

## Appendix 4: Archaeology & Cultural Heritage Appraisal

### Introduction

- 4.1 This assessment has been prepared by Waterman CPM Limited (WCPM) on behalf of Peel Holdings Plc to inform and support the Baseline Study for Wirral Waters. The location of the main areas of interest, as well as the wider study area, is shown on Plan 1(2938/27).
- 4.2 The aim of the report is to provide a summary of known information for the area, based on existing data, analysis of historic sources and a site visit. The likely nature of archaeological deposits and extant structures which may be impacted upon by any proposed development is outlined.
- 4.3 This assessment forms the basis for any further archaeological work, such as field investigation, should this be deemed necessary.
- 4.4 This assessment follows best practice procedures produced by English Heritage (EH 1998) and the Institute of Field Archaeologists (IFA 2001), and contained in Planning Policy Guidance Note (PPG) 15 'Planning and the Historic Environment' (DoE1994) and Planning Policy Guidance Note (PPG) 16 'Archaeology and Planning' (DoE 1990).

- 4.5 This advice recommends identification of the likely presence and significance of any archaeological deposits or important elements of the historic environment at an early stage.
- 4.6 Regional and Local plans tend to reflect this guidance. The policies which inform this assessment are presented in Appendix 1.

### Methodology

- 4.7 This archaeological and built heritage assessment is primarily a desk-based exercise. The sources consulted include information held in the MSMR. These consist of records relating to sites and findspots in the area and reports relating to past archaeological investigations.
- 4.8 The Wirral Archives and the local studies collection at Birkenhead Central Library were consulted for further records relating to the site. Information noted consists of early maps, documents and secondary sources. Aerial photographs showing the site and secondary sources, held by English Heritage at the NMR in Swindon, were also examined. As were the relevant Merseyside Maritime Museum publications.
- 4.9 Previously recorded archaeological information, as well as details of designated heritage in the vicinity of the site, is presented in this report. The numbers used in the text are

those issued by the MSMR. Information from early maps, other historic records and secondary sources are presented, and the site visit undertaken is explained.

- 4.10 Having checked the situation on the ground, this report provides a summary of the known structures and historical features, discusses the potential for hitherto undiscovered sub-surface deposits and evaluates the likely impact of the development of the site. An appropriate approach to further evaluation and mitigation is then recommended.
- 4.11 A gazetteer of MSMR information is included as Annex 1. In addition, at Annex 2, an archaeological glossary and time chart is provided.
- 4.12 The locations of the known archaeological sites and findspots are shown in Annex 3, on Plan 1 (2938/27). Plan 2 (2938/28) displays extracts from Burdett's map of 1797 and A Plan of the docks and warehouses proposed to be made at Birkenhead in the County of Chester as designed by J.M. Rendell' 1850, whilst Plan 3 (2938/29) shows extracts from a Map of the Borough of Birkenhead and the Districts of Wallasey, Bidston, Rock Ferry etc., dated 1899, and the 1936 twenty five inch Ordnance Survey map.

- 4.13 The site being considered straddles Wallasey Pool, which forms the mouth of the Birket River as it enters the River Mersey. The site extends over a total area of approximately 200 hectares, including the pool itself. Plan 1 (2938/27) shows the area involved.

### *Topography*

- 4.14 The majority of the site area consists of docklands, and is therefore characteristically flat and near to sea level.
- 4.15 The land to the north rises from the dockside in the direction of Wallasey Hill and New Brighton, quite steeply at the north west end and more gently towards the north east and the Mersey. At approximately 55 metres above Ordnance Datum (AOD) this hill shelters Wallasey Pool from the prevailing wind, so, historically creating the pool as an attractive anchorage. To the east, beyond Bidston Moss, the land remains relatively flat as it follows the valley of the Birket across the Wirral peninsula. From a relatively flat plain, which extends as far as Birkenhead Park, the land to the south rises to the west, towards Bidston Hill at circa 65 metres AOD, and to the south and Tranmere at approximately 40 metres AOD.

### *Geology*

- 4.16 The Soil Survey of England and Wales (1983) shows the area of the site to lie within an un-surveyed area. However, the

majority of the Wirral peninsula exhibits a underlying geology of reddish till, overlain by soils of the Clifton association. These are slowly permeable reddish fine loamy and course loamy soils, which are seasonally waterlogged, and similar soils with only slight seasonal waterlogging. These exist amongst deep course loamy soils, which are also affected by groundwater.

- 4.17 Interspersed amongst this prevailing geology are ridges of Permo-Triassic and Carboniferous reddish sandstone, overlain by well drained sandy and course loamy soils of the Bridgnorth association. These tend to be at risk of water and wind erosion. To the north of the site, two such ridges run nearly parallel with the Mersey; from Seacombe Point and, further west, along the line of Claremount Road from Poulton. The land between the ridges, as well as the eastern and western slopes, consists of glacial and boulder clay deposited over the whole of the district during the last ice age. This clay continues to the south, beyond the pool, between further sandstone ridges to the west around Bidston and Claughton, and on the bank of the Mersey in the vicinity of Birkenhead Priory.

### ***Development Proposals***

- 4.18 The development proposals envisage the large-scale, and long-term, zoned redevelopment of the docklands around

Wallasey Pool for a combination of commercial, residential and leisure uses.

- 4.19 This cultural assessment considers the known interest and potential of a large area to inform the formulation of a masterplan for this redevelopment.

### **Previously Identified Archaeology and Cultural Heritage**

- 4.20 The archaeological and heritage background has been assessed using the MSMR. The intention of the search is to locate known archaeologically sensitive sites, which may be affected by groundwork associated with construction at the site, and the completed development, and to predict and extrapolate likely archaeological conditions within the site area from finds made nearby.
- 4.21 The location of the entries recorded on the MSMR within the site, and within a study area extending across a 750 metre radius from the focus, are tabled in Annex 1 and indicated on Plan 1 (2938/27). The numbers referenced on the plan and in brackets in the text are the MSMR identifiers. Appendix 3 provides a glossary of archaeological terms and time chart.

### ***Designated Heritage***

- 4.22 The site sits on the opposite side of the River Mersey from the Liverpool docklands, which form a significant part of the Liverpool Maritime Mercantile City World Heritage Site (WHS No. 1150) (ICOMOS 2004). No part of this designated area lies on the west bank of the River Mersey, but the World Heritage Site and the eastern portion of Wallasey Pool are inter-visible. This relationship is discussed further in the WCPM visual assessment report (FORMAT).
- 4.23 No Scheduled Ancient Monuments (SAMs) are located within the boundary of the site or within the study area. The remains of Birkenhead Priory (SAM 32571) (EH 2000) represent the nearest such monument and lie over one kilometre to the south east of the site. The site does not contain any part of a locally designated area of archaeological importance.
- 4.24 Two areas designated on the English Heritage Register of Parks and Gardens of Special Historic Interest lie within the study area. The Grade I registered Birkenhead Park (RPG No. 1992) lies circa 500 metres to its south, whilst the Grade II listed Flaybrick Memorial Gardens (5005) is approximately 600 metres to the south west of the site.
- 4.25 The Hamilton Square Conservation Area lies approximately 500 metres to the south east of the site, whilst the Bidston Conservation Area lies a similar distance to its west. Both

Birkenhead Park and Flaybrick Memorial Gardens have also been designated as conservation areas by Wirral Metropolitan Borough Council. There are three listed buildings, or groups of buildings, within the site, and a further nine within the study area (see below).

### ***Non Designated Archaeology***

#### **Prehistoric**

- 4.26 In the south east of the site, two 'ancient flint arrowheads' [3189/2], found in 1819 on the edge of Wallasey Pool, and a 'circular, perforated stone implement' together with a sharpened antler [3189/1 & 7], found during the excavation of Vittoria Dock in 1908, represent the only prehistoric material recorded on the MSMR as having been recovered from within the site.
- 4.27 Immediately to the north west of the site area, unspecified palaeo-environmental remains are recorded as having been recovered from Bidston Moss, between the M53 motorway and the railway line running north from Bidston Station [2891/4 & 5][2991/18]. A polished stone axe was found in the garden of 14 Foxley Road, approximately 300 metres to the north of the Moss, in 1964 [2991/1], and petrological analysis showed that it had originated in Caernarvonshire. Elsewhere in the study area, the MSMR records a prehistoric date for 'stones' found circa 200 metres to the north of Dock

Road [3190/4], whilst three flint fragments are recorded no more accurately than having been recovered from Frankly Mere, Bidston and Woodside [3289/12].

### Roman

- 4.28 A coin of Valentinian II, found alongside Dock Road Wallasey during the Second World War, represents the only material of Roman date recorded on the MSMR as having been recovered from within the site [3090/13].
- 4.29 During excavations in 1845 for a new bridge to lift the road from Monk's Ferry to Bidston over the Chester railway, which was being extended from Woodside Station to the new docks on the south side of Wallasey Pool, an ancient bridge of substantial size was discovered buried in silt [3289/1-2]. Located approximately 200 metres to the south east of the site, it was recorded to be 100 feet long and 24 feet wide and consisted of solid oak beams in three horizontal layers. Based upon the method of construction, and an inferred relationship with Roman roads leading up from Chester to the Wirral, it was attributed a Roman date by the Rev. William H. Massie, who presented the find to the Cheshire Historical Society in 1850. A section drawn by the Railway Engineer at the time indicates that the bridge was found over four metres below the level of the dock railway lines beneath alluvial silt deposits (Edge 1986). It is apparent that the bridge crossed one of the tributaries of the Birket River, with the oaken beams resting on

rock at either end and on intermediate stone piers under the span. In due course the stream had become dried up and the bridge buried by the roadway.

### Medieval

- 4.30 The Mulne How, which means the 'mill mound' or 'hill' and lies approximately 250 metres to the south east of the site, is recorded as the approximate site of the Birkenhead Priory watermill [3289/3]. However, the exact location of the watermill of Birkenhead Priory has never been satisfactorily answered. A petition from the Pior to Edward Prince of Wales in 1305 requesting permission to enclose thirty acres of heath in Claughton suggest that the mill was close to the shore of the Wallasey Pool, and it has been suggested, on the evidence of early maps, that Bridge Street was carried over the mouth of Bridge End Brook on an embankment built on the Medieval mill dam.
- 4.31 A square feature, listed as 'Moat Croft', appears on a map of 1823 on the line of Old Bidston Road, circa 200 metres to the south of the site [3189/3]. This possible fortified manor site, perhaps that of the 'lost' manor house of Woolton-in-Wirral, is now covered by modern roads and buildings, and no trace of any moat remains.

### Post-Medieval

- 4.32 Around 1760 the tidal waters of the Mersey were retained in a pond to power corn and iron slitting mills, and these are recorded as having lain in the west of the site beyond Bidston Dock [2991/16]. These were demolished at the beginning of the 19th century. The site of Moss House is recorded to the north west of these mills [2991/11]. Documentary sources suggest that the site may have been moated, but no suggestion of the structure or earthworks remains (Woods & Brown 1960). To the north of these sites, on the northern boundary of the site, a bridge and sluices were built by George Warrington of Aigburth in 1738 to protect the Lord's Moss from the tide [2991/17]. This site has since been 'destroyed' by railway sidings.
- 4.33 Three entries on the MSMR relate to the Canada Works, the site of which lies within the southern boundary of the site [3090/10-12]. These were founded in 1853 by Thomas Brassey for shipbuilding and constructional ironwork, the works being named according to their original purpose of supplying ironwork, bridges and locomotives for Canada's Grand Trunk Railway. They were the first to occupy the Birkenhead Dock Company's new wharf on Wallasey Pool (Mawdsley & Sons 1861). When constructed the complex was a model for the day and consisted of a main shop, 900' long and 40' wide, together with iron and brass foundries, three graving docks, blacksmith's shops, copper smiths,

machine shops, fitting out bay, fabrication shop, woodwork and pattern shop, engine house, stores and a drawing office. The works were closed in 1889 and the machinery was sold off. The site was then used piecemeal for a variety of purposes until three sheds were demolished in 1935 and 1936, and the Pontoon Repair Shed was gutted by fire in 1963. In 1974 a mid-19th century Italianate workshop was the last remaining fragment of the works [3090/10], and two of the three graving docks are now filled.

- 4.34 The Vauxhall Iron Foundry [3090/16-17] lies on the southern edge of the site, on the opposite side of Corporation Road from the Canada Works. This includes an early 19th century brick hall recorded as the original foundry hall of William Laird's boiler works and iron ship-building yard. Facing Beaufort Road, it is now cement rendered with its cast-iron windows bricked up and later additions behind. William Laird had bought large tracts of land from Francis Richard Price, the Lord of the Manor, in 1824, and it was from here that, in 1829, Laird launched the first iron ship in England. At that time the works were on the shore of Wallasey Pool, and this indicates how much land was reclaimed in the construction of the docks (CBA 1979). With the building of the docks Wallasey Pool became unsuitable for the launching of ships and the works were moved to the bank of the Mersey, to the south of the pool, in 1856.

4.35 The MSMR contains few records relating to the docks themselves. The walls at the River Mersey entrance to Morpeth Dock, which were built in 1847 and extended in 1868, are recorded to the east of the site [3289/23]. This extension involved the replacement of the river lock with a concrete dam - the original 1847 entrance was on the site of the passage between Morpeth and Morpeth Branch docks. Aside from this record the only entries on the MSMR that relate to the structure and functioning of the docks themselves are those relating to the sites of two sluice control houses [3289/48-49] and to a customs house opposite Wallasey Dock [3289/41], all within the site, whilst a dockyard is recorded in the south east corner of the site [3289/33]. None of these is extant, with the site of the latter now under a modern business park (see paragraph 6.8).

4.36 The MSMR records each of the bridges constructed to cross the various docks within Wallasey Pool. Originally swing-bridges, constructed to an original Dock Trustees pattern, were installed to cross the Alfred Dock north entrance [3290/24], Alfred Dock south entrance [3290/33], Wallasey [3289/43], Egerton [3289/45] and Egerton/Morpeth [3289/42] Docks. During 1851 a dam had been completed dividing the Great Float into two parts and making the 'East Float' usable, and Duke Street was also carried via a swing-bridge [3190/11]. In the early 1930s the majority of these bridges were replaced by the more efficient Scherzer-type

bascule (from the French word meaning see-saw) lift-bridges. Within the site the MSMR records the extant examples at Duke Street [3190/15], Wallasey Dock [3289/44], and Alfred Dock north [3290/32]. Beyond the site, the Egerton/Morpeth bascule bridge, which is recorded together with its original hand operated bridge engine [3289/31], was restored in 1993 and opened as an interpretative centre in 1995.

4.37 A mortar mill is recorded within the south western portion of the site [3090/8] on the site of a natural spring flowing into Wallasey Pool [3090/9]. Another mortar mill and a cement works [3290/25] are recorded within the eastern edge of the site. A warehouse, built between 1893 and 1914, is roughly provenanced to just within the northern edge of the site [3190/17].

4.38 Bidston Dock is recorded in the western portion of the site [2990/5]. This was constructed in 1933 on the marshland of Bidston Moss at the end of the West Float to provide additional quays for general cargoes. Specialist cranes were erected here in 1955 for bulk handling of metal ores. Woods and Brown (1960) describe an embankment that was erected in 1814 to connect lands in Poulton with those in Bidston. The embankment was removed in 1833 and 'ten years later' Halfpenny bridge was built, with an opening for ships. This was itself replaced in 1926 by the Mersey Docks and Harbour Board with a modern swing bridge across what was to

become Bidston Dock. This bridge is not recorded on the MSMR. The docks, which covered an area of 4.3 hectares to a depth of 8 metres, were in-filled in 2000.

- 4.39 To the south of the site, although probably originally extending into it, Flaybrick Hill Tramway is recorded as running south west to north east and crossing the Hoylake Road [2989/28], and it is probably the same tramroad that is recorded running along the approximate line of Ilchester Road, before crossing Beaufort Road and continuing along Wharf Road [2990/7]. These probably represent the first line of rail in the Wirral Peninsula (Jermy 1984), which is first recorded on Greenwood's map of 1819 (see paragraph 5.3). It was constructed to transport sandstone from the Flaybrick Quarry to Wallasey Pool. Amongst other uses this stone was used as infill in the walls of the docks. It is thought that the line of the track closely followed the present Wharf Road, although no remains are visible along its length. The quarry was closed in 1831 when siltation had made access to the head of the Pool impossible, but it was reopened by the then owner James Tomkinson in 1844 when he was selected as the contractor for the construction of the Birkenhead Docks.
- 4.40 Approximately 400 metres to the north of the site, the remains of a 16th century dagger are recorded as having been found at 9 Palmerston Road [2991/15], and several further entries on the MSMR relate to the post-medieval growth of

the settlement at Poulton. The Manor House is known from at least the mid 17th century [3090/4], but its most recent structure, dating to the late 18th century, was demolished in circa 1904. Another entry, provenanced circa 100 metres to the north of the location attributed to the manor, is listed as that of 'Poulton Hall' [3091/7]. It is likely that this actually also relates to the manor, as this is also listed as being a probable 17th century construction replaced by a later building at the end of the 18th century, which was itself demolished in 1933. Both sites are now occupied by modern buildings, as is that of Poulton Mill, a windmill mentioned in the Vyner Survey of 1665, to their west [3091/26]. The 'Old Pool Inn' [3091/6], again probably of 17th century construction, was demolished at the beginning of the 20th century. The site is now occupied by modern houses, and a public house of the same name lies to the north of the site. Limekilns are recorded as being shown on Lye's survey of 1839 near the edge of Wallasey Pool, at the end of Limekiln Lane immediately to the north of the site [3090/14].

- 4.41 Within the south of the site, Birkenhead North Station appears on the MSMR [2990/3], but no remains of the original 'Docks' station, opened by the Hoylake Railway in 1866, are known. The present building was constructed between 1881 and 1891 to the standard Wirral Railway design. A railway goods station, built for the London and North Western Railway (L&NWR), London Midland and



Scottish Railway (LMS) and Great Western Railway (GWR) lines, also lies within the south eastern corner of the site [3189/12]. The Woodside and Hoylake turnpike road to Chester opened in 1787, providing a direct link to Liverpool by ferry. The toll house [2990/1] and gate [2990/2] are recorded, although both have been demolished, and their sites redeveloped.

4.42 The site of the 19th century 'Swan Hotel' [3190/8] on the northern edge of the site area has been redeveloped. Further to the north, within the study area, several mid to late 19th century houses, in Poulton [2991/7-8, 10 & 12-14] [3091/3-5] and Seacombe [3190/5] [3290/3 & 27], are recorded and have since been re-developed with housing, and, in the case of a farmhouse shown on the 1st edition OS map [3190/1], by a school. To the north of the site, between these two settlements, 'Brick Field' is listed as a brick and tilemaking site at the end of the 19th century, although it is depicted as a meadow on the 1841 Tithe map [3190/6].

4.43 Immediately to the north east of the site, Mawdsley and Smith's Smalt Works [3290/1], the site of which is now occupied by a modern warehouse, is recorded on the MSMR as having been in production prior to 1741, although it does not appear on Burdett's map of 1797 (see paragraph 5.2). The MSMR records the works of J. Gordon Alison - Engineers, Boilermakers, Iron and Brass Founders, immediately to the

south of the eastern end of the site [3189/9-10]. In 1875 these occupied three extensive ranges of common brick, but the site now houses smaller workshops. Further industrial facilities included on the MSMR within the study area are a Phospho-Guano works, which commenced use in c.1830 [3290/22], approximately 250 metres to the north east of the site, and the site of Moorhouse's Mineral Water Works, constructed in 1892 [3289/16] circa 200 metres to the south east.

4.44 A large number of further entries within the study area relate to individual structures associated with 19th and 20th century dock activity and the accompanying development of the settlements at Poulton, Seacombe and Birkenhead (see Plan 1 (2938/27) and Annex 1).

#### **Modern**

4.45 The MSMR records three warehouses within the northern edge of the site, to the south of Dock Road, as modern [3090/2] [3190/12-13].

#### ***Listed Buildings and other Cultural Heritage***

4.46 Within the northern edge of the site, to the south of Dock Road, stand two large brick grain warehouses [3190/16]. These represent the first major development on the Great Float, in 1868. The repeal of the corn laws and the subsequent rise in prices led to huge expansion in the corn

trade and these warehouses are testament to the creation of Birkenhead as a major gateway for the importation of grain into the north of England.

- 4.47 Within the eastern edge of the site stands a hydraulic generating station, erected on Tower Road in 1863 [3289/40]. Consisting of a hydraulic engine house and tower this is a Grade II listed structure, a large part of which was rebuilt following bomb damage during the Second World War. At this time the docks were equipped with the latest hydraulic cargo handling equipment, for which this installation provided the power. Beyond the eastern edge of the site, a square brick-built accumulator tower is situated at the Mersey entrance to the Alfred Dock [3290/14]. Built in the same style as the generating station, this decoratively castellated tower was constructed in 1866 to store the hydraulic power established by the Tower Road generator for the operation of the six lock gates at the three Alfred Dock river entrances. This Grade II listed structure is unusually squat as much of shaft is below ground level. To the south of this tower, to the east of Wallasey Dock, a brick pumping station was built in 1886 to maintain the water levels in the dock system [3289/18]. This was extended in 1908 and is Grade II listed.
- 4.48 At the western end of Limekiln Lane, immediately to the north of the site, stands 'The Old House' [3091/1]. Otherwise known as 'Bird's House', this small 17th century stone-built house on the corner of Limekiln Lane and Poulton Bridge Road

is probably the oldest extant structure in the vicinity of the site, and is Grade II listed.

- 4.49 Approximately 600 metres to the south east of the site stands Hamilton Square [3288/12-13] [3290/7-10]. Now a conservation area, this square was built between 1825 and 1846 under the supervision of the architect James Gillespie Graham, who in 1815 had laid out part of Lower New Town of Edinburgh. With the support of the Price family, who owned much of Birkenhead between 1700 and 1820, Graham had been engaged by William Laird to construct a new town on a grid plan. A site was reserved for the town hall on its eastern side, but this was not taken up until 1883, owing to the mid 19th century depression which ensured that Hamilton Square was the only element of the Gillespie Graham plan to be fully completed. The square represents the largest concentration of Grade I listed buildings outside Oxford, and, being located on the uppermost point of a ridge overlooking the River Mersey, it lies at a point prominent and visible enough to be seen from the town and from the other side of the River Mersey.
- 4.50 Woodside ferry terminal [3289/13, 38] lies 750 metres to the south east of the site. The existing terminal is of early 19th century construction but the ferry is probably of earlier origin and is mentioned in the will of one John Smith dated 1648 (Ashmore 1982). The floating landing stage survives, with

two walkways from a booking hall consisting of seven wooden ticket kiosks. It is Grade II listed.

- 4.51 Flaybrick Hill, where extensive stone quarries provided building stone for the construction of Birkenhead, particularly of the docks (see paragraph 4.20), lies approximately 600 metres to the south west of the site. It became Flaybrick Cemetery and is now designated as Flaybrick Memorial Gardens, Conservation Area, and as an English Heritage registered garden (No. 5005).
- 4.52 Birkenhead Park is 750 metres to the south of the site. It was designed by Sir Joseph Paxton, whose concept was to create an idealised countryside landscape of open meadows and naturalistic woodland belts, and opened in 1847. Paxton provided a separate perimeter road for traffic which allowed the park interior to be enjoyed by pedestrians, and this effectively defines the boundary of the park today. Following a visit to Birkenhead in 1850, F.L. Olmsted incorporated many of the features he first observed in the park into his design for Central Park in New York. Paxton's original design remains largely intact, and in 1977 the park was designated a Conservation Area. In 1995 it was also designated a Grade I Listed Registered Park by English Heritage (No. 1992). At the north eastern corner of the park, the grand triple-arched entrance gateway to Birkenhead Park is Grade II\* listed

[3189/6]. The lodges at the main entrance also feature on the MSMR [3189/4-5].

## Documentary Sources Including Historic Maps and Aerial Photographs

### *Historic Maps*

- 4.53 A map of Poulton, dated c. 1665, shows Poulton Windmill [3091/26] in the location at which it is recorded on the MSMR (see paragraph 4.21). The mill, together with the rest of the village, are separated from Wallasey Pool by 'Poulton Common'. A ferry is depicted, on a lane that appears to follow the current Limekiln Lane. This would appear to be accompanied by a single small structure.
- 4.54 Burdett's map of circa 1797 (see Plan 2 (2938/28)) shows 'Birkenhead Abbey' but does not show any further development to the south of Wallasey Pool. This plan confirms the location of the Bidston Mills to be that recorded on the MSMR [2991/16], and, together with those shown at Poulton, to the north of Wallasey Pool, and a single building at Seacombe, these are the only buildings depicted in the study area. No crossing of the Birket River is shown within the site area but a road is shown crossing the river immediately to its west, on the approximate line of the modern A5139.

- 4.55 Greenwood's Plan of the County Palatine of Chester, dating to 1819, shows little change to have occurred in the early part of the 19th century. The Woodside ferry is shown but, whilst several buildings are shown in the vicinity of the south eastern corner of the site, there was, as yet, no development along the banks of Wallasey Pool within the site area. Seacombe had grown to encompass a cluster of buildings focused on the bank of the Mersey, but had yet to extend as far south as the pool. A railway is however marked running into the western part of the site from a labelled stone quarry to the south east of Bidston. This is probably the Flaybrick Hill quarry which later became Flaybrick Cemetery (see paragraph 4.31). The situation is again unchanged by the time of the Wallasey Tithe map and apportionment of 1841, excepting that an alkali works and a Smalt works had appeared on the north bank of Wallasey Pool, towards its eastern end, and to the south west of Seacombe which had also grown further by this time.
- 4.56 A plan of 1850 shows the proposals for the creation of the docks at Birkenhead (see Plan 2 (FORMAT)). This plan illustrates the intention to consolidate the banks of Wallasey Pool, which, at this time, were largely unimproved, and thus from this plan it can be seen that a large proportion of the current site area represents land reclaimed during the construction of the Great Float within Wallasey Pool. To the north of the Birket estuary, Seacombe, at this time, still consisted of a sparse collection of cottages and hotels along

the edge of the Mersey. Further inland, little development is shown to the east of the village of Poulton, aside from the buildings of five industrial facilities spaced along the north bank of the pool which appear to have lined the northern edge of the site. To the south, the grid street plan of Birkenhead can be seen to have been laid out around Birkenhead Park, although little development appears to have yet occurred amongst this framework. There was, at this time, apparently no development on the southern bank of the pool, to the north of Corporation Road, aside from a group of three large warehouses at the end of Cathcart Street, in the area of the proposed Vittoria Wharf. Development on the bank of the Mersey, to the south of Wallasey Pool, was restricted to three ferry slips at that time.

- 4.57 The Ordnance Survey 25 inch map of 1875 shows the construction of the docks to have been completed along quite different lines to those proposed in the plan of 1850 (see Plan 2 (2938/28)). The Great Float had been divided into western and eastern portions by the construction of Duke Street swing bridge. Entry to the eastern portion was gained through the Morpeth and Alfred Dock, each of which was then separated from the East Float by a swing bridge. The Parish of Poulton-cum-Seacombe, to the north of the docks, was still largely rural in nature, although patches of terraced housing had been constructed to the north of the mouth of the Great

Float, and a settlement had appeared at Somerville, approximately halfway between Seacombe and Poulton.

- 4.58 The northern edge of the docks accommodated several warehouses in 1875, but was by no means densely developed. The industrial facilities shown on the 1850s map had all disappeared, to be replaced by fewer, but larger, works complexes, and a shipbuilding yard occupied the bank of the Mersey immediately to the north of the Alfred Dock. To the south of the Great Float, the southern docks were lined with warehouses served by railroad sidings radiating from an extension of the mainline from Chester, which had been indicated as a proposed extension on the 1850 plan. The 1875 map shows that the eastern majority of Birkenhead, to the east of the park, was, by this time, largely developed with terraced housing, whilst estates of more substantial dwellings had spread to its south. Between the Ferry Termini, the bank of the Mersey accommodated densely packed slipways and graving docks.
- 4.59 A map of The Borough of Birkenhead, dated to 1899 (see Plan 3 (2938/29)), shows that the situation was essentially little changed by this date. The Wirral Railway had been constructed across the parish of Poulton-cum-Seacombe; the warehouses along the north side of the docks were now served by its sidings, and it is likely that the arrival of the railway was responsible for the continued development of

Seacombe, in which terraced housing had proliferated since 1875. To the south of the docks Birkenhead had continued to grow, although significant development had yet to spread to the west of Birkenhead Park. Development had continued at the mouth of the docks, with the construction of the Woodside Lairage in what had been the works of the Pacific Steam Navigation Company, to the south of Morpeth Branch Dock.

- 4.60 By 1911, as shown in the 25" Ordnance Survey map of that date, Seacombe and Poulton, both now largely built up, had begun to grow into one, through the expansion of the Summerville township. To the north of the docks, and to the south of the Wirral Railway, industrial development had continued and the eastern end of the docks themselves were lined by warehouses by this time. In the south docks, Vittoria Wharf had been partially excavated to incorporate Vittoria dock, whilst Birkenhead had spread to envelope the park.
- 4.61 Development around the docks had reached its peak by 1936, as shown on Plan 3 (2938/29). The Ordnance Survey map of this date shows the north docks to have been lined with industrial facilities and warehouses along the full length of the Great Float, including the petroleum stores of the Liverpool Oil Storage Company. The Seacombe – Somerville – Poulton conurbation had coalesced around Central Park as the only remnant of the open land that had characterised the area in

the middle of the 19th century. To the south, in Birkenhead, further growth had resulted in the redevelopment of areas to the south west of the park, which had been occupied by large residences in extensive grounds, with estates comprising smaller houses, although these were still more substantial than those to the north west of the park.

### *Other sources*

- 4.62 Excavations in 1858 in Wallasey Pool for the construction of the Birkenhead Docks recovered a number of remains (not recorded on the MSMR). These included a human skull and the bones of both the small and great fossil musk ox and red deer, all lying on the old pre-glacial forest bed (Burnley 1981). The land around Bidston occupies the south and east slopes of a drainage basin which has formed the 'moss' which is a raised area of bog and marsh which contains peat deposits and has also revealed occasional prehistoric finds, such as a possible prehistoric canoe, which do not feature on the MSMR. Neolithic artefacts have been found in fields close to Bidston village core, whilst excavation in the 1990s recovered Mesolithic flint and Roman pottery (Stewart & Alagul 2005).
- 4.63 The discovery in 1898 of a supposed Neolithic flint factory at New Brighton, three kilometres to the north, implies not only existence of significant settlement, at least at the northern tip of the Wirral peninsula, during this period, but also trade with Antrim – the nearest practicable source of flint (Woods & Brown 1960).
- 4.64 The Romans arrived in the peninsula in 59 AD. The bridge discovered in 1845 (see paragraph 4.10) is possibly part of the Roman road to a Roman settlement, and perhaps port, at Meols or Hoylake, indicated by the presence of Roman coins there (Brocklebank 2003).
- 4.65 The name Wallasey is thought to be derived from Wealas-ey meaning the island of the Welsh men or strangers, perhaps suggesting that it served as a refuge from the attacks of invading Saxons (Woods & Brown 1960). By the 10th century Birkenhead had been periodically populated by Viking settlers who named the area Bierce Heved - a combination of old English and Scandinavian words, meaning 'headland of birch trees'. This evidently described the wooded character of the district below the headland, and this is also reflected in the name 'Woodside' (BCBC 1974). The name Bidston may derive from the Old English personal name Byddi or Budda and tun, meaning 'town' or 'farm', whilst the settlement of Poulton ('Pool tun') was established at the least hazardous point to cross the Wallasey Pool and was thus probably a centre of some importance from an early date.
- 4.66 Domesday Book records the hundred of Wallasey, but makes no mention of Birkenhead (Brocklebank 2003). In 1150 the

Norman Baron Hammon de Mascy, of Dunham in Cheshire, founded a Benedictine Priory at Birkenhead. The right of ferryage across the Mersey was given to the prior in 1282, and confirmed by a 1318 charter of Edward II who granted to the priory of Birkenhead for ever 'passage over the arm of the sea' and the right to make a reasonable charge for that passage. The site remained remote up to the dissolution of the monasteries in 1536 – the monks and the few villagers who worked for them being the only inhabitants of the headland (Coward 1932).

- 4.67 After dissolution, the priory with its estates and tenures was bought by Ralph Worsley who became Lord of the Manor. In 1716 the manor passed to the Price family, some houses and cottages were built and ferry traffic increased owing to the rise of Liverpool. The Vyner estate rental of the 17th and 18th centuries depicts small-holdings made up of a few fields, and long narrow lands typical of an open field agricultural system (Woods & Brown 1960). In 1801 the population of Birkenhead was recorded as just 110. Wallasey Pool was a stretch of sand and mud around the out-flowing River Birket, which hosted a herring fleet at that time, whilst the crossing of the Mersey was dependent on wind and tide and could take several hours in rough weather.
- 4.68 The first steam-boats were introduced on the Mersey in 1815. The introduction of a regular steam service in the early 1820s

encouraged an influx of commuters to the Wirral. By 1840 the Chester and Birkenhead Railway was open, and by 1844 the number of inhabitants in Birkenhead was about 14,000, earning the town the title of 'Liverpool's bedroom' (Coward 1903).

- 4.69 During the 1820s and 1830s a series of plans were drawn up for a system of docks in Wallasey Pool to profit from the shortage of dock space at Liverpool. James Meadows Rendel, a protégé of Thomas Telford, was elected to draw up the plans for the redevelopment of the Docks (Brocklebank 2003). In 1843 the Liverpool docks had less than 98 acres of water space, which had taken 135 years to create (McCarron 1990). Rendell's plan proposed the creation of 200 in just 5 years. In 1844 the Birkenhead Dock Company was formed to build docks and warehouses on the margins of the Great Float, and in 1847 the Morpeth and Egerton Docks were opened, as was the Woodside Basin, a number of dock warehouses, the extension of the Chester railway to the quays, and Birkenhead Park. In that same year Benjamin Disraeli is quoted as remarking that; 'London is a modern Babylon; Paris has aped Imperial Rome... disciples of progress have great faith in the future of Birkenhead'.
- 4.70 However, these docks limited the size of vessels that could enter the Great Float, and the ambitious schemes ran short of money. Political feuds developed, and in the face of financial

irregularity and mounting debt the scheme collapsed in August 1847. Both Rendell and Birkehead were ruined when, in 1858, rights to dock ownership were transferred to the Mersey Docks and Harbour Board (MD&HB) in Liverpool .

- 4.71 The Great Float was finally fully opened in November 1860 with entrance still via the Morpeth and Egerton Docks.
- 4.72 In 1870 the Woodside Basin was converted into the Morpeth Branch Dock. Around Morpeth and Egerton Docks an extensive rail network sprang up with goods stations and rail connections to all the quays. Further alterations to the Morpeth Dock were undertaken in 1872 giving a larger and more usable system with a small basin running into the GWR goods station. The Wallasey Dock represented a conversion of the failed Low Water Basin that was completed in 1877, with the completion of the surrounding transit sheds and warehouses in 1878. The opening of the northern entrances enabled the realisation of all of the promised advantages.
- 4.73 Unfortunately, with the eventual return to prosperity, William Laird's original concept of a new town built to a plan was forgotten (Burnley 1981). The siting of the Gas Works to the west of Hamilton Square and the proximity to the rapidly growing dock system undermined Laird's great plans for a middle class residential Birkenhead. Although further development took place in Birkenhead based on Graham's

grid format, it was of lower quality and cost with terraced housing being the predominant building form.

- 4.74 Largely as a result of its becoming one of a small number of ports licensed for the importation of animals from foreign countries under the Contagious Diseases (Animals) Act of 1878, Birkenhead's lairages saw 40-50% of Britain's total trade in live cattle and sheep by the end of the 19th century. Although the development of reliable refrigeration transformed this trade and Birkenhead began to lose business to the cold stores of Liverpool, the docks continued to benefit from the trade in Irish livestock (McCarron 1990).
- 4.75 With the development of the docks the availability of deep-water berths for sea-going ships brought a number of large flour mills to wharves along the northern side of the Great Float between the 1890s and 1910, whilst the repeal of the corn laws had led to the dedication of warehouses and transit sheds all over the estate, including those on Wallasey and Morpeth Docks, to this trade. At its peak, between the wars, Merseyside formed the largest flour milling centre in Europe. As sidelines the milling firms moved into animal foodstuffs using sub-standard grain, residues and molasses (McCarron 1990).
- 4.76 Before the transfer of the trade to south Wales during the 1880s, and to a lesser extent beyond, Birkenhead continued to be a major export centre for Welsh coal, with extensive



facilities growing up on the south side of the Float around Duke Street.

- 4.77 In 1873 the Liverpool Oil Storage Company had constructed large casements for the storage of lubricating and fuel oil and petrol in the area now occupied by the Mobil lubricant plant, with pipes connecting directly to berths on the west float. By 1924, oil storage tanks with a total capacity of 39,000 tons had been erected as demand for oil as a bunker fuel increased.
- 4.78 The large open basin of Vittoria Dock was created between 1905 and 1909 to replace the Vittoria Wharf which had been a large open area used for the storage of timber and general cargos. Pressure from far-east traders had forced the MD&HB to provide the new accommodation. It was extended to the west in the 1950s to accommodate larger vessels. Birkenhead also specialised in the handling of bulky cargos such as locomotives and trucks. During the Second World War the export of weapons and rolling stock centred on Cavendish Wharf to the south side of the West Float where an enormous crane was located. Birkenhead Docks had risen to their peak at the start of the Second World War, handling 13% of the port of Liverpool's trade and with almost half of the population relying on them and related industries for their livelihoods. Decline came through the 1950s and 1960s as trades were superseded and far eastern economies grew (McCarron & Marks 1997).
- 4.79 Until 1936 Bidston Moss, beyond Bidston Dock, was an area of low-lying wetland marsh at the western edge of the docklands. Its division into the Town Moss and the Lord's Moss, to differentiate ownership, suggests that it was utilised in some way from the late medieval period. The area was gradually reclaimed and enclosed and was drained during works on the Birkenhead Docks (Cowell 1992). Land was at a premium at the beginning of the 20th century and the marshes were considered for a number of uses, including arable and cattle farming (they were occupied by a golf course until 1942).
- 4.80 Due to the wet nature of the land the area was seen as unusable, despite the construction of brick culverts to drain the site. In 1936 the site was utilised for the disposal of domestic, commercial and industrial waste from the Wirral and the surrounding areas. This waste disposal continued on Bidston Moss until 1995 when the site was closed. Restoration work started towards the end of 1995, since which time landfill has been cleared, woodlands and meadows planted, and a series of footpaths and cycle ways created (Groundwork Wirral 2004).

### *Aerial Photographs*

- 4.81 The National Monuments Record (NMR) in Swindon identified a total of 304 vertical aerial photographs of the site and its environs, dating to between 23rd September 1940 and 16th May 1992. A further 13 specialist oblique photographs, taken on the 2nd of September 2005, and 15 military oblique photographs, dating to between 28th November 1940 and 5th June 1948, were also identified.
- 4.82 Birkenhead, as well as Wallasey were heavily bombed during the Second World War between August 1940 and January 1942. Derelict and potentially bomb-damaged buildings are shown on aerial photographs of the docks taken in 1945 [NMR ref. RAF/106G/UK/626]. Comparison with the Ordnance Survey map of 1936 shows that buildings had been lost along the northern edges of the docks, particularly around the Alfred Dock.
- 4.83 Limited redevelopment took place following the war, but overall, the evidence of aerial photographic surveys conducted in 1945 [RAF/106G/UK/766] and 1947 [RAF/CPE/UK/1996] suggest that the later 1940s was a period of stagnation in the development of the docks. Little expansion of the warehousing and factory buildings surrounding the docks is recorded in this period, whilst land immediately to the north of them appears to have been turned over to allotments or was left as scrubby wasteland. Evidence of bomb craters remained visible in these areas for many years.
- 4.84 Some regeneration is recorded in photographs of the docks from 1955 [RAF/58/1794] and onwards. Buildings in the process of demolition, as well as new structures are recorded along the northern edges of the docks, as well as around the northern entrances. Further construction of new large buildings is recorded at the western end of the docks on photographs taken in 1962 [RAF/58/5162] and 1973 [MAL/73024], whilst the warehouses surrounding the Vittoria Docks were replaced with larger structures between 1973 and 1975 [MAL/75058].
- 4.85 The process of replacing warehouse and factory buildings with modern structures continued throughout the 1970s and 1980s including the clearance of land surrounding Wallasey Dock and along the southern and northern edges of the East Float and demolition of factory buildings to the south of the West Float. The declining use of trains for loading freight is reflected by the removal of the rails and marshalling yards at Cavendish Wharf between 1979 [MAL/79034] and 1982 [MAL/82023]. The marshalling yards between Wallasey Dock and Egerton Dock were also removed between 1979 and 1982 and buildings cleared from this area. It is likely that this

reflects the downturn in the docks' fortune in the latter part of the twentieth century.

## Site Visit

- 4.86 The site was visited in February 2007 to assess the current ground conditions and topography and, in addition, to identify remains of previously recorded sites, or any hitherto unrecorded features of archaeological or heritage significance which may require more detailed assessment.
- 4.87 The north east corner of the study area, the area known as Seacombe Point, is occupied by large industrial units flanking East Street, including those of the Wallasey Water Treatment Works, and a timber yard. Birkenhead Road defines the western limit of this industrial area and is lined with Victorian terraced housing, in reasonable condition, along its west side. At the southern end of this road, around its junction with Dock Road, lie a series of modern industrial estates consisting of warehouse units. These are interspersed with areas of fenced-off wasteland.
- 4.88 Further modern industrial units, including those of the West Float Industrial Estate, line the north side of Dock Road to the east of its junction with Gorse Lane, along with a scrap yard and recycling facility. To the south of this portion of Dock Road, within the site, lie two Grade II listed 19th century grain warehouses [3190/16]. These are currently being renovated for residential use, and, together with another, probably late 19th century, warehouse to their east, these represent the only extant structures along this stretch of the West Float. The remainder of this area is now waste ground, following the closure of the Historic Warships at Birkenhead Museum in February 2006 (although part of this area was still occupied by the German U-Boat U-534 at the time of the visit).
- 4.89 To the west of Gorse Lane, another modern industrial estate surrounds Hickman's Road and abutts a large gas storage depot. Opposite these facilities, large storage warehouse buildings line the southern side of Dock Road. Further to the west, in the central northern portion of the site, lie industrial units comprising the Tate and Lyle sugar refinery and the Mobil lubricant plant. Although predominantly of late 20th century construction these facilities were observed to incorporate several earlier buildings, of probable early 20th century origin. The township of Poulton extends to the north and west of these installations beyond Limekiln Lane at the northern extent of the site.
- 4.90 At the western end of the site, Wallasey Bridge Road passes to the east of the now in-filled Bidston Dock [2990/5] and, to its south, the Bidston Waste Transfer Station, which backs onto Bidston Moss. The condition of the swing-bridge, which crosses the former mouth of Bidston Dock, could not be assessed at the time of the site visit, although it remains in

- situ. Beyond the bridge, to the east of the road, are further storage facilities and the yard and offices of Northwestern Shiprepairers Ltd.
- 4.91 These currently comprise a series of large 20th century warehouse and office buildings, together with a single graving dock, surrounded by large areas of hard standing. Wallasey Bridge Road meets Beaufort Road beside the railway line running between Birkenhead North Station [2990/3] and Wallasey. The station itself lies immediately to the south of an area recently cleared of terraced housing, which is now waste ground.
- 4.92 From here Beaufort Road runs in a south eastern direction. To its north, the dockyards to the south west of the West Float, occupied by the Canada Works [2990/10-12, 15] during the second half of the 19th century, are now largely vacant. A small number of brick structures do survive, including one which exhibits decoration, within large areas of hardstanding. These will require further investigation. A tramline [2990/7], which served these southern docks, runs parallel to Beaufort Road, immediately to its north, but is now redundant. To the south of Beaufort Road lie further cleared areas and the workshops and offices of the Vauxhall Ironworks [3090/16-17].
- 4.93 Corporation Road, which extends to the east of Beaufort Road and defines the southern extent of the site, passes large modern warehouse units lining Cavendish Wharf to its north, whilst, to the east of the Duke Street bridge, Vittoria Wharf also accommodates large 20th century warehouse units and associated infrastructure, including large cranes and handling equipment. The Duke Street bascule bridge itself, which here separates the East and West Floats, was seen to be in good condition, along with the 19th century gate keeper's huts to its south and the Dock Master's offices, which are now in use as a café. Late 19th and 20th century buildings, in variable condition, house semi-industrial and commercial activity to the south of Corporation Road.
- 4.94 The south eastern corner of the site, at the junction of Rendell Street and Tower Road, is now occupied by a small modern business park. To its north, the entrance to the Egerton Dock is now sealed by Tower Road and an area of car parking, beyond which an area of waste ground lines the eastern edge of the Great Float (here known as the Twelve Quays). The Egerton Dock remains extant, along with the bascule bridge [3289/31] that divides it from the Morpeth Dock. The Wallasey Dock bridge also remains in situ despite Wallasey Dock itself, to the east of the site, having been in-filled to provide a holding area for the ro-ro ferry service. Where it has yet to be re-developed, with modern office and commercial

units, the area to the south of the ferry terminal is largely waste ground.

- 4.95 The accumulator tower to the south of the Alfred Dock river entrance was observed to be in reasonable condition and surrounded by areas of large cobbles around rail sidings and probably dating to the 19th century. Two small brick huts, marked as Gate Keeper's Huts on the OS maps, flank the tower.
- 4.96 To its north, the southern river entrance to the Alfred Dock is now permanently closed by modern roadway in place of its stationary swing-bridge [3290/33], but the bascule bridge [3290/32] over its northern entrance remains in situ, apparently in a good state of repair. The 19th century Great Float dock wall, as rebuilt two years after its original construction, was seen to be extant, and in reasonable condition, from the river entrances of the Alfred Dock as far as the western side of Vittoria Dock .

## Conclusions

### *Desk Based Archaeological Assessment*

- 4.97 A desk-based archaeological assessment has been undertaken for a site at Wirral Waters, Merseyside. The impression is that the area of Wallasey Pool in which the docks were constructed

from the 1840s did not witness significant activity until the 19th century, during which time the site area became rapidly developed as docklands. Although this development was not the initial cause of the growth of Birkenhead, it provided further impetus for the growth of the town and represented the major source of employment for much of the 19th and 20th centuries.

- 4.98 It would seem that there was little activity in the vicinity of the site during the prehistoric period. Scattered finds in, and around, the site suggest limited activity around the Birket River as would be expected, and there is apparent potential for the preservation of palaeo-environmental remains, particularly in the west of the site around the Bidston Moss, although no analysis of samples appears to have yet been undertaken. However, the discovery of significant settlement sites to the north implies a focus for prehistoric activity at the northern end of the Wirral, perhaps directed towards trade with Ireland.
- 4.99 Roman activity would appear to have been restricted to the course of a Roman road running from Chester along the length of the peninsula towards putative settlements at its northern tip. The course of this road is unclear, but it would seem likely that the possible Roman bridge, discovered in 1845, provided it with a crossing over one of the Birket tributaries. No crossing of the main pool has yet been found, but the depth at which the bridge was recorded

(approximately four metres beneath the level of the 19th century docks), attributable to alluvial build-up, may have served to obscure any deposits of this, or earlier, date.

4.100 Neither Poulton nor Seacombe appear to have constituted significant settlements during the medieval period, whilst settlement at Birkenhead was concentrated around the Priory, around a kilometre to the south east of the site. The remains of the Priory are the closest scheduled ancient monument to the site. Cartographic evidence indicates that the banks of Wallasey Pool were meadow and marsh until the 19th century, and more recent development, not least the construction of the docks, would almost certainly have destroyed any evidence of any small-scale agricultural, domestic or industrial activity.

4.101 It is clear from the plan of 1850, which shows Rendell's proposals for the docks, that much of the site area was reclaimed in the 19th century, particularly in the south of the site around Cavendish Wharf. It is therefore highly unlikely that material pre-dating this reclamation would be encountered at shallower depths than circa four metres (as indicated by the depth at which the Roman bridge was identified, see above). Given the level construction of the docks, and the estuarine nature of the ground upon which they were constructed, it is envisaged that this depth of 19th

century make-up should apply, at the water's edge, across the site.

4.102 Bidston Moss is currently open space and its improvement continues (Groundwork Wirral 2004). Given the disturbance of the area use as landfill, any archaeological remains such as those related to the tidal mills or palaeo-environmental potential may have been harmed. It is possible that alluvial deposits elsewhere in the site area preserve similar environmental information. At the same time, the now infilled Bidston Dock will have removed any deposits down some eight metres. Given the relatively low archaeological potential of the site, depth of potential deposits and also its continuing uses, it is likely to be acceptable for any further investigation to be deferred until after outline consent is granted. There is no suggestion that any remains worthy of preservation in situ will survive within the core area being assessed.

4.103 In order to satisfy national and local policy and guidance, a programme of investigation may be required to record any sub-surface remains which are disturbed by development groundworks, although the detail of proposals will be required to clarify the areas where this may occur. It may be most appropriate for intrusive site investigation to be monitored by archaeologists in order to better understand site formation processes. A programme of palaeoenvironmental sampling of

suitable deposits may also be require in due course to clarify the early landscape development of Wallasey Pool.

- 4.104 As regards remains dating to the 19th century development of the docks this assessment has identified both designated and undesignated structures together with areas of particular industrial archaeological interest. which structures Most notable are the two Grade II listed grain warehouses to the south of Dock Road and the hydraulic generating station on Tower Road. Other unlisted structures have clear historical importance, including the surviving bascule and swing bridges, dock wall and gatekeepers' huts which are likely to qualify as curtilage listed given their relationship with the hydraulic generator tower.
- 4.105 At the same time, several unlisted structures have been identified which will need further assessment to define their development and importance including the dockmaster's offices now in use as a café, structures lying close to the Canada Works in the south and other fabric which may lie within areas which have not been entered to date.
- 4.106 Key historic structures should be retained within any new development. However, there may be instances where the integrity of the development requires that elements are removed completely or in part. In order to better understand the significance of surviving undesignated heritage fabric to

inform the evolution of proposals, it is recommended that more detailed assessment of the surviving historic fabric is completed through focussed documentary research and appraisal of condition.

- 4.107 The footprints of the various structures that composed Thomas Brassey's Canada Works are still visible, and, although a large number of sources exist which document this facility and the infrastructure within which it existed, parts of the works may benefit from archaeological investigation and is one area where dedicated evaluation may be required to define a suitable programme of further excavation and recording in advance of any new development, The infilled and open graving docks in this area are also of limited historical interest, but are unlikely to require anything more than monitoring during any works which might affect them.

### ***Cultural Heritage***

- 4.108 Important designated buildings and areas have also been identified which may be adversely affected indirectly by redevelopment of the site. Of particular note is the World Heritage Site across the Mersey in central Liverpool, the registered Birkenhead Park and Flaybrick Cemetery which are also designated conservation areas and Hamilton Square Conservation Area to the south east. Whilst the secluded and introspective nature of the two registered parks is likely to shield these areas from any effect on their setting, the

intentionally prominent location of the Hamilton Square conservation area requires further consideration in light of the visual assessment.

4.109 The buffer of the Liverpool Maritime Mercantile City World Heritage Site has been defined as running along the middle of the River Mersey. This area is not infringed upon by the proposed development.

4.110 Attention will also have to be paid to the relationship of retained historic fabric within the site and new development. This will need to be progressed as a master plan evolves for the site. The scale, layout and materials employed in any new development will need to have regard to the historic fabric, to minimise adverse effects. In order that the approach taken reflects the wider character of the historic landscape, it is recommended that some level of historic landscape characterization is completed. This work will be informed by discussions with English Heritage and the Merseyside historic characterisation project's work to date.

### ***Constraints and Opportunities***

4.111 The review of archaeological significance and cultural heritage allows a number of key constraints and opportunities to be identified.

4.112 Constraints are as follows:

- *Statutory Designations* – these are limited; any impacts are subject to national and local planning policies and guidance, where a premium is placed on the retention of historic fabric and fixtures and their setting (setting of listed buildings such as the Hydraulic Tower, the Corn Warehouses, and more distantly the Hamilton Square and Birkenhead Park Conservation Areas).
- *Undesignated Heritage Assets* – eg: unlisted buildings, areas of industrial archaeological interest and areas of archaeological potential may require investigation and recording, and possible retention.
- *Liverpool WHS* – the site is outside the buffer zone, but any impact of development on a WHS is a material planning consideration.
- *Cultural Heritage Significance* – the cultural significance of the site depends on its aesthetic, historic, scientific and social values (see Burra Charter), and these will have implications for the presentation of the site and the nature of physical interventions. The historic interest depends to a large degree on the functional unity of the docks, and there will be a need to ensure that the phased development of



character areas and the range of different uses across the area do not lead to fragmentation.

- *Uses and their implications for the site's special interest* – current uses are unsustainable, and new uses will be required to create value sufficient to justify regeneration and investment in the infrastructure and public realm. A clear understanding of the linkages between economic viability and cultural heritage is therefore needed.
- *Patterns of movement* – the water bodies are the major defining and connecting physical element within the area, and the movement and public realm strategy must respect the historic character of the dockside environment.
- *Management of the Site* – a long term vision for the management of the entire site and the presentation of its key spaces will depend on co-operation with owners of adjoining sites that make a significant contribution to the industrial character of the whole area.

#### 4.113 Opportunities are as follows:

- *Physical and Economic Regeneration* – will create value and lever investment into the conservation and enhancement of the historic environment.

- *Activity* – new development and public realm will greatly increase activity levels to the benefit and enjoyment of the historic environment. High density development will bring greater benefits.
- *New uses for historic buildings* – regeneration of the area will create new and sustainable uses for historic buildings and structures.
- *Environment and landscape* – water bodies are inherently attractive features and will contribute to the long-term conservation of the site. The waterside walks, wharfs, squares and spaces provides the opportunity to create a high quality public realm of distinctive character, informed by an understanding of the way in which the site worked as docks.
- *Identity and distinctiveness* – much of the site is currently of poor environmental quality, which allows scope for the creation of entirely new development and open spaces of high architectural quality and interest to complement the historic identity of the area.
- *Linkages* – development of the area will improve linkages with the town centre, the Hamilton Quarter and Birkenhead Park, bringing increased accessibility and ensuring that the historic areas of the town have a more viable future.

## ***Objectives***

4.114 Arising from the above conclusions and constraints/opportunities, it is possible to highlight a number of key **policy objectives** for how Wirral Waters should progress in the positive interest of archaeology and cultural heritage.

- *Vision for the Site* – a vision for mixed use regeneration, bringing activity and sustainable community-based development of the disused dock estate, based on a detailed understanding of the site’s history, special interest, cultural significance, constraints and opportunities.
- *Statutory historic environment policies* – a commitment to conservation and regard for the special interest of historic buildings, conservation areas, archaeology and their long term sustainable preservation in accordance with national and local planning policy and guidance.
- *Phased approach to regeneration* – under current market conditions, a phased approach to regeneration offers the best means of achieving the vision for the site, providing flexibility and opportunities for change.
- *Uses and activities* – to be compatible with the distinctive character of the waterside environment and its special heritage interest.
- *Movement strategy* – to improve accessibility to the area and develop linkages with other sites and areas of special interest within the town.
- *Character of development* – new development should respect the character and setting of historic buildings and areas, and protect strategic views out of, into and across the site.
- *Architectural design* – contemporary design using present day materials and techniques is preferable to an architectural language that copies from the past.
- *Industrial archaeology* – surviving elements of industrial archaeological interest should be retained within the site, provided that they pose no health and safety risk or long term maintenance liability. This may include historic paving surfaces, boundary walls, cranes and small scale artefacts.
- *Public realm* – a high quality, coherent public realm strategy will be developed, drawing on an understanding of the area and its historic identity, with a consistent approach to hard landscape, planting, lighting, car parking and signage.
- *Recording and site archives* – the owners will commission a photographic survey of the site for record purposes before commencement of works on site. Suitable investigation of

significant elements, including any sub-surface remains identified which cannot be retained, will also be completed and reported on.

- *Management strategy* – a coherent management strategy for the phases of development will be prepared, taking account of linkages with surrounding areas and the Council's broader conservation and environmental objectives.

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## Annex 1 – Merseyside Historic Environment Record Information

MSMR Identifier	Grid Ref. (All SJ)	Period (MSMR)	Description
2891/	-	-	-
4	2892 9130	Prehistoric	Palaeoenvironmental remains.
5	2875 9120	Prehistoric	Palaeoenvironmental remains.
2989/	-	-	-
28	2950 8985	R1	Flaybrick Hill Tramway.
2990/	-	-	-
1	2925 9003	R2	Toll house of Woodside and Hoylake turnpike.
2	2925 9004	R2	Toll gate.
3	2979 9025	R2	Birkenhead North Station.
4	2962 9014	Empire	Lee's Tapestry Works. Opened in 1908.
5	2982 9096	Inter-War	Bidston Dock, built 1933.
6	2999 9055	R1	Quay, in the area of Wharf Road.
7	2990 9025	R1	Tramline.
2991/	-	-	-
1	2968 9154	Neolithic	Polished stone axe.
7	2979 9162	19th century	House – 'The Eyrie'.
8	2969 9166	19th century	House – 'Mosslands'.
10	2985 9145	19th century	House – 'Brick Cottage'.
11	2940 9115	Post-Medieval	House – Moss House. Possibly moated.
12	2997 9142	19th century	House – 'Heathbank'.

13	2991 9133	19th century	House – ‘Heathbank Lodge’.
14	2999 9119	19th century	House - ‘The Slopes’
15	2985 9155	Post-Medieval	Remains of a 16th century dagger.
16	2961 9101	Post-Medieval	Two tidal watermills.
17	2946 9134	Post-Medieval	Bridge and sluices built by George Warrington of Aigburth in 1738.
18	2904 9143	Prehistoric	Palaeoenvironmental remains.
<b>3090/</b>	-	-	-
2	3095 9023	Modern	Warehouse on north side of West Float.
3	3042 9079	19th century	Cottages – ‘Hickman’s Cottages’.
4	3037 9098	Post-Medieval	Poulton manor house.
5	3021 9086	Modern	Wallasey Copper Stores warehouse.
6	3077 9080	19th century	Manor Farm.
7	3010 9068	19th century	Kiln near to the West Float.
8	3011 9061	19th century	Mortar mill, west of West Float.
9	3010 9056	N/A	Spring, west of West Float.
10	3015 9041	R2	Canada Works shipyard.
11	3008 9029	R2	Canada Works engine house.



12	3015 9041	R2	Canada Works.
13	302 909	Romano-British	Coin of Valentinian II.
14	305 906	Post-Medieval	Limekilns at the end of Limekiln Lane.
15	3027 9036	R2	Railworks at Canada Works.
16	3021 9010	R1	Vauxhall Iron Foundry. \
17	3021 9010	R1	Boiler yard.

3091/	-	-	-
1	3018 9102	Post-Medieval	'The Old House/Birds House'. Grade II listed.
3	3055 9105	19th century	Cottage - 'Pool Cottage'.
4	3064 9109	19th century	House - 'Poulton Lodge'.
5	3038 9111	19th century	Cottage - 'Elm Cottage'.
6	3021 9106	Post-Medieval	'The Old Pool Inn'.
7	3026 9116	Post-Medieval	Site of Poulton Hall.
8	3033 9145	19th century	House - 'Mill Bank House'.
14	3009 9105	19th century	Well.
22	3001 9122	Modern	War memorial
25	3016 9109	19th century	Nos 5 & 7 Brook Road.
26	300 911	Post-Medieval	Poulton Mill.
27	3019 9105	Post-Medieval	Poulton pinfold. Removed c. 1850.
3189/	-	-	-
1	315 899	Prehistoric	A 'circular, perforated stone implement' and a sharpened antler.
2	3188 8980	Prehistoric	Two 'ancient flint arrowheads'.

3	312 896	Medieval	Square feature, labelled as 'Moat Croft' on a map of 1823.
4	3138 8912	R2	Northern lodge at the main entrance to Birkenhead Park.
5	3140 8909	R2	Southern lodge at the main entrance to Birkenhead Park.
6	3140 8911	R2	Grand triple-arched entrance gateway to Birkenhead Park. Grade II* listed.
7	315 899	Prehistoric?	See 3189/1.
8	3190 8926	19th century	Yates North Western Hotel. Demolished.
9	3192 8949	R2	J. Gordon Allison; Engineers, engineering works.
10	3192 8949	R2	J. Gordon Allison; Engineers, boiler works.
11	3192 8949	R2	J. Gordon Allison; Engineers, foundry.
12	3197 8969	R2	Railway goods station for L&NWR, LMS & GWR.
13	3199 8945	Inter-War	Mersey Road Tunnel, Queensway Dock Entrance.
14	3145 8942	Empire	Livingstone Street Public Baths.
3190/	-	-	-
1	3161 9085	19th century	Farmhouse.
4	3153 9058	Unknown	Findspot – 'stones.'
5	3174 9054	19th century	House – 'Creek House'.
6	3131 9052	19th century	'Brick Field', brick and tilemaking site.
8	3197 9026	19th century	Inn – 'Swan Hotel'.

9	3195 9036	19th century	Albion Chemical Works.
10	3195 9042	19th century	Brick and tilemaking site
11	3119 9018	R2	Duke Street swing-bridge.
12	3110 9026	Modern	Warehouse.
13	3101 9025	Modern	Warehouse.
14	3116 9022	19th century	Dockmaster's office.
15	3119 9018	Inter-War	Duke Street bascule bridge.
16	3177 9026	R2	Two corn warehouses. Grade II listed.
17	31 90	R2	Warehouse, built 1893 to 1914.
3288/	-	-	-
12	3260 8892	19th century	Houses forming the east side of Hamilton Square, Nos. 52-57. Grade I listed.
13	3250 8892	19th century	30A Hamilton Street. Grade I listed.
3289/	-	-	-
1	3220 8938	Romano-British	Approximate site of a probable Roman bridge.
2	See above	See above	See above
3	3221 8936	Medieval	Approximate site of the Birkenhead Priory watermill.
4	3249 8912	R1	Independent Chapel, opened 1839.
5	3281 8912	R1	Woodside Hotel, 1833.
6	3208 8918	19th century	Holy Trinity, Price Street. 1837-1840.
7	3265 8902	19th century	Houses forming the east side of Hamilton Square, Nos 58-63. 1825. Grade I listed.

8	3245 8904	19th century	Houses forming west side of Hamilton Square, Nos 19-34. 1839 – 1844. Grade I listed.
9	3257 8908	19th century	Houses forming north side of Hamilton Square, Nos 1-18. 1825. Grade I listed.
10	3271 8912	19th century	Nos 23-31 Bridge Street and 1-9 Hamilton Street (Waterloo Buildings). Early to mid 19th century. Grade II listed.
11	3271 8917	R2	Pier Hotel. Grade II listed building.
12	32 89	Prehistoric	Three flint fragments from Frankly Mere, Bidston and Woodside.
13	3299 8920	R2	Woodside Ferry Terminal. 1861. Grade II listed.
14	3272 8901	19th century	Well.
15	3224 8938	R2	Bridge west of Taylor Street.
16	3229 8939	R2	Moorhouses Mineral Water Works, 1892.
17	3280 8922	R2	Sandstone gateman's hut, forming the central feature of the double gate entrance to the Mersey Docks and Harbour Board Estate. Dated to 1866.
18	3270 8993	R2	Pumping station. Grade II listed.
19	3282 8966	R2	Cattle walkway.
20	3277 8983	R2	Landing stage for cattle connecting to elevated walkway [3289-19].

21	3258 8943	R2	Dock gateman's hut south of the bridge between Morpeth Dock and Morpeth Branch Dock, dating to 1866.
22	3269 8948	R2	Morpeth Dock entrance, gateman's hut.
23	3270 8950	R2	Walls at River Mersey Entrance to Morpeth Dock.
24	3270 8950	R2	Lock gate at the entrance to Morpeth Dock.
25	3276 8946	R2	Warehouse, Morpeth Branch Dock.
26	3231 8945	R2	Engine shed, Morpeth Dock railway goods yard.
27	3231 8943	R2	Morpeth Dock railway goods yard, workshop/forge.
28	3232 8943	R2	Two linked stable units.
29	3231 8947	R2	Water column at Morpeth Dock goods yard. Installed in 1894.
30	3269 8927	R2	Cheshire Lines Committee goods station. Built in 1871 and extended in the 1890s.
31	3232 8954	Inter-War	Bascule lift-bridge.
32	3270 8970	R2	Railway warehouse in GWR goods station, dating to the 1950s.
33	3208 8960	R2	Dock yard.
34	3211 8951	Empire	Canning Street North railway signal box.

35	3291 8943	Inter-war	Ventilation shaft at the east end of Pacific Road, above the Mersey Tunnel. Constructed in 1934.
36	3285 9822	R2	Mersey Railway Pumping Station.
37	3275 8920	R2	Mersey Railway Pumping Station, boiler house.
38	3275 8920	Medieval – Post-Medieval	Woodside Ferry.
39	3264 8912	R2	Hamilton Square Railway Station. Merseyside Railway 1886.
40	3213 8996	R2	Hydraulic generating station. Grade II listed.
41	3215 8984	R2	Customs house, opposite Wallasey Dock.
42	3232 8954	R2	Egerton/Morpeth swing-bridge.
43	3217 8988	R2	Wallasey Dock swing-bridge.
44	3217 8988	Inter-war	Wallasey Dock bascule drawbridge.
45	3213 8964	R2	Swing-bridge on Tower Road between East Float and Egerton Dock.
46	3213 8964	Inter-War	Egerton Dock bascule drawbridge.
48	3220 8992	R2	Sluice control house.
49	3219 8985	R2	Sluice control house.
50	3235 8997	R2	Warehouse at Wallasey Dock.
3290/	-	-	-
1	3204 9025	Post-Medieval	Mawdsley and Smith's Smalt Works.
2	3226 9070	19th century	St. Paul's School, founded in 1848 and rebuilt in 1867.
3	3203 9073	Modern	House.

4	3205 9060	19th century	House – ‘The Mona Castle’. Converted to a pub in 1983.
8	3250 9059	R2	Dock.
9	3243 9055	R2	Flagstaff, on east side of East Street.
10	3264 9039	R2	Flagstaff, on seafront leading to Alfred Dock.
14	3258 9022	R2	Hydraulic accumulator tower. Grade II listed.
15	3250 9020	R2	Hut, on an island between the dock locks.
19	3250 9009	R2	Hut, east of Alfred Dock.
20	3219 9015	R2	Hut, to the east side of the town bridges.
21	3201 9040	R2	Sugar house.
22	3211 9043	R1	Phospho-Guano works.
23	3201 9035	R2	Cement works.
24	3216 9009	R2	Alfred Dock north, swing-bridge.
25	3201 9018	R2	Cement works/mortar mill.
26	3227 9075	19th century	St. Paul’s Church, Seacombe. Built in 1846.
27	3232 9051	Post-Medieval	‘Wheatland House’, later a dower house.
28	3243 9076	R1	‘The Marine’ public house. Formerly two town houses, constructed in the late 18th century.
29	3220 9061	19th century	House – ‘Fern Villa’, of mid-19th century construction.

30	3215 9052	19th century	Houses – ‘The Great Float’. Site of a pair of houses now occupied by a late 19th century public house.
31	3210 9050	19th century	Seacombe Terrace.
32	3215 9011	Inter-War	Alfred Dock bascule drawbridge on Tower Road.
33	3217 9006	R2	Swing-bridge at Alfred Dock exit.



## Annex 2 – Time Chart and Glossary

## *Time Chart*

Palaeolithic	c.8000BC and earlier	Early stone age, early development of man and earlier hominids.
Mesolithic	c.8000BC - 3500BC	Middle stone age, nomadic hunter gatherer groups.
Neolithic	3500BC - 2000BC	New stone age, first settled agrarian communities and monumental structures.
Bronze Age	2000BC - 500BC	First use of bronze, divided into early, middle and later sub-periods.
Iron Age	500BC - 43AD	First use of iron, divided into early, middle and later, some interaction with Romans and others.
Roman	43AD - 410AD	The first historical period, with written records, saw southern Britain subject to Roman government and culture (also Romano-British).
Early medieval	410AD - 1066AD	What has been called the Dark Ages, the period from the departure of the Roman legions to the Norman Conquest which saw the colonisation of much of Britain by Angles, Saxons and others.
Medieval	1066AD - c.1500AD	From the Norman Conquest through to the Renaissance.
Post-medieval	1500 - 1945	Everything in recent Centuries, especially monuments relating to the Industrial Revolution and the military.

N.B. The MSMR further separates the post-medieval period, as follows:

Post Medieval	1500 – 1750
Industrial Revolution 1 (R1)	1751 – 1835
Industrial Revolution 2 (R2)	1836 – 1900
Empire	1901 – 1917
Inter-War	1913 – 1939
Modern	1901 - 2050

### ***Terms***

Air photographs	Photographs taken from the air by archaeologists and other organisations such as the OS and RAF often show archaeology on the ground in the form of cropmarks, earthworks or soilmarks.
Archaeological value/potential	Value relates to known archaeology and is synonymous with significance and importance, whilst potential is a gauge of the probability of further archaeology lying undiscovered beneath the surface.
Artifact (artefact)	Catch all term for a discrete archaeological object as opposed to a site or debris i.e. prehistoric flint work and later metal objects and ceramics, not pottery sherds or walls.
Deposit	A sub-surface accumulation of archaeological material.
Features	Discrete remains forming part of an archaeological site i.e. ditches, pits, hearths, and walls.
Graving Dock	Also known as a dry dock. A narrow basin, usually made of earthen berms and concrete, closed by gates or by a caisson.

Listed Building	Statutory protection for buildings with special historic or architectural value. Grades I and II* require consultation with English Heritage where affected by development. Grade II usually dealt with solely by local planning authority.
Mitigation Strategy	Preservation/retrieval of the <b>archaeological value</b> of a development site through excavation, repositioning of development or change in the nature of development once identified through evaluation.
Preservation (in situ/by record)	Although current guidance advocates preservation of important archaeology in situ i.e. by not developing the area, the alternative (especially with less important remains) is to preserve by record through archaeological excavation.
Scheduled Ancient Monument	Statutory protection afforded to archaeological sites and monuments deemed to be of national importance. Consent required from English Heritage for activity impacting on the site (SAM).
Smalt	Powdered <b>glass</b> , colored deep <b>blue</b> , with <b>cobalt</b> , and used for <b>dying</b> and <b>laundering</b> .
Stone Age	Vernacular for Palaeolithic, Mesolithic and Neolithic periods.
Stratigraphy	Layers of archaeological and natural deposits which allow an understanding of the order in which events occurred.

## Plans

- Plan 1      Previously Identified Archaeology and Cultural Heritage  
(2938/27 03/07 IT/JTF)
  
- Plan 2      Extracts from Historic Maps (1797 & 1850)  
(2938/29 03/07 IT/CT)
  
- Plan 3      Extracts from Historic Maps (1899 & 1936)  
(2938/28 03/07 IT/JTF)

**Annex 3 – Historic Plans  
(see separate document)**