



CANNING DOCK LIVERPOOL

Phase 2

Archaeological Evaluation



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SUMMARY

Merseytravel propose to construct a Merseytram route between Liverpool City Centre and Kirkby. The proposed route runs along the eastern side of Canning Dock, Liverpool, at SJ 343 901, which lies within the extent of the Liverpool Docks World Heritage Site, and potentially in the area of a former entrance basin extending into the Old Dock from Canning Dock.

A programme of archaeological watching brief and trial trenching was carried out by Oxford Archaeology North (OA North) in 2004 which revealed a north/south aligned sandstone wall, which may have been connected with the draining and infilling of the Old Dock in 1826 prior to the construction of the New Customs House. Consequently, the Merseyside Archaeological Officer (AO) recommended that further evaluation be undertaken to continue to investigate the impact of the proposed development. Environmental Resources Management Ltd (ERM), acting for Merseytravel commissioned OA North to carry out the work. This phase of work was undertaken between February and April 2005.

Five trenches were examined as part of this stage of the tram works. Four were evaluation trenches (Trenches 137-141), located close to the two trenches excavated in the earlier phase of evaluation, and one trench was undertaken as a watching brief (Trench 142).

The results from Trench 142 uncovered the back of the Canning Dock wall and revealed that in this area it had been built in two phases. The earliest phase to the north, **2325**, was probably part of the original construction of Canning Dock at about 1740. When this dock was built it incorporated the north-east wall of the octagonal entrance basin of the Old Dock and replaced the oval graving dock that ran north from the entrance basin (cf Chadwick's map of 1725). It was later altered to its present configuration when the entrance to the Old Dock was blocked in c 1826; it is thought that the later southern element of Canning Dock wall seen in Trench 142, **2317**, relates to this phase of alteration.

When the Old Dock became too small, partly through becoming silted up and partly due to the increase in the size of ships, the entrance was blocked and the Old Dock drained in order that the New Customs House could be built. The substantial wall found in the earlier evaluation Trenches 1803b and 126 (**1213** and **1222**) was thought to relate to this activity. The wall was seen to continue north into Trench 139 and south into Trench 139 (**1279** and **1254**). Correlation with the historic mapping strongly suggests that its purpose was to act as blocking for the entrance to the Old Dock. The reuse of stonework from previous dock walling suggests that the wall was not intended to be seen, and could have been in some manner temporary. There was clear evidence of the wall having been partially robbed at the northern end (Trench 139) which was consistent with the robbing seen earlier in Trench 126. The large displaced sandstone blocks, crushed sandstone and brick located in Trenches 140 and 141 within deposits **1287** and **2310** suggest the

probable continuation of the blocking wall to the north, which has been largely robbed out.

A further wall **1234** in Trench 137 clearly pre-dated **1233**, the second phase of Canning Dock wall constructed at about 1826. It may also have been associated with the blocking of the Old Dock entrance but, unfortunately, it was not possible to connect this feature with the north/south oriented blocking wall seen in Trenches 138, 126, 1803b, and 139, owing to the presence of several substantial modern services.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Merseytravel propose to construct a Merseytram route between Liverpool City Centre and Kirkby. The proposed route runs along the eastern side of Canning Dock, Liverpool, at SJ 343 901, which lies within the extent of the Liverpool Docks World Heritage Site, and potentially in the area of a former entrance basin extending into the Old Dock from Canning Dock (Fig 1). A programme of archaeological watching brief and trial trenching was carried out by Oxford Archaeology North (OA North) in 2004 which revealed a north/south aligned sandstone wall, which may have been connected with the draining and infilling of the Old Dock in 1826 prior to the construction of the New Customs House. Consequently, the Merseyside Archaeological Officer (AO) recommended further investigation by evaluation to clarify the engineering impact of the proposed Merseytram route.
- 1.1.2 Environmental Resources Management Ltd (ERM – hereafter the ‘client’), acting for Merseytravel, requested OA North to submit a project design for the required work (*Appendix 1*). Following approval of this project design by the AO, and acceptance by the client, OA North undertook the work from February to April 2005. Groundworks were conducted by Liverpool Enterprise, sub-consultants to Mott MacDonald, who were acting as engineers for the proposed route on behalf of ERM.
- 1.1.3 This report sets out the results of the evaluation in the form of a short document, followed by a statement of the archaeological potential of the area. The report relates to Trenches 137-141 but refers to the earlier phase of work Trenches 1803b and 126. In addition, this report also details the results of a watching brief conducted on the Canning Dock wall to the north-west of the focus of the evaluation at the south-east corner of Canning Dock. This trench was designated Trench 142.

2. BACKGROUND

2.1 PHYSICAL BACKGROUND

- 2.1.1 The area to be subject to evaluation is situated to the south-east of Canning Dock, and lies to the west of the Strand which follows the line of the Canning Dock wall. This area lies within the World Heritage Site, and is to the east of the Albert Dock Conservation Area (Fig 1).
- 2.1.2 The site is currently laid with sets, and is a pedestrian walkway following the dock walls. The sets have clearly been disturbed along the route, many being relaid with concrete, due to extensive services being present in the area.
- 2.1.3 The geology of this part of Liverpool consists of drift deposits of Boulder Clay in the area of Canning Place and Strand Street on the edge of the Pool, with narrow bands of alluvium along the coastal margins and within the Pool itself. The solid geology consists of Pebble Beds and Upper Mottled Sandstone (Philpott 1999).

2.2 HISTORICAL BACKGROUND

- 2.2.1 **Medieval Liverpool (1066-1500):** the establishment of the town of Liverpool is well documented. The name '*Liuerpol*' is first mentioned in a charter of 1190-4, the town forming a part of the hundred of West Derby (Nicholson 1981). In 1207, a further charter was granted by King John which effectively elevated the settlement from a fishing and farming village to a royal borough. Between the granting of this charter and 1296, the population of the town had increased, and the settlement consisted of seven streets, the names of which are mentioned in documents from about 1300. These streets survive in the modern plan of the town, though they have been much widened. Important buildings were constructed throughout this period, including the castle, the Chapel of St Mary del Key and St Nicholas, and the Tower (*op cit*, 7).
- 2.2.2 The town was positioned next to the Pool, a prominent topographical feature and natural inlet, the place-name 'Liverpool' being derived from the Pool. The Pool comprises part of a ridge of sandstone covered with Boulder clay, with the ancient shore-line lying where the Strand is now. It was a natural tidal inlet or creek fed by streams arising further north, and was nearly 1.5km long at high tide (Stewart-Brown 1932, 88). The Pool is believed to have formed an important part in the town's life and in its maritime trade, acting as an area where cargoes would have been unloaded, and ships built and repaired. However, no medieval records survive relating to the use of the Pool (*op cit*, 89).
- 2.2.3 **Post-Medieval Expansion (1500-1710):** the earliest references to the Pool as an entity date to the seventeenth century; references in the Town Books in the last two decades of that century show that the 'lower pool' and the Waterside were indeed used for boat- and shipbuilding. In 1683, Thomas Webster, a ships'

- carpenter, and Alderman William Williams were granted the right to build 'cabins' on the waste on the south side of the Pool (MacLeod 1982). In 1696 Roger James petitioned for a piece of land where he could make a dock, with grab and crane to help heave ships; ships were set on stocks on the south and north side of the Pool, and houses were built to assist in shipbuilding (Stewart-Brown 1932, 89-92).
- 2.2.4 The earliest encroachments onto the Pool itself were undertaken by private landowners from the sixteenth century onwards. Land on the western side of the Pool, held by a series of major landowners, was also reclaimed around this time and records exist of these instances (*op cit*, 103-4). However, the main encroachment on the Pool did not begin in earnest until the later seventeenth century, and was particularly prevalent in the first decade of the eighteenth century. The mechanism of reclamation was by granting Pool lands on cheap rentals with the obligation to reclaim adjacent areas (*ibid*). This form of infilling is recorded in the later seventeenth century in corporation leases, and enclosures were made from 1679-80 onwards on the former Pool belonging to the corporation. The extent of some of the reclamation is illustrated by the corporation who, in 1714, allowed tenants of Mersey Street, south of the Pool, to wall in 100 yard deep sections of shore (Stewart-Brown 1932, 103). Excavations on a site opposite the study area revealed clear evidence of infilling along the Pool edge, showing two major phases of levelling, both during the seventeenth century (Davey and MacNeil 1985; Philpott 1999, 4).
- 2.2.5 With the demise of Chester's trade through the silting of the Dee by the late 1600s, Liverpool's trade began to rise in prominence (MacLeod 1982, 4). Throughout the seventeenth century, repeated references are made to severe weather conditions in documentary sources (*op cit*, 5). Storms were not the only concern, however; the increase in traffic in the area meant that the ports were becoming overcrowded. The sizes of ships were also increasing as transatlantic shipping became common, and incidents of rubbish tipping into the harbour also aggravated the problems of space (*op cit*, 6). The upsurge of the ship-building trade on the water's edge also exacerbated the problems (*ibid*).
- 2.2.6 ***The Old Dock (1710-1826)***: the combination of these factors brought increasing demand for better accommodation for ships, and in 1707, the scheme was finally mooted for an enclosed wet dock (MacLeod 1982, 7). George Sorrocold, the engineer who had built the Howland Dock at Rotherhithe in London, in 1708, was approached for his help. He suggested that the stones of Liverpool castle, which stood close to the proposed dock site at the top of the then Pool Lane, could be used to reduce the cost of the construction of the dock (Stewart-Brown 1932); however, it seems unclear as to whether this ever occurred. In 1709, the first Dock Act was passed, empowering the Mayor, Aldermen, Bailiffs, and Common Council as the trustees of the dock and allowing them to levy dock dues on ships entering the harbour.

- 2.2.7 Ritchie-Noakes discusses the water-encroaching design of the dock: '*the novelty of Steers' dock lay in its being formed by building within the tidal area of the Pool rather than by excavating on land (as had been Sorrocold's plan). This first dock subsequently became the prototype for most of the subsequent Liverpool docks*' (1984, 9). The construction of the dock was nevertheless a formidable task, particularly as it was built entirely by hand; the building work had to be undertaken in a sea-lake whose coffer-dam was constantly hammered by tidal currents, and from water flowing down into the Pool from the streams off the high ground of Mosslake (MacLeod 1982, 12). The ground was particularly unstable as well: Picton, writing in his *Memorials of Liverpool* (1873), says '*...the site was soft mud, through which the walls had to be carried down a considerable depth to reach the rock*'. The dock took seven years to complete.
- 2.2.8 The dock was roughly rectangular in plan, and was aligned east/west (*ibid*). The gates were 33 feet wide by 25 feet deep, and was 4 acres in area, capable of containing a 100 square-rigged vessels at any one time (MacLeod 1982, 13). Other elements of the dock were a 1½ acre octagonal tidal entrance basin, a graving dock off the north side and a landing stage projecting from the west side of the entrance to the entrance basin. The basin provided short-term berthing and safe access to the dock (Jarvis 1996). The graving dock was superseded by the construction of the Dry Dock (later Canning Dock) in 1740 (Ritchie-Noakes 1984). A second graving dock to replace that destroyed by construction of the Dry Dock was built in 1746 at the north end of the Dry Dock itself (*ibid*). It also seems likely that the northern extent of the Pool was covered over with the later development of Paradise Street, Whitechapel etc (Sharples 2004, 7). The Old Dock was such a success that it spawned further enclosed docks, including Salt house Dock in 1760 (Jones 1996, 111). By 1824 Liverpool had approximately 50 acres of enclosed dock space.
- 2.2.9 ***The New Customs House (1826-1962):*** before the dock was 100 years old, however, an Act of Parliament, the fourth Dock Act, was passed on 10 June 1811, allowing the dock to be filled in as soon as the Queen's Dock and Prince's Dock had been enlarged. In his survey of 1810, John Rennie had recommended its closure, since the dock had become shallow from constant dumping of sewage, leading to its silting up, and it had become too small for the larger classes of vessels which served the ever-increasing trade of the port. Furthermore, the site of the dock was the only realistic place that a new Customs House could be constructed in the area, which was now completely over-built with warehouses and dwellings. Customs' collection had increased to an unworkable state by this period, operating as it was out of a Customs House designed for much less trade, built in 1721-2 (MacLeod 1982, 26). Opposition to the backfilling by merchants, however, caused a 15 year delay, as arguments raged over the lack of space in the new docks and the distance from established businesses. However, the last ship sailed out of the dock on 31 August 1826, and the Old Dock was filled in shortly after.

- 2.2.10 During the building of the Customs House, the walls of the Old Dock continued to act as retainers while the foundations and basement were built, with the gap between the walls backfilled once ground level was reached (Macleod 1982). No documents survive describing this practice, but other sites on Merseyside followed identical methods when buildings were placed inside abandoned docks (such as George's Dock, which became the site of the Port of Liverpool Building, Cunard Building and The Liver Building). Approximately 95% of the new Customs House was built inside the Old Dock, with only the south-east corner projecting beyond the dock wall. The foundation stone was laid by Mayor Thomas Colley Porter Esq on 12 August 1828 (Rideout 1928, 68).
- 2.2.11 Aside from the docks, part of the success of cities like Liverpool was the transport infrastructure, which developed alongside the economic activities. The tram network in Liverpool was one element of this and provided a means of transport for people to move along the miles of dock fronts, around the city centre and, importantly, to bring people in from the surrounding suburbs to work in the city. Trams were initially wheeled vehicles, guided along routes using either a groove in a series of plates, or later along grooved rails set into the road. The earlier trams were horse drawn and later trams were of steam, until electric trams were developed (Jones 1996, 397).

2.3 PREVIOUS ARCHAEOLOGICAL EXCAVATIONS

- 2.3.1 An archaeological investigation took place on a site immediately to the east of the survey area, in the land now occupied by Chavasse Park, on the northern side of Canning Place. The work was a rescue excavation undertaken in the angle of Canning Place, Litherland Alley and South Castle Street in 1977 by Robina McNeil on behalf of the Merseyside Archaeological Society, Merseyside County Museums, the Department of the Environment, and the University of Liverpool. This revealed a section of the Pool foreshore on the west side of South Castle Street in the angle formed by that road, Canning Place, and Litherland Alley (centred at SJ 3434 9039) (Philpott 1999, 4; Davey and MacNeil 1985).
- 2.3.2 These excavations showed that the Pool at that point contained two major phases of levelling, both of seventeenth-century date. Finds included small but well-dated groups of pottery and clay pipes of the seventeenth and early eighteenth century. The 1977 excavation produced evidence for dense nineteenth century housing on the site, some with cellars, but also, more significantly, it located the edge of what was interpreted as the original Pool of Liverpool. Archaeological deposits within the Pool were consistent with infilling by soil, crushed sandstone and stones during the mid seventeenth century (Philpott 1999, 4; Davey and MacNeil 1985).
- 2.3.3 A watching brief was undertaken in September 1980 on works concerned with the widening and re-alignment of the Dock Road and the construction of the ring road in Canning Place. Part of the wall of the Old Dock was uncovered and recorded by the Archaeological Survey of Merseyside: '*Severe time constraints prevented*

major excavation, but a yellow sandstone coping was uncovered, standing on top of a sturdy brick wall (Nicholson 1981, 3; Jarvis 1996, 7).

- 2.3.4 A watching brief and programme of evaluation trenching was undertaken by OA North in 2004 (OA North 2004). Two evaluation trenches were excavated in the area, the first subsuming earlier Test Pit 1803 (referred hereafter as Trench 1803b and equates to Trench 1 in the earlier report) and the second *c* 2m to the south (referred to hereafter as Trench 126 and equates to Trench 2 in the earlier report). A north/south-aligned sandstone wall was recorded within both trenches, at a depth of 1.25m below ground level, and was not bottomed at 3.8m below ground level. No definite function could be found for this wall, although the presence of a re-used watermark block suggests that it post-dates the original phase of construction of the Old Dock, 1709-15. Finds from the backfill deposits built up against the wall suggest that it went out of date in the early nineteenth century. The wall may somehow have been connected with the draining and infilling of the Old Dock, but its precise date of construction and exact function could not be confirmed.

3. METHODOLOGY

3.1 AIMS

3.1.1 The aims of the archaeological work were as follows:

- to evaluate further the archaeology of the area adjacent to Canning Dock on the line of the proposed tramway;
- to establish the extent, location, character, width and depth of the observed wall, and to establish if it is in actuality a part of the Old Dock;
- to inform the design of the tramway so as to prevent damage to the Old Dock wall structure.

3.2 EVALUATION

3.2.1 A programme of trial trenching was implemented to assess the archaeological remains revealed during the evaluation carried out by OA North in 2004. Five trenches, Trenches 137-141, were positioned in order to expose the line of the wall revealed during these works, and to assess the deposits surrounding the walls. All trenches were placed close to the south-east corner of Canning Dock, and were situated on a pedestrian walkway (Fig 3).

3.2.2 The trenches were excavated in a stratigraphical manner by a mechanical excavator, under the supervision of an OA North archaeologist, to the top of significant archaeology, together with localised sondages to explore in more detail the archaeological stratigraphy. Where the trenches exceeded 1.2m, excavations ceased until health and safety measures had been put in place. This included excavating steps within the trenches, or shoring using sheet piles. All pavement sets were removed by hand prior to any excavation taking place, and spoil was stored at a safe distance from the edge of the trench in disposable bags.

3.2.3 The project design was adhered to for each specific phase of the evaluation. All archaeological work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

3.2.4 The recording methods employed by OA North accord with those recommended by English Heritage's Centre for Archaeology. The recording comprised a full description and preliminary classification of the features and materials revealed on OA North *pro-forma* sheets. A plan was produced showing the location of all the trenches and features, with representative sections being drawn at a scale of 1:10. A photographic record, using monochrome and colour slide formats, was maintained.

- 3.2.5 All artefacts and ecofacts were recorded using the same system as the contextual information, and were handled and stored according to standard practice, following current Institute of Field Archaeologists' guidelines.
- 3.2.6 The position of each evaluation trench was recorded using a total station and the digital survey data were transferred into DXF file format. The resulting file was then viewed and manipulated in AutoCAD, version R14. The archaeological detail was drawn up in the field with respect to field plots of the survey data and these edits were then transferred onto the raw survey data within the CAD system.

3.3 WATCHING BRIEF

- 3.3.1 Trench 142 adjacent to the Canning Dock wall was subject to a watching brief; it was excavated to a depth of 3.47m. All excavation was carried out under constant archaeological supervision, with archaeological deposits examined to a sufficient degree, working within health and safety constraints, to recover evidence of date, condition and function of relevant deposits. No environmental deposits were collected, as the deposits were not deemed viable for the preservation of palaeoenvironmental material and were not securely dated.

4. RESULTS

4.1 INTRODUCTION

4.1.1 Trenches 137, 138, 139, 140 and 141 were excavated to the south-east of Canning Dock, subsequent to archaeological remains being encountered during an evaluation in 2004 (OA North, 2005). Trench 137 was positioned directly to the east of the Canning Dock wall and west of Trench 1803b excavated in the earlier phase of evaluation (= Trench 1 in OA North 2004). Trench 138 was located immediately to the south of Trench 126 excavated in the earlier phase of evaluation (= Trench 2 in OA North 2004). Trench 139 was located immediately to the north of Trench 1803b and Trench 140 to the north of this. Trench 141 was positioned a short distance to the north-west of Trench 140. Trench 142 was located 35m to the north-west of Trench 141 along the back of Canning Dock (Fig 2).

4.1.2 Significant archaeological deposits, including four substantial sandstone walls were encountered at depths exceeding 1.2m. All trenches were excavated using sheet pile shoring owing to health and safety reasons. A small assemblage of post-medieval artefacts was recovered from the trenches (see *section 4.4*). No environmental deposits were collected, as the deposits were not deemed viable. For full descriptions of each context see *Appendix 3*.

4.2 EVALUATION TRENCH DESCRIPTIONS

4.2.1 **Trench 137:** this trench was aligned approximately north-east/south-west, and measured 3m by 2.5m, with a maximum depth of 3.2m. The trench revealed a cobbled pavement surface and modern pipe trenches, which overlay a series of deliberate backfill deposits. These in turn overlay two sandstone walls **1233** and **1234** (Fig 3).

4.2.2 Wall **1234** was aligned west-south-west/east-north-east, roughly at right angles to Canning Dock, and was revealed at a depth of 2.2m. This wall was constructed from dressed square yellow sandstone blocks, with tool marks on the majority of the stones; traces of mortar could be seen at irregular intervals. The wall appeared to be curving towards the north/south aligned wall revealed in earlier evaluation Trenches 1803b and 126, although the alignment was difficult to ascertain given to constricted size of the trench (Plate 2).

4.2.3 At a depth of 1.8m, a sandstone wall, **1233**, aligned north-north-west/south-south-east, was revealed; this was the eastern, rear face of the Canning Dock wall. Wall **1233** butted up against and was constructed over the top of wall **1234** (Fig 5) which would indicate that this phase of the Canning Dock wall, **1233**, post-dates wall **1234** (Plate 1). The upper two courses of wall **1233** were constructed of roughly cut and dressed square sandstone blocks bonded with white mortar, with

- the lower four courses being constructed of dressed square cut blocks, bonded with a grey mortar, and with bricks placed between some of the joins.
- 4.2.4 The backfill deposits consisted mainly of sand and clay deposits, with frequent building rubble inclusions (see *Appendix 3*). Tip lines could be seen showing the deposits slumping across both walls **1233** and **1234** from north to south. These overlay a natural silting layers **1245** and **1246** (cf Fig 5 west-facing section). These silting deposits were augured to a further depth of 1m (2.05m aOD), equating to 4.2m from the present ground surface, where natural sandstone bedrock was reached. The natural sandstone bedrock was not located in the other trenches as their maximum depth was 3.8m below the present ground surface.
- 4.2.5 **Trench 138:** this trench was aligned north-west/south-east, and measured 4.2m by a maximum of 3.2m, and was excavated to a depth of 3.2m. It lay directly to the south of Trench 126 excavated in the earlier phase of excavation. The trench revealed a cobbled pavement surface, which overlay a series of deliberate backfill deposits, **1248-1261**. These in turn overlay sandstone wall **1254** (Fig 3). Excavation revealed that the western half of the trench was disturbed by eight service pipes less than 0.5m from the surface, negating the possibility of further excavation in this part of the trench. A concrete tree box was also located to the east of the trench, which caused considerable truncation to the upper layers within this part of the trench.
- 4.2.6 The yellow sandstone wall, **1254**, aligned approximately north/south, was revealed at a depth of 1.5m in the south of the trench, stepping down to a depth of 3.2m in the north of the trench (Plate 3). The wall was constructed of roughly-squared sandstone blocks with coarse tooling, and was built using dry-stone construction. The northern section of the wall appeared to have been partially robbed, and damaged, with deliberate packing having been carried out using bricks **1262** to the west of the wall, and to the east of Canning Dock (Fig 6; Plate 4).
- 4.2.7 The deposits overlying wall **1254**, namely **1248 - 1261**, consisted mainly of backfilled sand and clay deposits, with frequent building rubble inclusions. They appear to have been dumped directly onto the wall in its present state, and no tip lines could be identified.
- 4.2.8 **Trench 139:** this trench was aligned north/south, measured 2.3m by 2m, and was excavated to a depth of 3.2m. It lay directly to the north of, and was contiguous with, Trench 1803b excavated in the earlier phase of excavation. The trench revealed a cobbled pavement surface, which overlay a series of deliberate backfill deposits. These in turn overlay sandstone wall **1279** (Fig 3).
- 4.2.9 Wall **1279** was of similar yellow sandstone to that of wall **1254** seen in Trench 138. It was found to align north/south, and possibly returned to the west to link with wall **1234** seen in Trench 137, although this is speculative. The wall was

- revealed at a depth of 1.5m, and was constructed of roughly-squared sandstone blocks with coarse tooling, and was bonded using a lime mortar; four courses of the wall were revealed (Plate 6). A linear feature, **1280**, probably a robber trench, was also located directly to the east of **1279**, on an identical alignment. This was backfilled with a loose sand, **1277**.
- 4.2.10 The deposits overlying **1279** consisted mainly of backfilled sand and clay, with frequent building rubble inclusions. These deposits revealed distinct tip lines sloping to the south over the line of the wall. Also within these deposits was layer **1275**, a possible midden deposit containing shell and building rubble material (Fig 7).
- 4.2.11 **Trench 140:** this trench was aligned north-east/south-west, measured 4m by 1.5m, and was excavated to a depth of 3.2m. It lay to the north of, and was contiguous with, Trench 139. The trench revealed a cobbled pavement surface, which overlay a series of deliberate backfill deposits consisting mainly of backfilled sands and clays, with building rubble inclusions. They showed distinct tip lines sloping to the south. Also within these deposits was layer **1290**, a possible midden deposit containing shell and building rubble material (Fig 8), which extended into Trench 139, as **1275**. The robber cut **1280** located in Trench 139 was not seen in the north-facing section of Trench 140 (cf Fig 8); however, deposit **1292** was the same as **1277** in Trench 139.
- 4.2.12 These backfill deposits overlay a curved 'structure', **1294**, measuring 0.72m by 0.6m, located within the north-eastern corner of the trench at a depth of 1.5m (Fig 3); it was constructed of bricks, bonded with a sandy lime mortar built on crushed yellow sandstone **1291**. Three courses of brick were revealed, although some had been moved from their original position (Plate 7).
- 4.2.13 A deposit of large sandstone blocks **1287** was revealed to the north-west and south-west of the trench overlying mid brown clayey sand with frequent grey brown clay inclusions **1295** and **1296**. This deposit could represent the remains of the robbing of sandstone wall **1279** in Trench 139.
- 4.2.14 **Trench 141:** this trench was aligned north-east/south-west and measured 4.8m by 1.8m and was excavated to a depth of 2.65m. It lay 1.7m to the north-west of Trench 140. Trench 141 revealed a cobbled pavement surface, which overlay deliberate backfill deposits and a rectangular cut, **2303**, in the north-east section of the trench (Fig 9).
- 4.2.15 The backfill deposits consisted of mainly sands and clays with rubble, crushed sandstone inclusions, and displaced sandstone blocks. These deposits tip from east to west and to the south. Within these deposits was a crushed brick and yellow sandstone layer with displaced blocks **2310** becoming more substantial to the west of the trench (Fig 9). These deposits in turn overlay brick structure **2315** along with a vertical and horizontal timber **2314** (Fig 3).

- 4.2.16 A brick structure, **2315**, measuring 0.7m by 0.5m with a thickness of 0.18m (Plate 8), was revealed in the north-eastern corner of the trench at a depth of 2.4m. The structure was constructed of red bricks bonded with sandy lime mortar. Two courses survive built on blue grey clay backfill **2313**, there was no apparent bond pattern.
- 4.2.17 A large vertical timber and a horizontal beam, **2314**, was located along the south edge of the trench (Plate 8). The vertical timber was 0.5m in diameter, 0.75m in height retaining most of the sapwood although it appears to have been squared off towards the east. The horizontal beam is aligned north-west/south-east extending for 0.2m into the trench and 0.35m thick. The horizontal timber has been driven into clay **2313** and was packed around with stones.

4.3 WATCHING BRIEF TRENCH DESCRIPTIONS

- 4.3.1 **Trench 142:** this trench was located along the back of Canning Dock aligned north-east/south-west, 3.20m by 1.92m with a maximum depth of 3.47m. This was later extended to the north-west by 1.9m to a depth of 1.57m (Fig 4). The trench revealed a flagstone-paved surface towards Canning Dock becoming a cobbled pavement to the north-east, overlying a number of levelling layers and concrete plinths. These in turn overlay deliberate layers of backfill, which partially covered the back of the Canning Dock wall designated **2317** and **2325** (Fig 10).
- 4.3.2 A drain was located within the backfill layer **2321**, constructed with a flagstone base, with brick and sandstone walls at each side 1.15m wide, 0.32m in height and 0.87m deep. This feature was aligned north-west/south-east parallel to Canning Dock. The top was damaged and was truncated to the north only surviving 0.4m into the trench. The portion of drain that extended into the trench was demolished to accommodate the shoring (Plate 10).
- 4.3.3 Backfill **2321** overlay and butted the face of sandstone structures **2317** and **2325** (which formed the back of Canning Dock wall) to a depth of 1.4m. This in turn overlay a lens of black clinker material, which overlay silty sand mixed with clay **2322**, probably original backfill material for the dock wall.
- 4.3.4 A channel, **2324**, had been cut to accommodate a cast iron pipe which runs through the top of the sandstone walls **2317** and **2325**; it was filled with crushed sandstone and brick material **2320**. This service runs parallel with Canning Dock.
- 4.3.5 The rear face of Canning Dock was located and appears to have been constructed in two phases, the earlier phase **2325** was constructed of rectangular sandstone blocks with soft yellowish sand/lime mortar and was of a neater construction than the later phase. These blocks were of a varied stretcher bond and stepped out with each course down (Plate 9). The alignment of this face does not run parallel with

- Canning Dock, veering more north-north-east with a slight curve. This may be due to the bend along Canning Dock opposite the trench location.
- 4.3.6 The later section of wall **2317** forming the rear of Canning Dock was found to comprise pink/red sandstone blocks with patches of red brick. Different types of mortar were used in the construction of the wall, predominately compact grey cement mortar used around the sandstone blocks with a soft light grey/white sand lime mortar and compact white mortar for the brickwork. At 3.4m from the surface a large sandstone block was revealed with two/three courses of bricks positioned on top with a mixture of soldier and stretcher and header bond pattern, probably a levelling course for the remainder of the wall. This section of wall was also found slightly misaligned with the interior face of Canning Dock, and stepped out with each course down.
- 4.3.7 The interior seaward face of Canning Dock has been rendered so it was not possible to ascertain if the divide between the two wall sections extended all the way through.

4.4 FINDS

- 4.4.1 **Introduction:** in total, 33 artefacts and ecofacts were recovered from Phase 2 of the evaluation, the majority of which was fragments of pottery. The remainder comprised clay tobacco pipe, glass, animal bone, marine shell, and coal. Most of the finds were retrieved from tipped backfill deposits associated with the infilling of the dock (**1267**, **1273**, **1276**, **1296**, and **2313**), and a few were recovered from other deposits (**1269**, **1277**, and **1289**). All the finds are catalogued in *Appendix 3*, and the type found in different deposits is summarised in Table 1, below.

	Backfill deposits (1267 , 1273 , 1276 , 1278 , 1296 , and 2313)	All other contexts (1269 , 1277 , and 1289)	Total
Animal bone	1	0	1
Clay tobacco pipe	3	2	5
Coal	1	0	1
Glass	5	0	5
Marine shell	3	0	3
Pottery	15	3	18
Total	28	5	33

Table 1: Type of finds from different contexts

- 4.4.2 Most of the artefacts appeared to all into a date range between the seventeenth century and the nineteenth century, with the pottery providing the most reliable dating evidence. Details of the pottery are set out below, followed by a brief record of the other categories of finds. Whilst these finds, where they are dateable, corroborate the pottery evidence, they have little other relevance for the site.
- 4.4.3 **Pottery:** the earliest pottery fragment was recovered from backfill deposit **1278**, and was a medium sandy oxidised-ware possible bowl base, which may date to the fifteenth century. The same context produced a clay tobacco pipe stem with no

- diagnostic features, dated to the eighteenth to early twentieth century, and a green cylindrical bottle fragment dated to the eighteenth to nineteenth century.
- 4.4.4 Three fragments of tin-glazed earthenware, dated to the eighteenth century, were recovered from backfill deposits. These comprised the rim of a hollow-ware vessel and a fragment with a cobalt blue painted flower design, which were retrieved from modern backfill **1267**, and an undecorated body fragment, which was found in original Dock backfill **2313**. Other finds from backfill **1267** included the only three white earthenware fragments recovered during Phase 2, of which two had a pearlware glaze resulting in a date of the late eighteenth to early nineteenth century. One of these was decorated with the 'Willow' transfer-printed pattern - the only decorated fragment from the assemblage other than the painted tin-glazed earthenware from the same context. Backfill **2313** also produced the only other fragment of possible early fineware - a thin-walled brown-glazed red earthenware vessel base dated to the late seventeenth to early nineteenth century.
- 4.4.5 The seven fragments just discussed were the only post-medieval finewares in the assemblage; the remaining ten fragments were coarsewares, of which nine were earthenwares and one was stoneware. Of the earthenwares, five were buff-coloured, orange-coloured, or orangey-buff coloured, either self-glazed, brown-glazed, or unglazed (from backfills **1276** and **2313**, and fill **1277**), and were dated to the late seventeenth to early eighteenth century. The other four were brown-glazed red earthenware (from backfills **1267** and **1276**, and fill **1277**), and were dated broadly to the late seventeenth to early twentieth century. The final coarseware fragment was brown-glazed buff-coloured stoneware, dated to the eighteenth to nineteenth century. The coarseware vessels comprised jars, crocks, and wide dishes, and were essentially kitchen wares.
- 4.4.6 **Clay tobacco pipe, glass, and coal:** the clay tobacco pipe fragments comprised stems with no diagnostic features, and a single near-complete bowl from backfill **1276**. The bowl had a flat oval base, and was positioned at a very shallow angle to the stem. It was of the long bowl type, was chamfered around the edge, and was dated to c1680 to 1710 (Ayto 1994, 8, nos 8 and 9). The two earliest fragments of glass were from very thin-walled green bottles from original Dock backfill **2313**, and were tentatively dated to the seventeenth to eighteenth century. Two much thicker walled fragments from green cylindrical bottles, dated to the eighteenth to nineteenth century, were also recovered from backfills **1276** and **1278**. A late twentieth century colourless glass vessel base, marked 'Arcoroc, France', was found in original Dock backfill **2313**, and must have been intrusive in this context, which otherwise appeared to date to approximately the eighteenth century. A single lump of unburnt coal was recovered from modern backfill **1267**, and was not closely dateable, although the pottery within this context suggests a late eighteenth to early nineteenth century date.
- 4.4.7 **Animal bone and marine shell:** a single animal bone fragment from a young cow was recovered from original Dock backfill **2313**, and oyster valves were retrieved

from backfills **1273** and **1276**. All of these remains have been interpreted as food waste.

- 4.4.8 **Conclusions:** a very small domestic assemblage, mostly from a single evaluation trench, was recovered during Phase 2. It included an interesting fragment of possibly fifteenth century pottery, some glass thought to date to the seventeenth to eighteenth century, and an excellent example of a late seventeenth to early eighteenth century clay tobacco pipe long bowl. Most of the assemblage dated to the late seventeenth to early nineteenth century, and the capacity of the artefacts to date the deposits was limited by the small number that were recovered. The value of the assemblage lies in its ability to add to the late seventeenth to early nineteenth century pottery assemblages already recovered or in the process of being recovered, in the Liverpool Dock area.

5. DISCUSSION

5.1 INTRODUCTION

- 5.1.1 This evaluation took place to further investigate the wall revealed to the east of Canning Dock in a previous phase of evaluation (OA North, 2004). The function of this wall remained enigmatic, but a theory was put forward suggesting the wall was built as a retaining wall across the original entrance to the Old Dock to keep water out during construction of the New Customs House in 1826.

5.2 PHASING

- 5.2.1 **Introduction:** the remains uncovered during the evaluation trenching and watching brief carried out to the east of Canning Dock can be briefly summarised in terms of the wider development of the dock area of Liverpool. What follows is an outline of the order of events based on the recent archaeological work.
- 5.2.2 **Phase 1:** this is the earliest phase and represents all activity relating to the construction and use of the Old Dock. The work summarised in this report has no remains which date to this phase specifically. However, the original layout of the Old Dock with the octagonal entrance basin with graving dock to the north has a bearing on the following developments. The Old Dock was constructed between 1709 and 1715.
- 5.2.3 **Phase 2:** the next major change in the maritime landscape of Liverpool was the additional construction of Canning Dock to the north and west of the entrance to the Old Dock. The method of construction meant that the graving dock was removed and replaced by the larger Canning Dock. In addition part of the octagonal basin was incorporated into the main eastern Canning Dock wall. Canning Dock was constructed at about 1740 (Ritchie-Noakes 1984). The earlier phase of dock wall identified as **2325** in Trench 142 would appear to relate to this phase of construction. Salthouse Dock was added to the south of Canning Dock in 1760 to allow for the increasing volume of shipping entering and leaving Liverpool (Jones 1996, 111).
- 5.2.4 **Phase 3:** towards the end of the eighteenth century the Old Dock was becoming less favourable owing to problems of silting and the increasing size of shipping. As a result, the decision was made to backfill it and construct a much needed, larger New Customs House in the space. In order to carry this out, it appears that the entrance to the Old Dock was blocked by wall **1254 / 1222 / 1213 / 1279** seen running through Trenches 138, 126, 1803b and 139 (in a progression from south to north – fig 3) to allow draining of the dock. The construction of this wall was of reasonable quality workmanship but there was definite evidence of the reuse of previous blocks from an unconfirmed dock wall.

- 5.2.5 The blocking wall, or dam, was probably a temporary work and, once the Old Dock was drained, the southern section of Canning Dock was built extending the line of the eastern Canning Dock wall to its present configuration. Construction of this section of the Canning Dock may have involved reusing some of the material that had been used to build the temporary blocking wall. Robber trench **1280** in Trench 139, the large displaced sandstone blocks, crushed sandstone and brick located in Trenches 140 and 141, within deposits **1287** and **2310**, and the results from Trench 126, which revealed evidence of robbing, may relate to this putative activity.
- 5.2.6 This blocking of the Old Dock and straightening out of the southern section of the eastern Canning Dock wall probably all occurred at or around 1826; the change in alignment can be seen when figures 11a-e, which all show historic mapping pre-1826, are compared with figure 11f (1836).
- 5.2.7 After all the new construction work had been completed, including the straightened stretch of Canning Dock, then the area between it and the defunct wall blocking the Old Dock was then backfilled. The backfill deposits around walls **1234**, **1254** and **1279** were very similar to those backing up against the Canning Dock, shown both in Trench 137 and in earlier watching briefs (OA North, 2004), namely a mixture of sandy-clays and building rubble. These deposits suggest deliberate dumps, rather than a gradual build up of materials while the walls were in use. The tip lines shown clearly in Trench 137 and Trench 139 indicate rapid dumping of material slumping across walls **1233**, **1234** and **1279**, suggesting a specific episode within a relatively short period of time within this area. Although Trench 138 does not show similar tip lines, the degree of truncation and disturbance in this trench probably destroyed any such evidence.

Trench Number	Dimensions Length – Width /m	Alignment	Wall (context number)	Phase
137	3.0 x 2.5	NE / SW	1234	2
			1233	3
138	4.2 x 3.2	NW / SE	1254	2
139	2.3 x 2.0	N / S	1279	2
140	4.0 x 1.5	NE / SW	-	-
141	4.8 x 1.8	NE / SW	-	-
142	5.1 x 1.9	NE / SW	2325	2
			2317	3

5.3 CONCLUSIONS

- 5.3.1 Excavation of the evaluation Trenches 137 – 142 have revealed the presence of four substantial sandstone walls and associated deposits, at a minimum of 1.5m below the current ground surface.
- 5.3.2 The four walls identified in the recent work were as follows:

- North / south wall or dam blocking the Old Dock entrance, probably dating to 1826 – seen as contexts **1213**, **1222**, **1254**, **1279** in Trenches 1803b, 126, 138 and 139. The remains were consistent and formed a continuous wall line that would have spanned the Old Dock entrance.
 - East / west wall, which pre-dates the later phase of Canning Dock wall, seen as **1234** in Trench 137. The wall curved slightly and appeared as if it continued towards **1279**. However, the function of the wall is unclear, it may have been a revetment wall for the dam wall blocking the Old Dock. The relationship between **1234** and **1279** remains unknown.
 - North / south Canning Dock wall first phase dating to 1740, which would have linked into the octagonal entrance basin to the Old Dock, seen as **2325** in Trench 142.
 - North / south Canning Dock wall second phase when the wall was straightened, probably dates to 1826 after the Old Dock went out of use. Seen as **2317** in Trench 142 and **1233** in Trench 137.
- 5.3.3 Evidence of the likely temporary nature of the wall built to block the Old Dock entrance was discovered by the reuse of earlier dock sandstone blocks and the robbing of the wall itself. The wall did not appear on any cartographic sources.
- 5.3.4 The results of the recent work clearly demonstrate that the development of the Liverpool docks was multiphased, with at least part of the docks' histories being invisible in terms of documentary evidence.

6. BIBLIOGRAPHY

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APPENDIX 1: PROJECT DESIGN

APPENDIX 2: CONTEXT INDEX

Context	Description	Thickness (max)
1228	Mid reddish-brown loose sandy-silt with occasional building rubble inclusions - backfill layer	0.40m
1229	Mid greyish-brown loose sandy-silt with frequent building rubble inclusions - backfill layer	1.53m
1230	yellowish-grey moderately compacted sand - possible levelling layer	0.19m
1231	Mid blueish-grey firm silty-clay with occasional sandstone boulder inclusions - backfill	0.12m
1232	Loose yellow sand with fairly frequent sandstone pebble inclusions - backfill	0.21m
1233	Canning Dock wall	-
1234	Sandstone wall	-
1235	Light-mid grey compacted sand with fairly frequent crushed concrete inclusions - levelling layer for paving stones	0.20m
1236	Mid brown moderately compacted silty-sand with frequent building rubble inclusions - backfill of 1237	0.70m
1237	Cut of service trench	0.70m
1238	Mid greyish-brown loose silty-sand with frequent sandstone fragments and building rubble inclusions - backfill	1.05m
1239	Light grey loose mixed concrete and sand - backfill of 1247	1.2m
1240	Modern concrete used to support electricity cable	0.25m
1241	Mid grey loose sand with occasional large fragments of red sandstone - backfill	0.43m
1242	Dark greyish-brown friable silty-clay with frequent charcoal fragments, and occasional building rubble inclusions - backfill	0.30m
1243	Mid grey moderately compacted silty-sand with occasional red sandstone fragments - backfill	0.70m
1244	Mid grey firm silty-clay with occasional sandstone fragments - backfill	0.13m
1245	Mid grey firm and claggy silty-clay with frequent sandstone fragments - backfill and natural silting mix	0.23m
1246	Mid blueish-grey firm clay with occasional large sandstone fragments - natural silting	0.23m
1247	Service trench cut	1.2m
1248	Concrete tree box	
1249	Mid brown firm sandy-silt with occasional sandstone	0.6m

	fragments and building rubble - backfill	
1250	Pale yellowish-grey loose gritty-sand - backfill, possible riverside deposit?	0.12m
1251	Dark reddish-brown soft silty-sand with occasional stone inclusions - backfill, possibly after 1254 became disused	0.25m
1252	Pale yellowish-grey loose gritty-sand - backfill, possible riverside deposit?	0.18m
1253	Mid yellow firm sand with occasional crushed sandstone fragments - backfill	0.20m
1254	Sandstone wall aligned north/south	
1255	Mid grey loose sand with occasional stone inclusions - backfill of 1256	0.40m
1256	Cut for services	0.40m
1257	Mid brown firm sandy-silt with occasional building rubble inclusions - backfill, possibly after 1254 became disused	0.75m
1258	Mid brownish-pink loose silty-sand - backfill	0.40m
1259	Mid pinkish-brown firm silty-clay with occasional small stones - backfill, possibly after 1254 became disused	
1260	Mid yellow soft sand with occasional sandstone fragments - backfill	
1261	Mid grey stiff clay with very occasional small stones inclusions	
1262	Red brick structure	
1263	Construction cut for Canning Dock	
1264	Backfill of 1263	
1265	Unstratified finds	
1266	Pale grey loose sand with crushed concrete fragments - modern hardcore	0.33m
1267	Mid brown loose sandy-clay with occasional sandstone fragments - modern backfill	1.13m
1268	Dark grey firm gritty-sand with frequent clinker and building rubble inclusions - modern backfill	1m
1269	Dark brown compact sandy-clay with occasional humic material content, directly overlies wall 1279	0.34m
1270	Yellowish-brown compact degraded sandstone - backfill	1.29m
1271	Pale grey loose sand with occasional stone inclusions - backfill, with tip lines to the south	0.6m
1272	Mid brown compact gritty-sand with occasional pea-grit and root activity - backfill, with tip lines to the south	1.50m
1273	Dark greyish-black friable ashy deposit with frequent building rubble with shell fragments - backfill, with tip lines to the south	1.87m
1274	Light brown friable gravelly-sand with fairly frequent building rubble inclusions- backfill, with tip lines to the	1.56m

	south	
1275	Black compact gravelly-sand frequent shell and lime mortar inclusions - possible midden deposit	1.67m
1276	Light brown loose sandy-clay with occasional sandstone fragments - backfill	0.7m
1277	Mid brown loose sand with very occasional sandstone fragments - fill of 1280	
1278	Mid blueish-grey, with mid brown gleying, compact sandy-clay - backfill	0.3m
1279	Sandstone wall aligned north/south, and returning to the west	
1280	Possible robber cut	
1281	Mid reddish-brown firm sandy-silt with frequent building rubble inclusions - possible backfill	
1282	Light yellowish brown loose sand, with very occasional small stones and concrete fragments, sand bedding below setts	0.07m
1283	Dark blackish-brown, compacted silty-clay, with occasional rubble, sand and concrete inclusions - backfill	0.34m
1284	Mid greyish-brown loose sand with occasional pebble inclusions - possible bedding layer for 2316	0.15m
1285	Dark grey loose silty-sand with frequent pebble inclusions - backfill	0.50m
1286	Compacted crushed yellow sandstone - demolition layer	0.52m
1287	Dark greyish-brown loose clayey-sand with crushed sandstone and sandstone block inclusions - demolition layer	0.60m
1288	Light yellowish-brown loose sand with very occasional pebble inclusions - backfill overlying 1294	0.10m
1289	Mid brown compacted clayey-sand with building rubble inclusions - demolition layer associated with 1294	0.81m
1290	Blackish-grey compacted sandy-gravel with frequent shell, brick and mortar inclusions	1.60m
1291	Yellow compacted and crushed sandstone - demolition layer	0.72m
1292	Light grey loose sand with frequent pebble inclusions - backfill	0.70m
1293	Yellow compacted and crushed sandstone - demolition layer appearing in north-facing section only	0.62m
1294	Brick structure - possibly the base of a well	0.22m
1295	Mid brown loose clayey-sand - backfill	0.76m
1296	Mid brown firm clayey-sand - backfill	1.06m
1297	Mid reddish-brown compacted clay with frequent gravel inclusions, and occasional sand lenses - backfill	0.88m
1298	Yellow compacted and crushed sandstone - demolition	0.28m

	layer only visible in east-facing section	
1299	Dark grey compacted sand aggregate - modern bedding layer	0.10m
2300	Pinkish-brown compacted sandy-gravel - modern bedding layer	0.12m
2301	Concrete - modern bedding layer	0.55m
2302	Mid brown compacted gravelly sand - fill of 2303	1.12m
2303	Square shaped cut	1.12m
2304	Dark grey compacted gravelly-sand with lenses of mid grey sand - backfill	1.86m
2305	Mid greyish-brown loose silty-sand with occasional sandstone fragments - backfill	0.43m
2306	Yellow compacted and crushed sandstone - backfill	0.34m
2307	Light yellowish-brown loose sand - backfill	0.18m
2308	Dark brown loose silty-sand with frequent root action - possible redeposited topsoil backfill	0.74m
2309	Mid greyish-brown loose silty-sand with occasional small stones and root action - backfill	0.73m
2310	Mid brownish-grey loose silty-sand with frequent building rubble inclusions - demolition layer	1.00m
2311	Dark grey compacted silty-clay - backfill only visible in west-facing section	0.32m
2312	Yellow compacted and crushed sandstone - backfill	0.75m
2313	Blueish-grey plastic clay - original backfill of Dock	0.39m
2314	Timber upright	0.75m
2315	Brick structure, possible remains of dock wall	0.18m
2316	Modern concrete pipe casing	0.45m
2317	Sandstone wall and brick structure	2.80m
2318	Mid buff compact sand – bedding layer	0.16m
2319	Dark grey mid compact sandy clay – levelling layer	0.32m
2320	Pinkish-red compact clayey-sand with 50% brick and sandstone inclusions – fill of 2324	0.30m
2321	Pinkish-brown mid compact sand with 30% brick and sandstone inclusions - backfill	1.40m
2322	Mid grey-brown compact silty sand with lenses of grey blue plastic clay – backfill	2.20m
2323	White concrete – modern support structures	0.41m
2324	Cut for cast iron pipe	0.30m
2325	Yellow sandstone block wall structure	1.98m

APPENDIX 3: FINDS SUMMARY

Context	Category	Quantity	Description	Date range
1267	Coal	1	Lump	Not closely dateable
1267	Pottery	2	Pearlware-glazed white earthenware fragment from pie dish or basin, and 'Willow' transfer-printed ashtray base	Late eighteenth - early nineteenth century
1267	Pottery	2	Tin-glazed earthenware hollow-ware dish rim and small fragment with cobalt blue painted flowers (?)	Eighteenth century
1267	Pottery	1	White earthenware, possibly with creamware glaze	Late eighteenth - twentieth century
1267	Pottery	1	Brown-glazed red earthenware	Late seventeenth - early twentieth century
1269	Pottery	1	Brown-glazed buff-coloured stoneware bottle or jar base	Eighteenth - nineteenth century?
1273	Marine shell	2	Oyster valves	Not closely dateable
1276	Clay tobacco pipe	1	Almost complete long bowl with flat oval base, bowl at very shallow angle to stem	Late seventeenth - early eighteenth century
1276	Glass	1	Cylindrical green bottle fragment	Eighteenth - nineteenth century
1276	Marine shell	1	Oyster valve	Not closely dateable
1276	Pottery	2	Brown-glazed red earthenware hollow-ware vessel base and rim	Late seventeenth - early twentieth century
1276	Pottery	1	Brown-glazed laminated buff-coloured earthenware crock (?) base	Late seventeenth - early eighteenth century
1277	Clay tobacco pipe	1	Stem, medium to wide bore	Seventeenth - early twentieth century
1277	Pottery	1	Brown-glazed red earthenware	Late seventeenth - early twentieth century
1277	Pottery	1	Orange earthenware rim from large unglazed hollow-ware vessel	Late seventeenth - early eighteenth century?
1278	Clay tobacco pipe	1	Stem, medium bore	Eighteenth - early twentieth century
1278	Glass	1	Green cylindrical bottle fragment	Eighteenth - nineteenth century
1278	Pottery	1	Medium sandy oxidised ware bowl (?) base	Fifteenth century?
1289	Clay tobacco pipe	1	Stem, medium bore	Eighteenth - early twentieth century
1296	Clay tobacco pipe	1	Stem, medium bore	Eighteenth - early twentieth century
2313	Animal bone	1	Tibia from right-hand-side of young cow	Not closely dateable
2313	Glass	1	Colourless glass drinking (?) vessel base marked 'Arcoroc, France'	Late twentieth century
2313	Glass	2	Thin-walled green bottle fragments, with very small bubbles throughout resulting in very pitted surfaces	Seventeenth - eighteenth century?
2313	Pottery	1	Tin-glazed earthenware	Eighteenth century

Context	Category	Quantity	Description	Date range
2313	Pottery	2	Self-glazed laminated orange earthenware dish rim and vessel base	Late seventeenth - early eighteenth century
2313	Pottery	1	Self-glazed orangey-buff-coloured earthenware coarse hollow-ware vessel fragment	Late seventeenth - early eighteenth century
2313	Pottery	1	Fine brown-glazed red earthenware vessel base	Late seventeenth - early nineteenth century

ILLUSTRATIONS

FIGURES

Fig 1	Location Map
Fig 2	Location map of evaluation and watching brief Trenches
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Fig 3b	Detailed plans of Trenches 1803b, 126, and 137-141 showing the heights Above Ordnance Datum in meters
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Plate 1: View of walls *1233* and *1234* looking north-north-west



Plate 2: View of walls *1233* and *1234* showing curvature of *1233* looking west



Plate 3: View of wall *1254* looking south



Plate 4: View of wall *1254* (looking north) showing brick packing *1262*



Plate 5: North face of wall *1254*



Plate 6: View of wall *1279* looking west



Plate 7: View of wall **1294** looking north



Plate 8: View of timber structure **2314** with east-facing section of wall **2315**



Plate 9: Canning Dock Wall **2317** looking south-west



Plate 10: Canning Dock Wall **2317** looking south-east