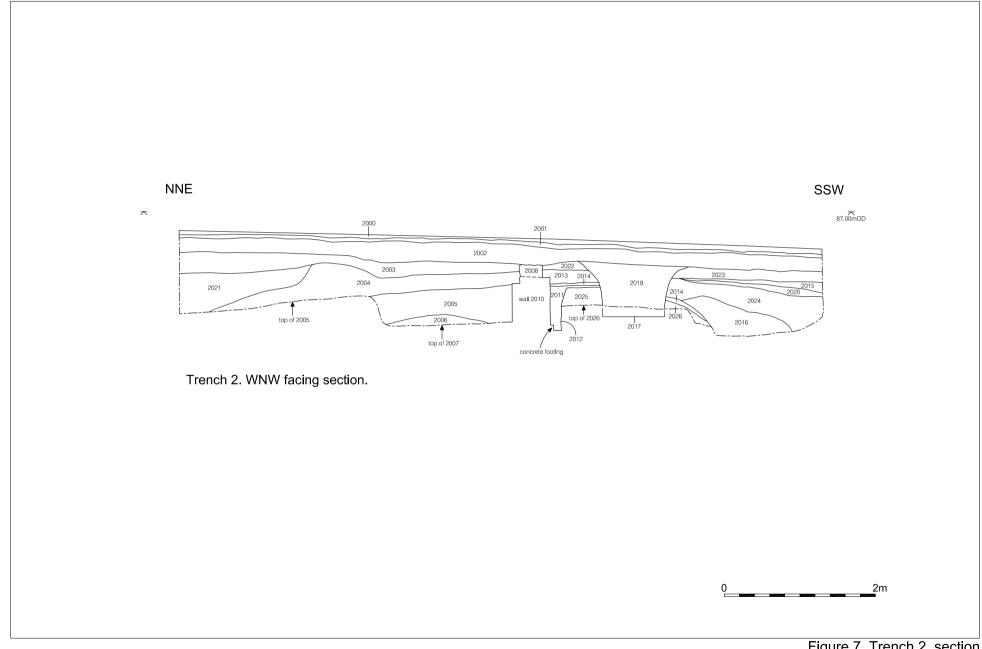


Figure 7. Trench 2, section Scale 1:50

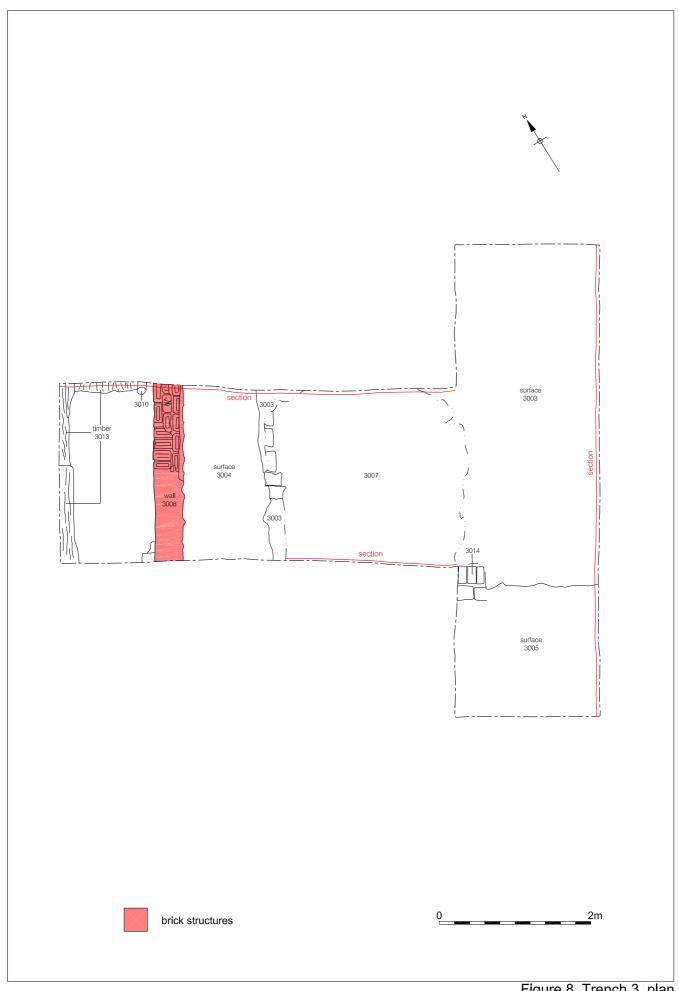
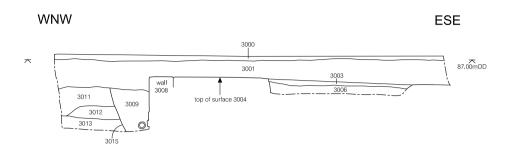
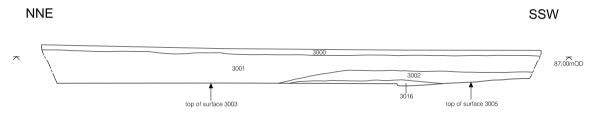


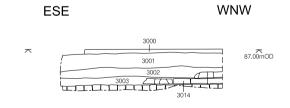
Figure 8. Trench 3, plan Scale 1:50



Trench 3. SSW facing section.



Trench 3. WNW facing section.



Trench 3. NNE facing section.



Figure 9. Trench 3, sections Scale 1:50

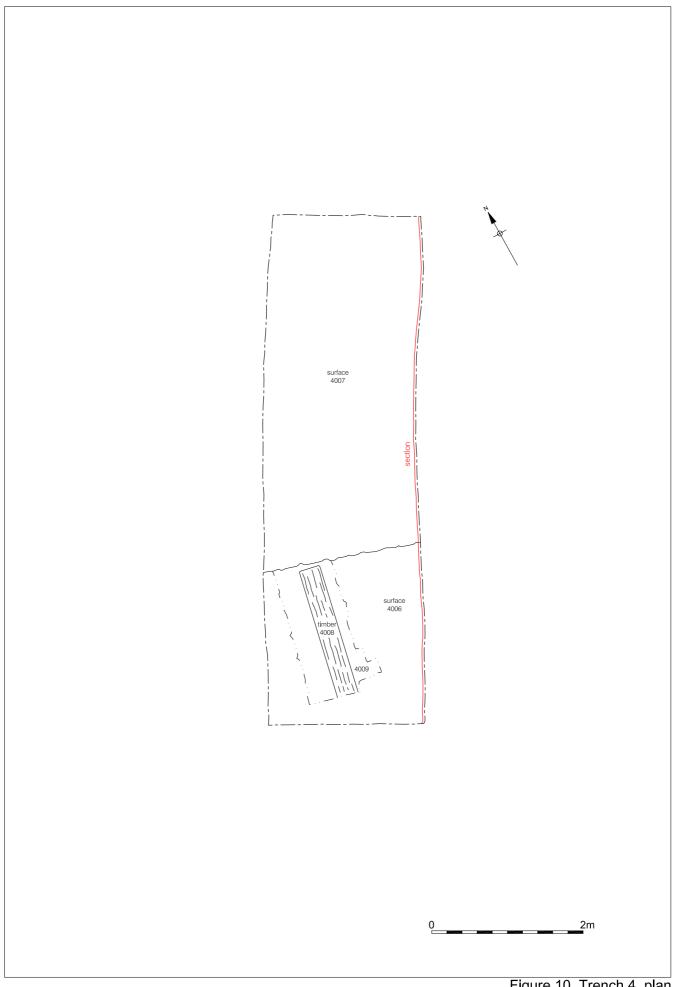


Figure 10. Trench 4, plan Scale 1:50

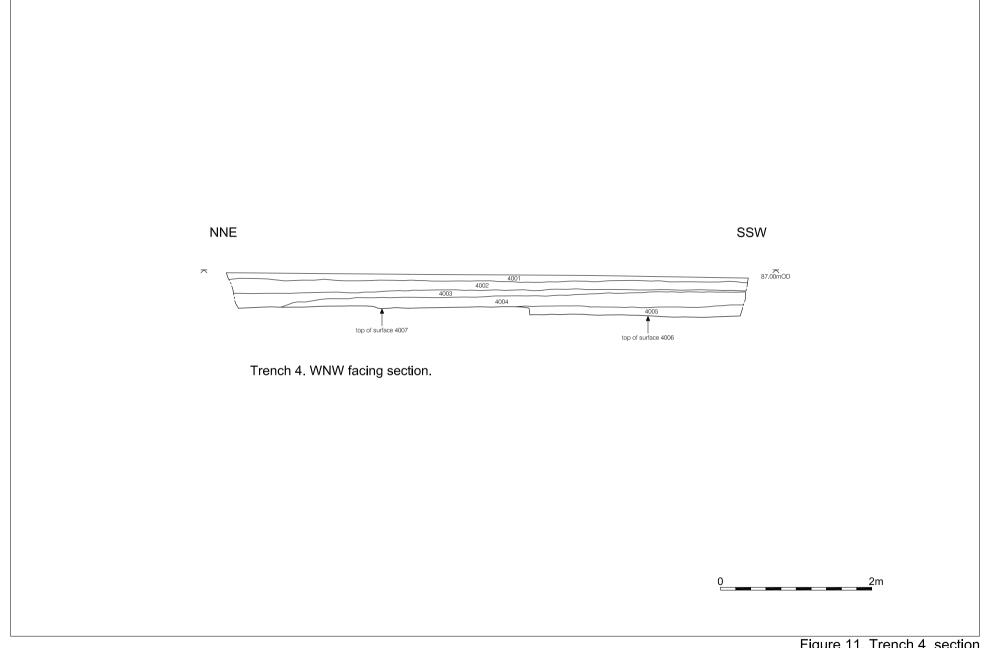


Figure 11. Trench 4, section Scale 1:50

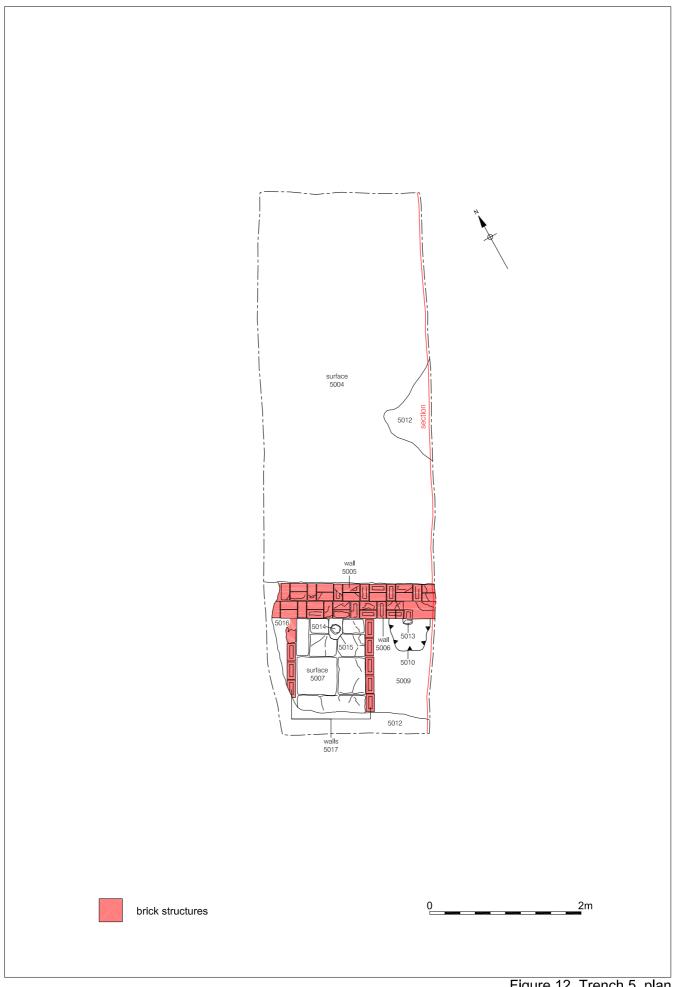


Figure 12. Trench 5, plan Scale 1:50

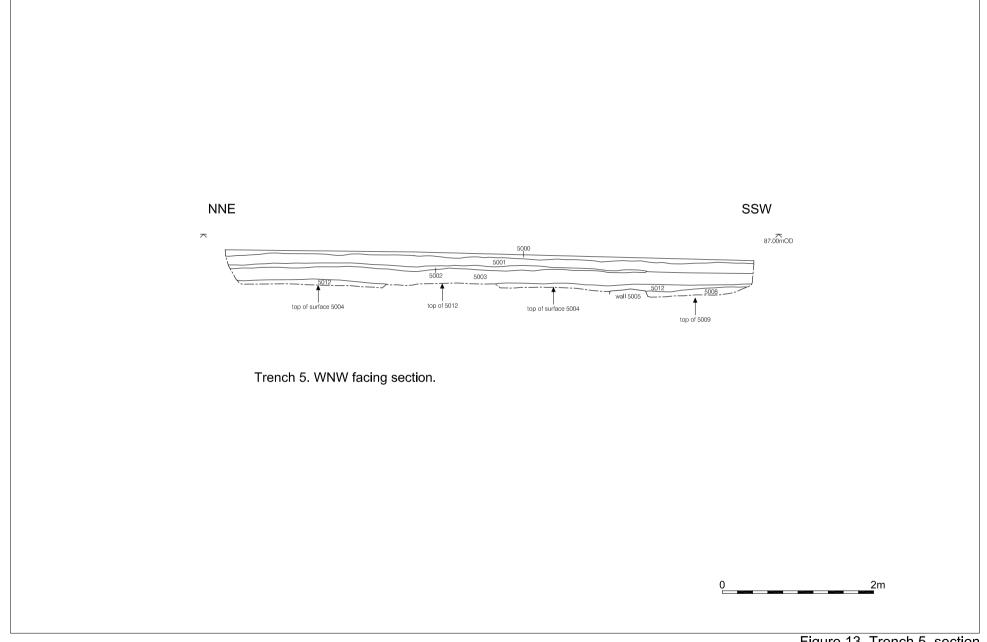


Figure 13. Trench 5, section Scale 1:50

#### 8. THE ARCHAEOLOGICAL SEQUENCE

Discrete stratigraphic entities (e.g. a cut, a fill, a deposit) were assigned unique and individual 'context' numbers, and these are indicated in the following text as [\*]. The archaeological sequence has been described by broad stratigraphic phases.

#### 8.1 Phase 1: Mid 19th Century?

## 8.1.1 Trench 1 (Figure 4)

8.1.1.1 A deposit, [1018], was recorded in the south-western corner of Trench 1, at a maximum height of 85.70m OD. It comprised loose, light greyish brown silty sand and gravel, with fragments of chalk, brick and mortar throughout. It was not excavated but a suggested interpretation is that it could have been the earliest deposit encountered in the trench, potentially dating to the earliest phases of construction of Knowsley Street station in the mid 19th century.

#### 8.1.2 Trench 2 (Figures 6-7)

8.1.2.1 Recorded throughout the southern portion of Trench 2 was a distinctive deposit, [2026], this being the earliest material in the stratigraphic sequence in this trench. Surviving at a maximum height of 85.73m OD, it comprised compact, dark greyish purple silty ash with frequent crushed and fragmented coal and iron pan throughout. Again, this deposit was not excavated, but a suggested interpretation is that it could potentially derive from the earliest phases of construction of the station in the mid 19th century, its form perhaps indicating that it may have been derived from a former railway track-bed.

#### 8.1.3 Trench 3 (Figures 8 and 9)

8.1.3.1 At the western end of the western arm of Trench 3, a possible timber surface or deck, [3013], comprising probable railway sleepers, was recorded, at a maximum height of 86.25m OD. Tightly laid-in together, the sleepers measured up to 1.20m in length x 0.23m wide x 0.10m thick. The 'structure' could not be examined in detail due to its situation at the maximum possible depth of excavation, and thus its precise form and character remain unclear. However, a suggested interpretation is that the 'structure' could represent a previous ground surface, probably pre-dating the later buildings known in this part of the site and may, therefore, derive from the earliest usage of the station.

#### 8.1.4 Phase 1 - Discussion

8.1.4.1 Deposits assigned to Phase 1 potentially represent activity on the site during its earliest usage as Knowsley Street station in the mid 19th century. However, since none of these deposits/features could be examined in detail during the evaluation, in each case the precise method of deposition, form, function and date of origin remain uncertain.

#### 8.2 Phase 2: Mid-Late 19th century

#### 8.2.1 Trench 1 (Figures 4-5 & Plates 1-3)

8.2.1.1 Phase 2 contexts in Trench 1 were largely of structural nature, interpreted as broadly representing elements of the westernmost buildings of Knowsley Street station, probably built during the mid-late 19th century and represented on early 20th century mapping (Figure 3).

- 8.2.1.2 In the north-western corner of the Trench 1, a red brick wall, [1005], was exposed, this being 0.44m wide and exposed for 2.20m, running on an NNE-SSW alignment. The wall line was continued to the south as a similar wall, [1024], of which a length of *c*. 1.60m was recorded. To the south, this returned to the west as wall [1029], this running *c*. 1.10m to the western limit of excavation. With demolition rubble removed from the internal angle of walls [1024] and [1029], lime-washed brickwork in English Garden Wall bond was revealed, *c*. 0.50m in height and continuing below the base of excavation. A single thickness brick wall, [1023], ran from the south end of wall [1005], towards the north end of wall [1024], *c*. 1.10m to the south.
- 8.2.1.3 Together the structural remains described above are interpreted as representing the surviving elements of the external wall of one of the station buildings. This is believed to be the rectangular building shown, on early 20th century Ordnance Survey mapping, on the north side of the 'Up' platform buildings and to the rear of the entrance building fronting onto Knowsley street (Figures 3a and 3b). Now reduced to what was the contemporary ground level, to the west these walls form part of the outline of the cellar of the building, as evidenced by the internal lime-wash, as described.
- 8.2.1.4 External to the building was a well-preserved flagstone surface, [1004], recorded at a maximum height of 86.32m OD. The surface comprised sandstone flags of varying size. On the eastern side of the trench, one flagstone had been disturbed to expose a sand and gravel bedding deposit, [1014].
- 8.2.1.5 The interval between cellar walls [1005] and [1024], in which brick skin [1023] was located, represents the location of a cellar light. With demolition rubble removed from the northern portion of this feature, further brickwork, [1028], was exposed, this abutting and running at right angles to the south end of wall [1055], this forming the north wall of the cellar light, c. 0.30m in height. To the east, wall [1028] returned at right angles to the south, thereby forming the east wall of the cellar light. The floor of the cellar light was formed by a partially exposed flagstone surface, [1021], recorded at a height of 86.28m OD. A penny of George V, dated 1918, was encountered lying directly upon the flagstones of this surface.
- 8.2.1.6 The cellar light was neatly framed as a surface treatment in flagstone surface [1004] by three purposely-worked sandstone blocks, [1006], overlying brickwork [1028]. Each of the blocks had one or more notches cut into its upper edge, these representing the housings for a horizontal iron grille that would have protected the cellar light. The largest block of the three was the one running parallel to the main wall, measuring 1.20m in length x 0.34m wide x 0.11m high, and this was keyed-in to shallow housings on the internal sides of the two smaller, flanking stones.
- 8.2.1.7 In the southern part of Trench 1, a substantial brickwork structure, [1015], has also been assigned to Phase 1. It comprised two main, conjoined elements. To the north was a rectangular brickwork 'pad', the detail of which was mostly obscured by mortar and pitch at the level of demolition. On plan, this element measured 1.16m NNE-SSW x 0.82m wide. To the south, it conjoined with the second element, comprising a network of walls creating a compartmentalised brickwork structure measuring >2.40m NNE-SSW x >1.80m wide. Two narrow, rectangular compartments were exposed, with a third, this larger and possibly square in form, continuing beyond the eastern limit of excavation. Two of the compartments were partially emptied of demolition rubble, it being possible to excavate to a depth of only *c*. 0.40m due to the confines of the working area.

- 8.2.1.8 Recorded in the area between the corner of the building formed by walls [1024] and [1029] and structure [1015], was a disturbed flagstone surface, [1009], with a sand bedding layer, [1010]. This surface, recorded at a maximum height of 86.31m OD, possibly represents a corridor along the north side of the platform buildings.
- 8.2.1.9 The functions of the various elements of structure [1015] are uncertain, but its overall location suggests that it represents the north-western corner of a rectangular platform building shown in outline on early 20th century mapping (Figure 3).

## 8.2.2 Trench 2 (Figures 6-7 & Plates 4-5)

- 8.2.2.1 The earliest deposit assigned to Phase 2 in Trench 2 was a sandy clay layer, [2025], up to 0.24m thick. Interpreted as dump layer for ground raising, to the north the deposit had been truncated by the construction cut, [2012], for a brick wall foundation, [2010], which crossed Trench 2 on an ESE-WNW alignment then turned through 90° to run to the NNE, adjacent to the western limit of excavation. The brickwork, laid in English Cross bond, was up to 0.50m wide and was recorded at a maximum height of 86.13m OD. Partial excavation of the construction cut, infilled with silty ash deposit, [2011], revealed brickwork surviving to a height of *c*. 0.65m, this set upon a stepped concrete footing, recorded at *c*. 85.50m OD. Set upon the brickwork was a dressed sandstone block, [2009], incorporating a rectangular socket, presumably the housing for a timber door jamb.
- 8.2.2.2 Wall [2010] has been interpreted as the foundation for the south wall, and an associated internal wall, within the range of platform buildings that this trench was sited to locate (Figure 3). The door jamb housing represents the position of doorway into the building from the platform.

#### 8.2.3 Trench 3 (Figures 8-9 & Plates 6-7)

- 8.2.3.1 The remains of two brick walls, [3008] and [3014], recorded in Trench 3, have been interpreted as representing the goods yard outbuilding that this trench was sited to locate (Figure 3 and Plate D4). The more substantial of these, wall [3008], crossed the western arm of the trench on a NNE-SSW alignment, with brickwork surviving to a height of 0.68m, incorporating a stepped two-course brick foundation. The upper portion of the wall was three bricks wide, up to 0.62m, recorded at a maximum height of 86.77m OD, and this structure is interpreted as the foundation for the external, west wall of the station outbuilding. Exposed mostly in the north-facing section of the western arm of the trench was the second wall, [3014], this interpreted as the remains of the external, south wall of the same building.
- 8.2.3.2 Internal to the building represented by the walls described above were two preparatory layers, [3007] and [3006], for a durable sandstone sett surface, [3004]. Layer [3007] comprised fragmented sandstone, brick and concrete, and formed a compact consolidation base upon which loose cinder and ash bedding layer [3006] had been spread. The surviving area of sandstone sett surface [3004] measured 2.25m x 1.27m, recorded at a maximum height of 86.75m OD, with the setts butted against the east side of wall [3008]. To the east, the surface had been replaced, as described in Phase 5, below.

8.2.3.3 Exposed in the southern part of the main arm of Trench 2 was another, similarly constructed, sandstone sett surface, [3005], which has also been assigned to Phase 2. This would have lain external to the outbuilding and, with a noticeable upward slope to the south, this surface has been interpreted as representing the north side of a cambered road running beside the outbuilding. It was recorded at a maximum height of 86.72m OD, at the south end of the trench. The setts in this surface were recorded as butting up against the brickwork of wall [3014], with a thin gap between the two structures infilled with pitch, which was evidently the material used to bed down the setts in this surface.

#### 8.2.4 Trench 4 (Figure 10 & Plate 8)

- 8.2.4.1 The earliest deposit recorded in Trench 4 was a layer, [4009], exposed in the base of a hand-excavated sondage towards the southern end of the trench. Comprising loose cinder, ash and fine gravel, with frequent pieces of slag throughout, the deposit has been interpreted as the bedding for a timber sleeper, [4008], which measured at least 2.0m in length (aligned NNE-SSW) x 0.30m wide and 0.15m thick. Recorded at a maximum height of 86.26m OD, the upper surface of the sleeper was perforated by four holes, presumably representing the attachments for a former rail track. Trench 4 had been sited in the area of a series of converging rail tracks in the goods yard north of the station buildings, as shown on early 20th century mapping (Figure 3).
- 8.2.4.2 The majority of Trench 4 revealed a sandstone sett road surface, [4007], similar to that seen in the south end of Trench 3. The setts appeared evenly coursed, again bedded down with pitch. The surface extended 4.70m north-south in the trench, recorded at a maximum height of 86.53m OD, with some damaged, worn and repaired areas noted.

#### 8.2.5 Trench 5 (Figure 12-13 & Plates 9-10)

8.2.5.1 A brick wall, [5005], was recorded towards the southern end of Trench 5, sited to investigate the eastern end of the platform buildings of the station, as shown on early 20th century mapping (Figure 3). This wall has been interpreted as representing the external wall of those buildings. Two bricks thick, it ran across Trench 5 on a WNW-ESE alignment, and was abutted to the south by brickwork, [5006], this also two bricks thick and interpreted as the internal wall of a row of WC cubicles in the platform buildings. The lowermost courses in wall [5006] comprised red bricks similar to those forming wall [5005], this brickwork exposed to height of *c*. 0.40m, but all below the contemporary ground level. The uppermost surviving course in this wall comprised slightly frogged, yellowish white bricks, with dark reddish brown glaze on the stretchers, a feature which presumably continued on the now demolished higher courses, these forming the internal walls of the cubicles.

- 8.2.5.2 Parts of three separate WC cubicles were exposed in the southern end of Trench 5, the best surviving example being the middle of the three. This was delimited by parallel, single skin walls, [5017], butting up to wall [5006] at right angles, thereby creating a cubicle c. 0.90m wide. Again the bricks at and above contemporary ground level were yellowish white and glazed on one or more faces. This cubicle probably retained its original flooring, [5007], comprising dressed flagstones of varying dimensions; mostly cracked in-situ and recorded at a height of 86.30m OD. Such a surface had not survived in either of the adjacent cubicles, as far as they were exposed, but a compact layer, [5009], of fragmented red brick and sandstone in the easternmost of the three cubicles potentially represents an original bedding layer.
- 8.2.5.3 North of and external to the platform buildings was a sandstone sett road surface, [5004], extending >5.20m north-south and recorded at maximum height of 86.35m OD. Largely identical in construction that seen to the north in Trench 4, this road surface again displayed some evidence of wear and tear, with several pronounced undulations.

#### 8.2.6 Phase 2 - Discussion

- 8.2.6.1 Structures, feature and deposits assigned to Phase 2 have been interpreted as broadly representing the earliest structural phases of Knowsley Street station, potentially spanning the mid-to late 19th century. It is acknowledged, given that the station is known to have been developed in piecemeal fashion from the mid 19th century, that this broad phasing potentially incorporates several episodes of building. Therefore, with little opportunity to excavate the remains during the evaluation, in order to clarify relationships between individual structural elements, all interpretations are provisional.
- 8.2.6.2 Stone sett roads, such as those encountered in Trenches 3, 4 and 5, are visible on historic photographs, which show the goods yard/sidings area forming the eastern portion of Knowsley Street station (e.g. Plate D3). This photographic evidence indicates that such roads ran alongside rail tracks, such as that exposed in Trench 4.

### 8.3 Phase 3: Late 19th century-mid 20th century

#### 8.3.1 Trench 1 (Figure 4 & Plates 1-2)

8.3.1.1 Phase 3 contexts in Trench 1 have been mostly interpreted as representing alterations and additions to existing structural elements of the westernmost station buildings, potentially dating from the late 19th through to the mid 20th century. The first of these alterations is represented by a brick wall, [1012], which appeared to form an extension from the corner of the building defined by Phase 2 walls [1024] and [1029]. Approximately 0.50m wide, the brickwork was exposed for length of *c*. 0.70m, continuing beyond the eastern limit of excavation on a WNW-ESE alignment. The purpose of this extension is largely uncertain, given the limited degree to which the brickwork was exposed, but it potentially relates to development of the main range of platform buildings adjacent to and east of this station building. With the building thus extended, a salt-glazed drainpipe, [1007], had been subsequently inserted, within construction cut [1013], through Phase 2 surface [1004], directly adjacent to wall [1012].

- 8.3.1.2 In the northern end of Trench 1 and running parallel to the previously described wall [1012], was a far less substantial red brick wall, [1011]. Two bricks thick, it extended 1.54m from Phase 2 wall [1005], without having been being keyed-in, ending within the limit of excavation. Its purpose is largely uncertain, perhaps being related to a porch or similar extension to the elevation of the station building.
- 8.3.1.3 Two minor structural alterations were recorded in the southern part of Trench 1. The first comprised the insertion of a line of three frogged red bricks, [1022], into a gap between the south side of wall [1029]/[1012] and flagstone surface [1009]. The gap may have been caused by damage to the surface during the building of wall [1012] and this was clearly a piecemeal repair. The second was the construction of a skin of frogged red bricks, [1016], along the eastern side of the westernmost rectangular compartment in structure [1015]. Apart from the obvious result of narrowing the open compartment, the purpose behind this is uncertain, given that the function of this structure is unknown.
- 8.3.1.4 A distinctive dump deposit, [1019], was recorded in the southern end of Trench 1, overlying Phase 1 deposit [1018]. From its composition, this material was certainly fire debris, although burning had probably not occurred *in situ* as the adjacent brickwork in structure [1015] was not fire damaged.

#### 8.3.2 Trench 2 (Figures 6-7 & Plates 4-5)

8.3.2.1 A significant part of the door threshold represented in Phase 2 by worked sandstone block [2009], was evidently replaced by a concrete block [2008], 0.30m wide and 0.15m thick, bonded onto wall foundation [2010]. This would have formed new threshold sill in the doorway.

## 8.3.3 Trench 4 (Figure 10 & Plate 8)

8.3.3.1 The rail track represented by Phase 2 timber sleeper [4008] evidently fell into disuse, to be overlain by a layer, [4006], for the most part comprising worn sandstone setts fairly randomly deposited with no binding material, but with sandstone fragments compacted between the dumped setts. This layer abutted *in situ* road surface [4007] to the north and continued to the southern limit of excavation. Patchy deposit [4012] comprised oil and stone chippings upon layer [4006] and is presumably derived from subsequent usage of the area. At some point an insertion had been made in layer [4006], recorded as an irregular feature, [4010], filled by deposit [4011]; its purpose is unknown.

## 8.3.4 Trench 5 (Figure 12 & Plates 9-10)

8.3.4.1 Phase 3 contexts in Trench 5 have been interpreted as representing minor alterations to existing structural elements in the WC cubicles in the northern platform buildings. Insertions [5015] and [5010] were made to accommodate salt-glazed drainpipes, [5014] and [5013], respectively, in two of the cubicles exposed. In the third, westernmost, cubicle, the flagstone floor surface was presumably removed and replaced by a layer of concrete, [5016].

#### 8.3.5 Phase 3 - Discussion

8.3.5.1 Structures, feature and deposits assigned to Phase 3 have been interpreted as broadly representing amendments to the main structural elements of Knowsley Street station, potentially spanning the late 19th to mid 20th century.

#### 8.4 Phase 4: 1970s

#### 8.4.1 Trench 1 (Figures 4-5)

8.4.1.1 Phase 4 contexts in Trench 1 represent demolition of the station buildings in the 1970s.
Demolition rubble [1017] infilled the rectangular compartments in structure [1015], with other demolition layers, [1003], [1020], [1025], [1026] and [1027], also recorded in this trench.

#### 8.4.2 Trench 2 (Figure 7)

- 8.4.2.1 As with Trench 1, Phase 4 in Trench 2 represents demolition activity from the 1970s. A sequence of demolition deposits was recorded in the northern part of Trench 2, namely layers [2007], [2006], [2005], [2004], and [2021]. Layer [2006] was notable in that it consisted mostly of roof slate, this presumably derived from the platform buildings themselves.
- 8.4.2.2 South of wall foundation [2010], in the area believed to be the site of the north platform, the recorded evidence suggested that sub-surface remains of the platform had been 'grubbed-out' and the area backfilled with re-deposited materials, namely layers [2016], [2024], [2020] and [2015].

#### 8.4.3 Trench 3 (Figure 9)

8.4.3.1 In Trench 3, two deposits, [3012] and [3011], both demolition layers recorded in section in the western arm of the trench, have been assigned to Phase 4, again representing demolition of the station buildings in the 1970s. Layer [3012] was notable in that it comprised approximately 40% fragments of roof tile and coping, while the overlying layer, [3011], also contained large amounts of roof debris, mostly comprising roof slates.

#### 8.4.4 Trench 5 (Figure 13)

8.4.4.1 A rubble deposit, [5008], was recorded in section, in the southern part of the trench.

#### 8.4.5 Phase 4 - Discussion

8.4.5.1 Phase 4 represents demolition of the buildings of Knowsley Street station in 1970.

#### 8.5 Phase 5: Modern

#### 8.5.1 Trench 1 (Figure 5)

8.5.1.1 Two layers, [1002] and [1001], of dolomite hardcore, overlain by the existing tarmac surface [1000], were recorded in section. The surface slopes slightly from 86.74m OD to 86.63m OD, from north to south.

## 8.5.2 Trench 2 (Figures 6-7)

8.5.2.1 Two layers, [2003] and [2022], of dolomite hardcore and a compacted layer, [2023], of fragmented sandstone, all recorded in section, probably represent an earlier version of the car park surface, set out following demolition of the station buildings. Probably when forming the ground surface, layers [2022] and [2023], were cut through by a substantial service trench, [2017], of maximum width 1.45m. In plan, this feature was T-shaped, with a plastic drain pipe exposed within it, towards the south-western corner of the trench.

8.5.2.2 Two layers, [2002] and [2001], of dolomite hardcore, formed the make-up for the existing tarmac surface, [2000], recorded at 86.74m OD in the north and sloping away to 86.49m OD in the south.

# 8.5.3 Trench 3 (Figures 8-9)

- 8.5.3.1 A drainage feature, [3015], was recorded in section, in the western arm of Trench 3, running alongside wall [3008]. Filled with a deposit, [3009], comprising 90% brick fragments the feature was initially interpreted as the construction cut for the wall itself. However, the presence of land drain within the lower part of the feature, and the fact that it cut through demolition layers, indicates that this was probably a drainage feature post-dating demolition.
- 8.5.3.2 A concrete surface, [3003], was recorded throughout much of Trench 3, overlapping the damaged eastern side of sett surface [3004] and overlying wall stub [3014]. This has been interpreted as an earlier version of the car park surface, laid out following demolition of the station. An additional spread of concrete, [3016], was evidently laid to level out a depression in surface [3003]. It is assumed that undamaged areas of the previously described sett surfaces in this area were retained as part of this early car park surface.
- 8.5.3.3 Two layers, [3002] and [3001], of dolomite hardcore underlay the existing tarmac surface, [3000], this recorded at a maximum height of 87.16m OD in the north, sloping away slightly to 87.09m OD in the south.

# 8.5.4 Trench 4 (Figure 11)

8.5.4.1 A layer, [4005], of mixed dolomite hardcore, up to 0.13m thick, was used to infill the area upon re-deposited sett layer, [4006]. Three layers, [4004], [4003] and [4002], all dolomite hardcore in composition, were then laid, of maximum overall thickness 0.33m. Layer [4001] was the overlying tarmac surface, recorded at 87.04m OD in the north and sloping away to 86.93m OD in the south.

## 8.5.5 Trench 5 (Figures 12-13)

8.5.5.1 Four layers, [5012], [5003], [5002] and [5001], all comprising dolomite hardcore, were recorded in section in Trench 5, with a combined maximum thickness of *c*. 0.45m. These formed the make-up for the existing tarmac surface, [5000], which was recorded at a maximum height of 86.76m OD.

#### 9. CONCLUSIONS AND RECOMMENDATIONS

#### 9.1 Conclusions

- 9.1.1 The archaeological evaluation undertaken in the car park forming the southernmost portion of the proposed development site at Knowsley Street/Angouleme Way, Bury, identified the presence of archaeological remains dating from the post-medieval industrial and modern eras. The most significant archaeological remains are those dating to the post-medieval industrial period, comprising structures, features and deposits representing sub-surface remains of the former Knowsley Street station.
- 9.1.2 Like many towns in Central Lancashire, Bury saw rapid industrialisation from the late 18th century, particularly as the textile industry developed. Built in 1848 by the Lancashire and Yorkshire Railway Company, Knowsley Street station lay on the Lancashire cross-country route between Rochdale and Bolton. and throughout the second half of the 19th century was well served by through trains to Liverpool, Wigan and the Lancashire coast. The route was also heavily used by east-west freight traffic avoiding Manchester. In industrial archaeology terms, the site of Knowsley Street station is of high significance.
- 9.1.3 Five archaeological trial trenches (Trenches 1-5) were investigated during the evaluation, all sited to investigate the potential survival of station buildings and associated features, as identified from documentary evidence. All five trenches encountered well–preserved structural remains of the station buildings and associated areas, at minimum depths of 0.30-0.50m below existing ground level. The depth of survival of these remains indicates that they will be highly vulnerable to development groundworks, with great potential for destruction.
- 9.1.4 All recorded archaeological remains have been assigned to five distinct phases (Phases 1-5) of archaeological activity, with remains in Phases 1-3 resenting usage and development of the station and its goods yard/sidings from the mid-late 19th century through to the mid 20th century. The structures, features and deposits assigned to Phases 1-3 in Trenches 1-5 are of moderate to high industrial archaeological significance. Arguably of the greatest significance are those structural remains representing station buildings in Trench 1, in the westernmost portion of the site.

#### 9.2 Recommendations

- 9.2.1 The archaeological mitigation strategy recommended for the site is the implementation of a programme of open area archaeological excavation and recording, with subsequent reporting and publication of results, thereby effectively preserving, by record, the important industrial era remains at the site.
- 9.2.2 The findings of the evaluation indicate that archaeological remains of Knowsley Street station survive across the car park area, at relatively shallow depths. Therefore, a significant proportion of the car park area should be stripped and subject to open area archaeological excavation, prior to the onset of the main elements of the construction programme. The actual extent of the area of excavation must be agreed with GMAU prior to the onset of the works. All exposure of archaeological remains must be undertaken under archaeological supervision at the initial stage of the excavation.

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# 11. ACKNOWLEDGEMENTS AND CREDITS

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# **PCA Credits**

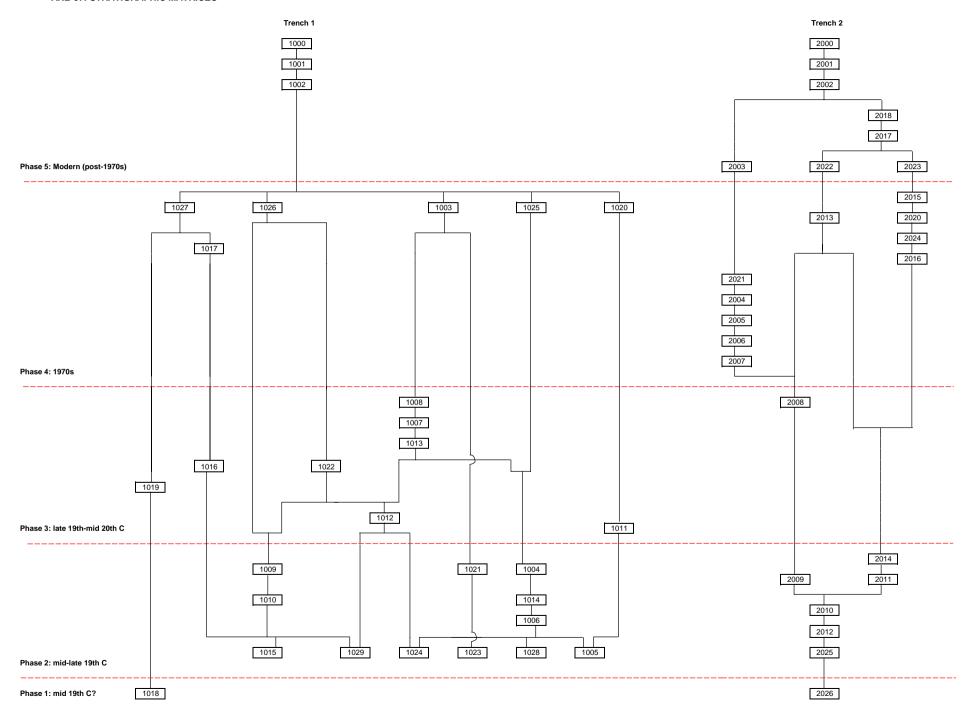
Field evaluation: Phil Moore (Site Supervisor), Kate Downey

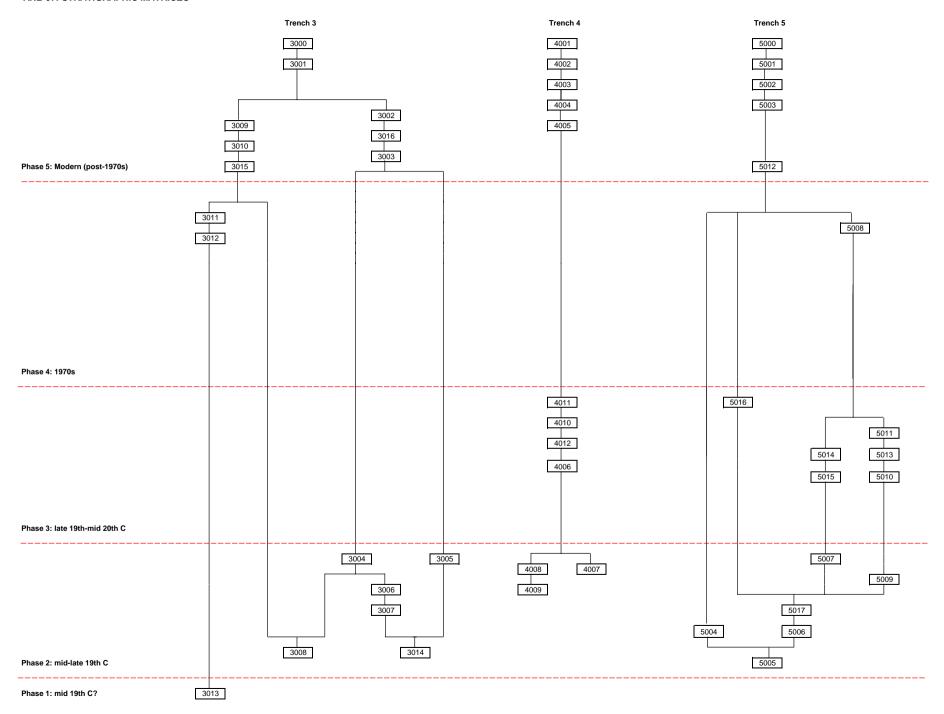
Report: Phil Moore and Robin Taylor-Wilson

Project Manager. Robin Taylor-Wilson

CAD: Adrian Bailey

# APPENDIX A STRATIGRAPHIC MATRICES





# APPENDIX B CONTEXT INDEX

Context	Trench	Phase	Type 1	Type 2	Description	Interpretation
1000	1	5	deposit	layer	indurated; dark bluish black; well-sorted fine angular stone aggregate in bituminous matrix; extends across Trench 1, up to 80mm thick	tarmac car park surface
1001	1	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; recorded throughout Trench 1, up to 0.28m thick	make-up for tarmac surface
1002	1	5	deposit	layer	compact; light grey; well-sorted dolomite hardcore; recorded throughout Trench 1, up to 0.30m thick	make-up for tarmac surface
1003	1	4	deposit	layer	compact; variously coloured; crushed and fragmented red brick and light grey mortar, in a matrix of dark greyish black, silty sand; frequent fine and medium sub-angular to sub-rounded stones; occasional glass shards, iron pipe fragments, slate fragments, asbestos roofing sheet fragments; recorded throughout Trench 1, up to 0.50m thick, not fully excavated	demolition dump
1004	1	2	masonry	surface	sandstone flagstones; dimensions vary: maximum 900mm x 700mm, minimum 580mm x 380mm; all well dressed but worn, bedded down tightly together; overall surface extends 4.40m N-S x >1.70m E-W, not excavated	external flagstone surface
1005	1	2	masonry	wall	red bricks (220mm x 110mm x up to 80mm); detail mostly obscured, bond possibly English Garden Wall; bonded with mid grey mortar; internal elevation faces W; extends 2.20m NNE-SSW x 0.44m wide, not excavated	external (cellar) brick wall
1006	1	2	masonry	surface	sandstone blocks; three recorded, the largest measures 1200mm x 340mm x 110mm, other two measure 820mm x 340mm x 110mm; well dressed, forming surface treatment for cellar light, with the largest 'keyed' into the smaller two at either end; all are notched on upper inner edges, representing housing for former grille; bedded on dark grey mortar; extends 1.80m N-S x 0.84m E-W, not excavated	sandstone surface surround for cellar light
1007	1	3	masonry	structure	ceramic salt-glazed pipe; internal diameter 0.10m, not excavated	drain pipe
1008	1	3	deposit	fill	indurated; mid greyish yellow; sand-rich concrete; measures 0.30m x 0.20m, not excavated	concrete infill of [1013]
1009	1	2	masonry	surface	sandstone flagstones; dimensions vary: maximum 900mm x 600mm x 50mm thick; all well dressed but worn; bedded down tightly together on deposit [1010]; surface extends 2.30m N-S x >1.80m E-W, not excavated	?internal flagstone surface
1010	1	2	deposit	layer	loose; mixed dark grey and mid brown; fine-medium sand; occasional brick fragments and mortar flecks; extends >1.70m N-S x >1.26m E-W, not excavated	bedding for surface [1009]
1011	1	3	masonry	wall	red bricks (220mm x 110mm x 70-80mm); one course seen in plan, bond uncertain; bonded by dark grey mortar; extends 1.54m ESE away from and at right angles to wall [1005] x 0.22mm wide, not excavated	external brick wall
1012	1	3	masonry	wall	red bricks (220mm x 110mm x 70-80mm); one course seen in plan, bond uncertain; bonded by dark grey mortar; extends WNW-ESE continuing line of wall [1029] for >0.70m N-S x 0.48m wide, not excavated	external brick wall
1013	1	3	cut	service	sub-circular; sides presumed vertical; base not seen; 0.22m x 0.28m, not excavated	cut for drain [1007]
1014	1	2	deposit	layer	loose; dark greyish brown; fine-medium sand and coarse gravel; occasional brick fragments and mortar flecks; extends 0.96m N-S x >0.60m E-W	bedding for surface [1004], possibly disturbed
1015	1	2	masonry	structure	red bricks (220mm x 110mm x 70-80mm); composite structure; bonding possibly English Garden Wall; bonded with mid-dark grey mortar; overall structure extends >3.50m N-S x >1.80m E-W; comprises two main elements: the first a solid rectangular 'pad' of brickwork, 1.16m NNE-SSW x 0.82m wide, partially covered at level of clearance by pitch, abutted to the south by the second, a compartmentalised structure measuring >2.40m NNE-SSW x >1.80m wide; the main part of second element has two narrow NNE-SSW aligned rectangular compartments to the west and part of a third meeting the l.o.e. to the east; not excavated	brick structure, ?chimney base
1016	1	3	masonry	?	red bricks (220mm x 110mm x 70-80mm); one brick thick; one course visible in plan, bonding possibly Stretcher; extends 1.46m N-S in W compartment' in structure [1015], as ?infill of E side; partially collapsed to the W; not excavated	brickwork addition to structure [1015]
1017	1	4	deposit	layer	loose; dark greyish brown mottled with mid yellow; silty sand and fine-medium gravel; occasional small-medium brick and mortar fragments; infill of 'compartments in southern element of structure [1015]; not fully excavated, >0.50m thick	rubble infill of structure
1018	1	1	deposit	layer	loose; light greyish brown; sandy silt and fine-medium gravel; moderate small-medium chalk and mortar fragments, occasional small-medium brick fragments; extends >0.96m N-S x >1.20m E-W, not excavated	dump deposit
1019	1	3	deposit	layer	loose; dark bluish black; sandy silt with high proportion of crushed and fragmented charcoal; occasional glass shards, wood and slate fragments, iron nails; extends > 1.10m N-S x > 2.0m E-W, not excavated	burnt dump deposit
1020	1	4	deposit	layer	compact; variously coloured; small-medium, with occasional large, red brick fragments and light greyish white mortar fragments, in dark grey silty sand matrix; extends >1.70m N-S x >0.30m E-W, not fully excavated	demolition dump
1021	1	2	masonry	surface	sandstone flagstones; two seen, the first 600mm x 180mm, the second 600mm x 440mm; laid tightly together, bonded with dark grey mortar; extent of visible masonry is 0.60m x 0.60m, not fully excavated	flagstone surface in cellar light
1022	1	3	masonry	structure	frogged red brick (220mm x 110mm x 70-80mm) structure; comprises three bricks laid end-to-end infilling gap between walls [1029]/[1012] and surface [1009]; bonded by medium grey mortar; extends 0.74m E-W, not excavated	brickwork infill
1023	1	2	masonry	wall	red bricks (220mm x 110mm x 70-80mm); one brick thick; bonding pattern uncertain; bonded by mid grey mortar; internal elevation faces W; extends >0.60m N-S between walls [1005] and [1024], probably part of same build - for cellar light	wall of cellar light
1024	1	2	masonry	wall	red bricks (220mm x 110mm x 70-80mm); detail obscured, bond possibly English Garden Wall; bonded with mid grey mortar; W facing cellar elevation is lime washed; extends >1.62m NNE-SSW x 0.48m wide, not excavated	external/cellar brick wall
1025	1	4	deposit	layer	loose; mid-dark greyish red; silty sand with crushed and fragmented red brick; occasional mortar flecks, slate fragments; extends >5.50m N-S in section, >50mm thick, not fully excavated	demolition dump

Context	Trench	Phase	Type 1	Type 2	Description	Interpretation
1026	1	4	deposit	layer	compact; variously coloured; crushed and fragmented red brick and light grey mortar, in matrix of dark greyish black sand and coarse	demolition dump
					gravel; moderate fine-medium sub-angular-sub-rounded stones; extends >1.15m N-S x >0.35m E-W, not fully excavated	
1027	1	4	deposit	layer	compact; variously coloured; crushed and fragmented red brick and light grey mortar, in matrix of dark greyish black sand and coarse	demolition dump
					gravel; moderate sub-angular-sub-rounded stones; extends >3.60m N-S x >1.90m E-W, not fully excavated	
1028	1	2	masonry	wall	red bricks (220mm x 110mm x up to 90mm); S and W facing elevations; bond possibly English Garden Wall; bonded by dark grey mortar;	external (cellar light) brick
					visible dimensions 0.55m E-W x 0.68m N-S and >0.30m high	wall
1029	1	2	masonry	wall	red bricks (220mm x 110mm x 70-80mm); one course visible at level of clearance and internal, N facing, cellar elevation exposed; bonded	?external/internal brick wall
					by dark grey mortar; English Garden Wall bond; lime washed on internal elevation with lead water pipe protruding; extends >1.10m WNW-	
					ESE x 0.68m wide, not excavated	
2000	2	5	deposit	layer	indurated; dark bluish black; well-sorted fine angular stone aggregate in bituminous matrix; extends across Trench 2, up to 80mm thick	tarmac car park surface
2001	2	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; extends across Trench 2, up to 50mm thick	make-up for tarmac surface
2002	2	5	deposit	layer	compact; light grey; well-sorted dolomite hardcore; extends across Trench 2, up to 0.22m thick	make-up for tarmac surface
2003	2	5	deposit	layer	compact; mid greenish brown; limestone/dolomite hardcore; extends across Trench 2, up to 0.30m thick	make-up for tarmac surface
2004	2	4	deposit	layer	compact; light reddish purple; crushed and fragmented red brick and mortar, in matrix of mid brown silty sand; extends >4.10m N-S x >2.0m E-W, up to 0.47m thick	demolition dump
2005	2	4	deposit	layer	compact; mid brownish red; 90% red bricks, with numerous complete examples, some bonded as parts of walls, remaining 10% very	demolition dump
			1	'	mixed, crushed and fragmented light grey mortar, frequent fine and medium sub-angular to sub-rounded stones, very occasional wood	·
					fragments and glass shards; extends >4.40m N-S x >1.60m E-W, up to 0.48m thick	
2006	2	4	deposit	layer	loose: 90% roof slates, remaining 10% crushed and fragmented red brick and light grey mortar; seen in section extending >1.30m N-S, at	demolition dump
					least 0.13m thick	
2007	2	4	deposit	layer	friable; light yellowish orange mottled with light grey; coarse sand and fine sub-angular stones; frequent red brick and light grey mortar fragments, frequent slate fragments; extends >4.50m N-S x >1.60m E-W, not excavated, thickness uncertain	demolition dump
2008	2	3	masonry	structure	concreted; light bluish white; concrete block (0.95m x 0.30m x 0.15m), smooth upper surface and rough sides; built upon wall [2010],	doorway sill
					infilled against stone [2009]	
2009	2	2	masonry	structure	sandstone block (300mm x 260mm x 160mm); dressed upper surface, incorporating rectangular socket/housing (100mm x 60mm x 50mm)	housing for door jamb
2010	2	2	masonry	wall	red bricks (230mm x 110mm x 70-80mm); regular courses of English Cross Bond; bonded with light brownish grey mortar with flecks of	foundation wall
					charcoal; runs 4.50m WNW-ESE then turns to the NNE running >2.0m E-W x 0.50m wide; survives to a maximum height of 0.64m upon	
					concrete foundation	
2011	2	2	deposit	fill	loose; mixed deposit of dark purplish grey silty ash, mottled with dark orange brown sandy silt and light bluish grey clay; frequent sub-	fill of construction cut [2012]
			1 '		angular-sub-rounded pebbles, moderate coal flecks, occasional red brick fragments; extends 0.45m S beyond cut, at least 0.60m thick	
2012	2	2	cut	linear	linear; E-W aligned; sharp break of slope at top into straight, almost vertical side; base not seen; extends >1.30m E-W x 0.23m wide, at	construction cut for wall
					least 0.60m deep	[2010]
2013	2	4	deposit	layer	soft; light brown; sandy clay; frequent fine and medium sub-angular to sub-rounded stones, occasional medium-large sub-angular to sub-	dump layer
	_		ļ		rounded pebbles; in section extends 0.79m N-S, 0.18m thick	
2014	2	2	deposit	layer	loose; mid yellowish brown; medium sand; in section extends >1.30m N-S, up to 0.05m thick	dump layer
2015	2	4	deposit	layer	loose; dark purplish grey; silty ash; frequent red brick flecks and fragments, occasional sandstone fragments; in section extends >1.85m N-S, up to 0.14m thick	dump layer
2016	2	4	deposit	layer	soft; light brown; sandy clay; frequent fine and medium sub-angular to sub-rounded stones; extends > 1.90m N-S x >2.0m E-W, at least	dump layer
2017	2	5	cut	service	T-shaped in plan; gradual break of slope at top, falling to very steep almost vertical side; base not seen; extends >2.20m SE-NW, with branch to SW extending >1.50m, up to 1.40m wide, >0.55m deep, but not fully excavated	service trench
2018	2	5	deposit	fill	generally compact; very mixed deposit, mostly mid brownish grey silty clay and dark purplish grey silty ash; frequent fine and medium sub-	backfill of service trench
			1 '		angular to sub-rounded stones; moderate brick fragments, glazed pipe fragments; plastic drainage pipe exposed within feature in SW	[2017]
					corner of trench, protected/overlain by fine gravel; at least 0.55m thick, but not fully excavated	· -
2019	void		1			
2020	2	4	deposit	layer	loose; mid-brownish red; crushed red brick with occasional small brick fragments; occasional pockets of dark greyish purple ash; in section extends >1.85m, up to 0.10m thick	demolition dump
2021	2	4	deposit	layer	generally compact fill - becomes progressively more mixed and loose to the N; dark purplish grey with lenses of mid grey and dark reddish	levelling dump layer
-021	_	]	aoposit	.ayoi	brown; silty sand with lenses of ash; frequent fine and medium sub-angular to sub-rounded stones, occasional brick and wood fragments,	adinp layer
					re-deposited timber sleeper in S facing section; in section extends >1.75m N-S, up to 0.53m thick	
2022	2	5	deposit	layer	compact; mid grey; sandy dolomite hardcore; in section extends 0.40m N-S, up to 0.011m thick	levelling dump layer
<u> </u>	<u>_</u>	V	acposit	iayoi	Josephan, this gray, dariay administrataone, in accitori exterios ottorios ottorios ottorios ottorios ottorios	noveming dump layer

Context	Trench		Type 1	Type 2	Description	Interpretation
2023	2	5	deposit	layer	concreted; light brown; crushed and fragmented sandstone - very occasional large fragments; in section extends >2.0m N-S, up to 0.15m	levelling dump layer
					thick	
2024	2	4	deposit	layer	compact; dark greyish purple; silty ash with pockets of light brown silty clay; frequent mortar flecks and fragments; in section extends	dump layer
					>2.05m N-S, up to 0.48m thick	
2025	2	2	deposit	layer	soft; light brown; sandy clay; frequent fine and medium sub-angular to sub-rounded stones; in section extends >0.55m N-S and seen to	dump layer
					extend full 2.0m width of trench, up to 0.24m thick	
2026	2	1	deposit	layer	compact; dark greyish purple; silty ash; frequent crushed and fragmented coal, moderate fine and medium sub-angular pebbles, moderate	dump layer/track-bed?
					iron pan; extends >3.70m N-S x >2.0m E-W, not excavated	
3000	3	5	deposit	layer	indurated; dark bluish black; well-sorted fine angular stone aggregate in bituminous matrix; extends across Trench 3, up to 80mm thick	tarmac car park surface
3001	3	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; extends across Trench 3, up to 0.44m thick	make-up for tarmac surface
3002	3	5	deposit	layer	loose; light grey; well-sorted dolomite hardcore; extends across Trench 3, up to 0.16m thick	make-up for tarmac surface
3003	3	5	deposit	surface	concreted; light greyish yellow; fine sandy concrete; extends > 4.48m N-S x > 4.50m E-W, up to 70mm thick	levelling layer
3004	3	2	masonry	surface	sandstone setts (250mm x 200mm x 150mm); regularly sized, all roughly squared, laid to form an even, single coursed surface; extends	internal surface
					>2.25m N-S x >1.27m E-W; not excavated	
3005	3	2	masonry	surface	sandstone setts (250mm x 200mm x 150mm); regularly sized, all roughly squared, laid bedded in asphalt to form a durable, single course	external road surface
					surface with slight camber - down to N; some worn/cracked examples; extends >1.74m N-S x >1.90m E-W; not excavated	
3006	3	2	deposit	layer	loose; dark reddish brown to greyish purple; cinder/ash and fine angular-sub-rounded stones; occasional flecks of coal, slag and chalk,	make-up for floor surface
					moderate sandstone fragments, including re-deposited sandstone setts; in section extends >1.80m E-W, up to 0.14m thick	[3004]
3007	3	2	deposit	layer	compact; crushed and fragmented sandstone, red bricks and light grey concrete, in matrix of mid greyish brown silty sand; extends	make-up for floor surface
				· .	>2.60m E-W x 2.50m N-S, not excavated	[3004]
3008	3	2	masonry	wall	red bricks (220mm x 110mm x 70-80mm); English Garden Wall bond; bonded with dark grey mortar; external elevation faces W; extends	brick wall foundation
			,		>2.20m NNE-SSW x 0.62m wide, survives to a height of 0.68m, including stepped footing	
3009	3	5	deposit	fill	loose; crushed and fragmented red brick; very occasional mid grey mortar fragments; in section, up to 0.50m wide, >0.55m thick	fill of feature [3015]
3010	3	5	deposit	drain	red ceramic drain pipe; unglazed land drain type; pipe thickness 20mm, bore 50mm	drain pipe
3011	3	4	deposit	layer	loose; dark bluish grey; up to 90% roofing slate fragments, in mid greyish brown silty sand matrix; in section extends >0.75m E-W, up to	demolition dump layer
				· .	0.38m thick; not excavated	
3012	3	4	deposit	layer	loose; dark greyish brown with light orange brown mottling; sandy silt with 40% roof tile and coping fragments; frequent brick fragments,	demolition dump layer
				· .	occasional chalk flecks, mortar fragments; in section extends 0.70m E-W, up to 0.19m thick; not excavated	
3013		1	timber	structure	timber ?surface/deck; individual dimensions vary: up to 1.20m in length x up to 0.25m wide x up to 0.15m thick; overall structure extends	timber ?surface/deck
					>2.40m N-S x >0.80m E-W, up to 0.15m thick; not excavated	
3014	3	2	masonry	wall	red brick (220mm x 110mm x 70mm) wall; regularly coursed but bond uncertain - only two courses seen; bonded with mid grey mortar;	internal/external wall
			,		internal elevation faces N; in section extends >2.80m E-W, width not seen, survives to height of 0.15m	
3015	3	5	cut	linear	presumed linear, recorded in section only; W side, sharp break of slope at top, steep slightly concave side; base not seen due to water	?drain trench
					table; 0.50m maximum width, at least 0.55m deep	
3016	3	5	deposit	layer	concreted; light pinkish white; lime-rich concrete with fine and medium sub-angular stones; in section extends 2.20m N-S, assumed <2.0m	concrete levelling layer
				'	E-W, up to 70mm thick	
4001	4	5	deposit	layer	indurated; dark bluish black; well-sorted fine angular stone aggregate in bituminous matrix; extends across Trench 4, up to 80mm thick	tarmac car park surface
4002	4	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; extends across Trench 4, up to 0.18m thick	make-up for tarmac surface
4003	4	5	deposit	layer	loose; light grey; well-sorted dolomite hardcore; extends across Trench 4, up to 0.20m thick	make-up for tarmac surface
4004	4	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; extends across majority of Trench 4, up to 0.15m thick	make-up for tarmac surface
4005	4	5	deposit	layer	weakly cemented; light greenish grey; well-sorted dolomite hardcore in concrete matrix; extends >3.0m N-S x >2.0m E-W, up to 0.13m	levelling layer/?former car
				','	thick	park surface
4006	4	3	masonry	surface	sandstone setts (300mm x 100mm x 20mm); fairly randomly laid on thin bed of cinder/ash; compact but no bonding material; gaps packed	sett ?surface
	1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		with thinner sandstone fragments; extends >2.50m N-S x >2.0m E-W; not excavated; oil stained (see [4012])	
4007	4	2	masonry	surface	sandstone setts (300mm x 100mm x 20mm); regularly sized, all roughly squared, laid bedded in asphalt to form a durable, single course	external road surface
	1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		surface with camber - down to the N; some cracked/worn examples, some missing, repaired with concrete; extends >4.70m N-S x >2.0m E-	
					W: not excavated	
4008	4	2	timber	structure	timber railway sleeper (>2.0m x 0.30m x 0.15m); aligned NNE-SSW; four holes in N half; not excavated	?in-situ sleeper on former
.000	ľ	_		Strastare	and a section of the	track -bed
4009	4	2	deposit	layer	loose; dark bluish black with light orange flecks; cinder/ash with fine and medium sub-angular to sub-rounded stones; frequent slag	?make-up of former track
1.000	ľ	_	aopooit	,	fragments; >1.80m N-S x >0.85m E-W; not excavated	bed
	I		1	1	magnionic, 2 hours to 22000m E 11, not oxoditated	1200

Context	Trench	Phase	Type 1	Type 2	Description	Interpretation
4010	4	3	cut	feature	irregular; vertical sides through sett surface; no discernible base; up to 0.40m N-S x up to 0.54m E-W x 0.15m deep	uncertain feature
4011	4	3	deposit	fill	friable; dark bluish grey; silt and fine gravel; 0.15m thick	fill of feature [4010]
4012	4	3	deposit	spread	loose, dark bluish black; solidified oil with stone chippings and fine gravel; appears within joints and recesses of surface [4006]; extends	oil spread on surface [4006]
					>2.0m N-S x $>$ 2.0m E-W, up to 50mm thick	
5000	5	5	deposit	layer	indurated; dark bluish black; well-sorted fine angular stone aggregate in bituminous matrix; extends across Trench 5, up to 80mm thick	tarmac car park surface
5001	5	5	deposit	layer	loose; mid grey; well-sorted dolomite hardcore; recorded throughout Trench 5, up to 0.15m thick	make-up for tarmac surface
5002	5	5	deposit	layer	loose; light grey; well-sorted dolomite hardcore; recorded throughout Trench 5, up to 50mm thick	make-up for tarmac surface
5003	5	5	deposit	layer	loose; mid grey; mid grey; well-sorted dolomite hardcore; extends across Trench 5, up to 0.20m thick	make-up for tarmac surface
5004	5	2	masonry	surface	sandstone setts (300mm x 100mm x 20mm); regularly sized, all roughly squared, laid bedded in asphalt to form a durable, single course surface with slight camber - down to the S; some cracked/worn examples and surface has noticeable undulations; extends >4.90m N-S x >2.0m E-W; not excavated	uneven road surface
5005	5	2	masonry	wall	red brick (230mm x 110mm x 70-80mm); two bricks thick; regularly coursed, but bonding pattern uncertain; very dark greyish black mortar; external elevation faces N; extends >2.0m E-W x 0.25m wide, not excavated	external wall of WC cubicle
5006	5	2	masonry	wall	red bricks and yellowish white bricks - the latter with dark reddish brown glaze (230mm x 110mm x 70-80mm); two bricks thick; regularly coursed, bonding pattern uncertain; bonded with dark grey mortar; lighter glazed bricks form internal S elevation, red bricks form N skin abutting wall [5005]; extends >2.0m E-W x 0.25m wide, at least five courses seen, maximum height 0.40m	internal wall of WC cubicle with glazed elevation
5007	5	2	masonry	surface	sandstone flagstones; dimensions vary: maximum 840mm x 500mm; all well dressed with rounded edges; bedded down tightly together; some cracked; extends >1.15m N-S x >1.0m E-W, not excavated	flagstone surface of WC cubicle
5008	5	4	deposit	layer	loose; mixed deposit of red brick fragments, dark greyish black silty sand, mid yellow fine sand; frequent fine and medium sub-angular to sub-rounded stones; occasional wood fragments; extends >1.50m N-S x >2.0m E-W, up to 90mm thick	demolition dump layer
5009	5	2	deposit	layer	compact; light orange yellow with red brick and sandstone fragments; frequent sub-angular to sub-rounded fine pebbles; extends >1.0m N-S x E-W x > 0.74 E-W, not excavated	make-up for former surface?
5010	5	3	cut	service	sub-oval; sharp break of slope at top; steep almost vertical sides; base not seen; 0.42m N-S x 0.57m E-W x at least 0.31m deep	cut for drain [5013]
5011	5	3	deposit	fill	loose; dark greyish black; coarse sand and fine sub-angular and sub-rounded stones; frequent fragments ceramic drain fragments; 0.42m N-S x 0.57m E-W x at least 0.31m thick	backfill of cut [5010]
5012	5	5	deposit	layer	cemented; light greenish grey; mixed dolomite hardcore in concrete matrix; extends across Trench 5, up to 0.10m thick	levelling layer/?former car park surface
5013	5	3	deposit	drain	ceramic pipe; salt-glazed; thickness 20mm, internal bore 0.10m	drain pipe
5014	5	3	deposit	drain	ceramic pipe; salt-glazed; thickness 20mm, internal bore 0.10m	drain pipe
5015	5	3	cut	service	sub-oval; 0.23m N-S x 0.17m E-W, not excavated	cut for drain [5014]
5016	5	3	deposit	layer	indurated; light bluish white; lime-rich concrete with light blue fine gravel aggregate; extends >0.90m n-S x >0.23m E-W, not excavated	rough concrete surface
5017	5	2	masonry	wall	two internal partition walls formed by single thickness/course of yellowish white bricks with dark reddish brown glaze on foundation course(s) of red bricks (both are 230mm x 110mm x 80mm); run N-S abutting wall [5006] to the N; bonded with dark grey mortar; extend > 1.20m N-S, not excavated	internal partition walls in WC cubicles

# APPENDIX C SITE PHOTOGRAPHS (PLATES C1-C10)



Plate C1. Trench 1, from the north-west. Trench view, overhead from Knowsley Street Bridge.



Plate C2. Trench 1, from the south-west. Trench view, structure [1015] in foreground *(1m scale).* 



Plate C3. Trench 1, from the north-east. Structure [1006] detail (1m scale).



Plate C4. Trench 2, from the north-east. Trench view, with wall [2010] (1m scale).



Plate C5. Trench 2, from the south-east. Structure [2008]/[2009]/[2010] detail (1m scale).



Plate C6. Trench 3, from the north-east. Trench view, overhead from the access road (1m scale).



Plate C7. Trench 3, from the north-west. Surface [3004] and wall [3008] detail (1m scale).



Plate C8. Trench 4, from the south-west. Trench view, timber [4008] in foreground (1m scale).



Plate C9. Trench 5, from the south-west. Trench view, surface [5004] in rearground (1m scale).



Plate C10. Trench 5, from the north-west. Surface [5007] and wall [5005]/[5006] detail (1m scale).

# APPENDIX D HISTORIC PRINTS/PHOTOGRAPHS (PLATES D1-D6)

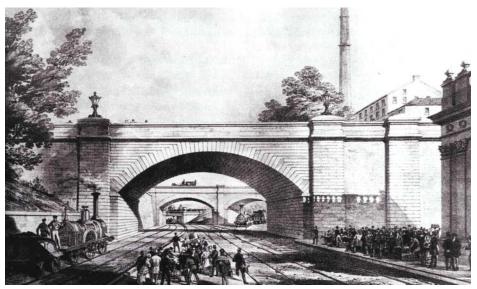


Plate D1. Artist's impression, c. 1850, looking west at Knowsley Street bridge.

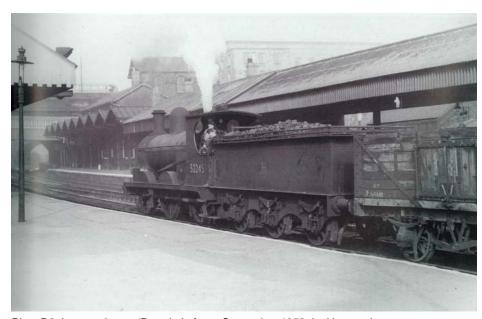


Plate D2. Locomotive on 'Down' platform, September 1953, looking north-west.



Plate D3. Eastern goods yard/sidings, 1967, looking west.

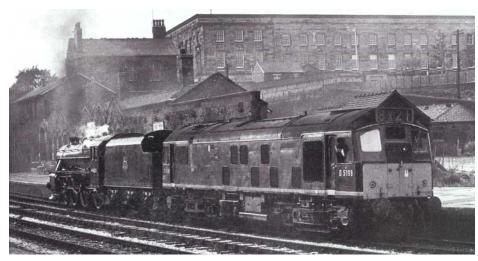


Plate D4. Locomotive on 'Up' platform, August 1970, looking north-west.



Plate D5. 'Up' platform, October 1970, looking south-east.



Plate D6. 'Up' platform and partly demolished station buildings, 1971, looking north-west.