

7. CULTURAL HERITAGE

7.1 Introduction

- 7.1.1 The cultural heritage significance of the site was evaluated by Durham University Archaeological Services, commencing in October 2005. This was carried out by means of a desk based assessment, followed by a geophysical assessment then a trial trenching exercise.
- 7.1.2 An archaeological desk study was undertaken in October 2005 to check the status of the site. The assessment was conducted by Archaeological Services in accordance with a specification provided by Tyne & Wear Archaeology Officer.
- 7.1.3 The objective of the scheme of works was to assess the nature, extent and potential significance of any surviving archaeological features within the proposed development area, so that an informed decision may be made regarding the nature and scope of any impacts of the proposed development.
- 7.1.4 Direct impacts would be likely during the construction phase whereas indirect effects upon the setting of scheduled monuments for instance could persist through the operational phase.

7.2 Methodology

- 7.2.1 The field visit took place on 7th October 2005. This report was prepared between 4th and 17th October 2005.
- 7.2.2 The following sources of information were consulted:
- National Monuments Record;
 - Sites and Monuments Record;
 - Local studies archives and other relevant repositories;
 - Information available on internet resources such as the Keys to the Past website, AHDS and OASIS.
- 7.2.3 The site lies at the boundary between Carboniferous Westphalian Coal Measures and Permo-Triassic Magnesian Limestone. The solid geology is overlain by glacial drift.

7.3 Baseline conditions

Place name origins

7.3.1 The settlement of Newbottle lies to the north of the settlement of Houghton-le-Spring. The origin of the place name of Newbottle derives from the Old English nīwe (new) and botl (house); this suggests early medieval origins for the settlement (Watts 2002).

The prehistoric and Roman period (up to 5th Century)

7.3.2 There is no direct evidence of prehistoric activity in the proposed development area. However, there are several sites within three to four kilometres. The site of Copt Hill (HER 100), located to the southeast, a Neolithic and Bronze Age barrow/burial mound. Hastings Hill Bronze Age site (HER 113) located to the northeast includes a causeway camp, cursus and barrow. Humbledon Hill and Warden Law Hill Neolithic-Bronze Age barrows (HER 255, 447), located to the east, also demonstrate predominately prehistoric activity (Lyndon Dodds 1995).

7.3.3 Within close proximity of the proposed development site there is a crop mark, identified from aerial photographs; this may date to the prehistoric period. This crop mark is located immediately northwest of the proposed development site (HER 4845).

The medieval period (5th century to 1540)

7.3.4 Newbottle village is constructed on a regular two-row plan with a green. The earliest documentary reference to Newbottle (HER 323) is in 1183. It is mentioned in the Boldon Book, which states that Newbottle was a major centre with a mill.

The post-medieval period (1541 to 1899)

7.3.5 Saxton's map, dated 1542, (Figure 3), show no detail, purely showing the presence of the towns surrounding the survey area. Newbottle (spelt 'Newbottell') and Houghton-le-Spring are depicted by a church and a few buildings. A bridge is shown crossing the river, but no roads or routeways are present.

7.3.6 Place names have altered again on John Speed's map of 1611 (Figure 4). It is stated by Milburn that in 1671 the 'old moor' pasture land was enclosed and divided (Milburn 1979); then, in 1700, the arable fields were enclosed. The location of these lands is vague.

7.3.7 Robert Morden's map dated 1695 has the first indication of a main route; the route shown is from Durham to Sunderland, and the Were River is marked (Figure 5).

- 7.3.8 Newbottle was the home to two potteries, High Pottery and Low Pottery (HER 4641/2). Newbottle High Pottery (HER 4641) was founded in c.1720 and Low Pottery (HER 4642) was in production before 1728. High Pottery was located in Pottery Yard behind Dial House. Although the pottery closed in 1878 the broken kilns and works could be seen until 1890. The site has since been developed and built upon but, during road widening in 1968 at Pottery Yard, pottery waste was discovered. Wasters and kiln furniture have also been observed on a loose spoil tip northwest of the High Pottery site. There are two earlier references to pottery kilns, one of 1615 which mentions the presence of kilns at the north end of the village, and one of 1728 which states the Tile Kilns ceased to operate in 1728. These may refer to the High and Low Potteries respectively (Fletcher 2005). Ball suggests that the Potteries were founded in 1700 and 1740 (Ball 1906).
- 7.3.9 Bowen's map of 1777 (Figure 6) gives more detail of the settlement of Houghton-le-Spring, showing the church and properties aligned on both sides of the main road. Although the village of Newbottle appears to be developing there is no indication of its size on this map.
- 7.3.10 Cary's map of 1787 (Figure 7) shows more detail of the road network of that time. Lambert's map of 1807 (Figure 8) indicates a growth in settlement to the south and depicts the waggonways and pits sunk within the surrounding area, the depths of which are marked in fathoms.
- 7.3.11 A more detailed picture of the occupation of towns and villages starts to emerge on Greenwood's map of 1820 (Figure 9); the railways, pits, roads and settlements size are also shown more clearly. Newbottle has expanded to the east and west and Houghton-le-Spring has a windmill.
- 7.3.12 The expansion of the coal mining industry in the northeast saw the opening of Newbottle colliery in 1816; it worked until 1956. Some 18 miles of private railway carried coal to the River Wear; the Lambton Railway (HER 3131) connected Margaret Pit, Success Pit & Betty Pit (HER 3126, 3127, and 3136). The colliery was opened by the Nesham family; in 1819 it was taken over by the Earl of Durham, and then by Lambton Collieries Ltd in 1896. This became the Lambton, Hetton and Joicey Collieries Ltd, which was taken over by the National Coal Board in 1947.
- 7.3.13 The first Earl of Durham, John George Lambton (1792-1840), known as 'Radical Jack', was both a colliery owner and a leading figure in British politics. He was involved in the 1832 reform movement, served as ambassador to Russia, and during his time as High Commissioner of British North America he over saw union of the provinces. The Lambtons also owned engineering works making locomotives and stationary engines at Philadelphia, to the north of the site (Emery 1992). To show their appreciation to the Earl of Durham, the people of the area erected a stately

monument, a reproduction of a Greek Temple in Doric style. This was completed in 1844 and stands in a prominent position on Penshaw Hill, to the north of the site (Hind 1978).

- 7.3.14 The Lambton Waggonway (HER 2833) was built in 1815 by the Nesham family, to replace an earlier one from Philadelphia to the Penshaw Staiths. Nesham was a strong supporter of the Revolutionary wars in America, and some of the place names in the township of Newbottle have historical links to this. Bunker Hill, the site of the colliery offices, and Philadelphia works were named after battle sites of 1775 and 1776 (Census 1861).
- 7.3.15 The Lambton Waggonway (Figure 21) was the largest colliery railway systems in the region. It was the site of an experiment by William Brunton in 1813, when he introduced his 'Mechanical Traveller' or 'steam horse' machine to part of the line between Margaret Pit and West Herrington through the winter of 1814. The machine was a locomotive fitted with a pair of mechanical feet and was used to haul loads up a 1 in 36 gradient; it gained its name because of its jerky shuffling gait (Brunton 2005). This line was sold to John Lambton in 1822. It was realigned in 1831 and abandoned *c.*1870. When a new car park was under construction at Sunderland Royal Hospital, remains of the waggonway proved to survive as a band of crushed coal waste (Figure 9). In 1996, excavations at the former Lambton coke works found 150m of wooden rails and sleepers preserved in situ.
- 7.3.16 The tithe map dated 1838 (Figure 10) shows the division of land around Newbottle, the main landowners being the Earl of Durham, Wilson, Watson, Chilton and Byres, with the land mainly in use as arable farmland. There are indications of pits close to the proposed development on the site of Jane Pit and Mary Pit and Margaret Pit to the north (HER 3126, 3134/5, Figure 1), they are unnamed and appear to be small scale mining possibly in the form of bell pits. The Lambton Waggonway is referred to as the 'Lord Durham Railway' and to the south Sedgely Farm (HER 5128) is called Segg Letch Garth, with the Tile Sheds (HER 3137) just to the north. By the time of the 1st Ordnance Survey map the tile sheds are only depicted as small buildings showing a decrease in size of the industry. In the 30 years between the drawing of the Tithe Map and the 1st edition Ordnance Survey map, industry in other parts of the area expanded, as did the community and the area of housing.
- 7.3.17 The 1st edition Ordnance Survey map (Figure 11) shows an increase of industrial works within the vicinity of the site. These include Jane Pit (HER 3134) which lies on the Old Waggonway (HER 3130). The pit may have been disused by 1858 as it is referred to as Old Shaft (coal). Penshaw Foundry (HER 3110), to the northwest of the site, is shown with a mill dam and race which appears to be out of use by the time of the 2nd edition. Located to the north of the development site lie Success Brickfield, Newbottle Junction Engine, and Newbottle Reservoirs (HER 3125, 3128,

3129 & 3132). Success Brickfield was served by a waggonway (HER 3131) that ran east-west along what is now Bradwell Way in Success. The Newbottle Junction Engine was sited on the head of Junction bank; this was the heart of the railway system. The reservoirs of Newbottle were built in the 19th century to supply and store water from the area, largely for the use on neighbouring industrial sites.

7.3.18 The quarries shown on the 1st edition OS map of the area include West Herrington, Stoney Potts and Newbottle quarries (HER 3152, 3154/57). These sites were used to extract stone in the earlier 19th century, but they are clearly disused by 1858. To the east of Newbottle was a limestone quarry with working limekilns (Milburn 1979). These former quarries, located to the west of Newbottle, are now covered by new housing, but they could be seen until the early 1960's. There are corn mills within the vicinity of the site; to the southeast, at Sedgelech there is a water-powered mill and to the south there is wind powered mill at Houghton-le-Spring. To the southeast is the Flint Mill. Milburn states that this was originally called Newbottle Mill, and changed use in 18th century; the mill ground flint for use in the potteries.

7.3.19 The 1894 2nd edition Ordnance Survey map (Figure 12) shows that the pits located to the west of the site are disused and the Old Wagon way is now a footpath. To the north the Junction engine is no longer there, but the railway network is still in use. The northern area surrounding Margaret Pit and Success is more developed and The Northern Hospital for Infectious Diseases has been built close to the disused Jane Pit. The hospital was presumably built to treat diseases such as diphtheria, whooping cough and possibly typhus, and childhood diseases such as measles and smallpox, all of which were on the increase at this time. With the growth of the community two Methodist chapels have been built. The village also shows an increase in public houses and inns. To the south of the village three terraces of houses and a farm have been built at Sunnyside; further evidence of the population increase is seen in the appearance of new schools at Philadelphia Lane to the north and Newbottle Lane to the south. The proposed development site remains arable farmland, with the only change being the removal of a field boundary.

The modern period (1900 to present)

7.3.20 The 3rd edition Ordnance Survey map (Figure 13) shows that the development area was still predominately open fields in 1918. The expansion of population and housing of Newbottle is apparent, and Philadelphia Lane, to the north of the site, has also increased in size. To the south the settlement of Grasswell has been established, with housing and a football ground; the school buildings south of Cellar Hill House have also grown. The Northern Hospital has gained a mortuary, and is now labelled the Northern Hospital (Infectious Diseases). To the north, Success Pit is disused, and some reservoirs have gone.

7.3.21 The 4th edition Ordnance Survey map (Figure 14) shows that the site of Jane Pit has been redeveloped for housing, a number of the large sheds surrounding Margaret Pit to the north have gone, and the industrial buildings along the route of Philadelphia Lane have been demolished and replaced with terraced houses. The study area is still occupied by open agricultural land, crossed by an east-west track.

The listed buildings

7.3.22 There are no listed buildings within the proposed development area. However, within the village of Newbottle there are five grade II listed buildings along the route of Front Street (HER 7022, 7026, 7030-2). These are Newbottle Working Men's Club, North Farm, East Grange, East Farm barns and Storey House, all of which date from the 18th century. To the south of the village is Cellar Hill House, a grade II listed building off Houghton Road (HER 7033). Cellar Hill House was used as a school in 1858 and continued in educational use until 1873-9, during which time it was described as a preparatory school (Fletcher 2002). This building is referred to as Rowes Hall on the 1838 tithe map.

7.3.23 Within the vicinity of the proposed development in Newbottle, at the eastern end of the village is East Farm (HER 4995). The original farmhouse and hind's cottage dates to c.18th century. Two barns within the complex are grade II listed buildings and the rest are of 19th century date.

7.3.24 The parish church of St Matthew was built in 1885-6 by Oliver and Leeson of Newcastle; the porch was added in 1888. It is built in an Early English style with lancet windows (HER 7028). The church stands at the east end of Newbottle.

7.3.25 Philadelphia Generating Station is a grade II Listed Building (HER 5107) to the north of the proposed development site. A temporary power station opened by the Sunderland District Electric Tramways Ltd in 1905, it served the collieries and the tramway system. The parts of the building which survive today are the large generating hall and two smaller buildings. In more recent years the buildings have been used as a central garage for the National Coal Board (Ayris & Linsley 1994). This complex includes purpose-built housing for the workers, located to the north of Philadelphia Generating Station, and an adjacent tramway, which is now a bus depot.

Site reconnaissance

7.3.26 A field visit was conducted, to help ascertain the potential of the proposed development area to contain any archaeological resource. The visit noted site topography, earthworks and areas of modern overburden, modern services, boundaries, buildings and other upstanding remains. A *pro forma* recording sheet was utilised for this purpose.

7.3.27 The air photograph (Figure 15) shows the site as open land. The sites of Margaret Pit, Success and the Northern Hospital can all be seen. The triangles of old railway lines south of Margaret Pit are clearly visible, but the southern section of the Lambton Railway has largely disappeared. The whole of the development area was in arable cultivation when the photograph was taken in 1981. Since 1981 the landscape of the northern part of the proposed development area has been planted with trees (Figure 16). The southern part of the site has predominately remained the same. The only visible change is the addition of a drain or sewer which traverses the south eastern corner of the site in a northeast – southwest direction (Figures 17-20).

7.4 Potential impacts

Effect on setting

7.4.1 The closest listed buildings lie to the east of the proposed site, within Newbottle village. These buildings lie within a carefully monitored conservation area. The proposed development would not have a direct visual impact upon the buildings and would not alter the character of the wider setting.

The potential archaeological resource

7.4.2 There is no direct evidence for prehistoric or Roman activity within the study area. There is some evidence of prehistoric activity in the surrounding area, and this indicates that an as yet unidentified resource has the potential to exist. Little disturbance has taken place in the southeastern area.

7.4.3 Archaeological deposits relating to the medieval and post-medieval period may survive over the southern part of the site. This evidence is likely to relate to agricultural practices and farming, as established from the cartographic evidence.

7.4.4 However, the foundations, levelling of land and the associated services could have a direct impact on any archaeological resource of the site, if any exists. Therefore at the request of the County archaeologist a geophysical survey, followed by a trial trenching exercise was carried out. This work was guaranteed by condition 30 which as now been discharged. There is still a requirement for a watching brief during the construction phase and this will be implemented when the development proceeds.

Geophysical report

7.4.5 The report of the geophysical survey is included in Appendix 7.1 in full. In summary anomalies reflecting past agricultural land-use have been detected, including possible traces of ridge and furrow cultivation and former field boundaries shown on 1st edition Ordnance Survey (OS) maps.

7.4.6 The Tyne and Wear Archaeologist therefore required a programme of trial trenching; targeted so as to sample the ridge and furrow remains, and also complete a random sample over the rest of the survey area.

Trial trenching

7.4.7 The trial trenching exercise was carried out in July 2006 in accordance with a specification provided by Tyne and Wear Archaeology Officer. The works comprised the excavation of a series of 11 trenches covering up 430m² located over geophysical anomalies. The full report is included in Appendix 7.2.

7.4.8 In summary the findings were that there were no significant archaeological features in any of the trenches. The two features, which were excavated were dated to late 19th or early 20th centuries.

7.4.9 As no significant archaeological features have been uncovered, no further scheme of archaeological works is recommended in relation to this development. No further work is required on the pottery assemblage.

7.4.10 No archaeological deposits have been identified which require preservation in situ.

7.5 Mitigation measures

7.5.1 Since no features of importance were discovered no mitigation measures are required, other than the watching brief required by the planning condition.

7.6 Conclusion

7.6.1 No archaeological deposits have been identified which require preservation in situ.

7.6.2 Geophysical survey and trial trenching has confirmed the findings of the desk study. Therefore there would be no significant adverse impacts arising as a result of the development.

7.7 References

Cartographic sources

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