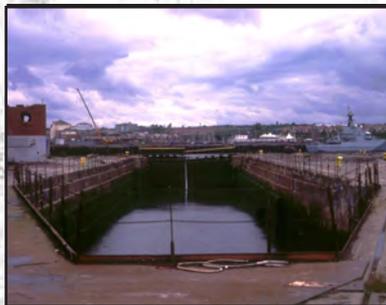
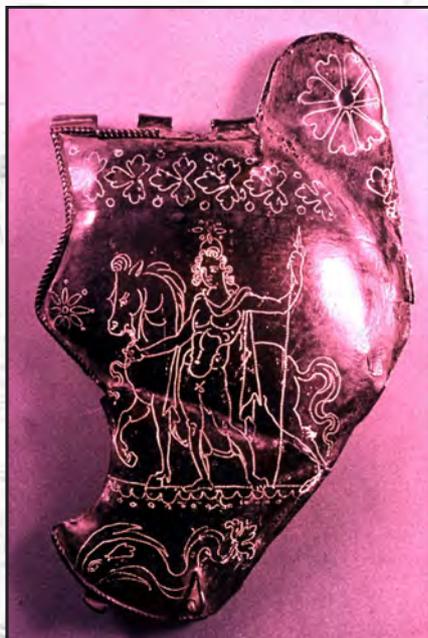


SOUTH SHIELDS

AN ARCHAEOLOGICAL ASSESSMENT & STRATEGY



- SOUTH TYNESIDE METROPOLITAN BOROUGH COUNCIL - PLANNING DEPT.
- CITY OF NEWCASTLE - PLANNING AND TRANSPORTATION DEPARTMENT
- NORTHUMBERLAND COUNTY COUNCIL - ARCHAEOLOGY AND CONSERVATION
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PART 1 : ARCHAEOLOGICAL ASSESSMENT

1 Introduction

1.1 Geology, Location and Topography

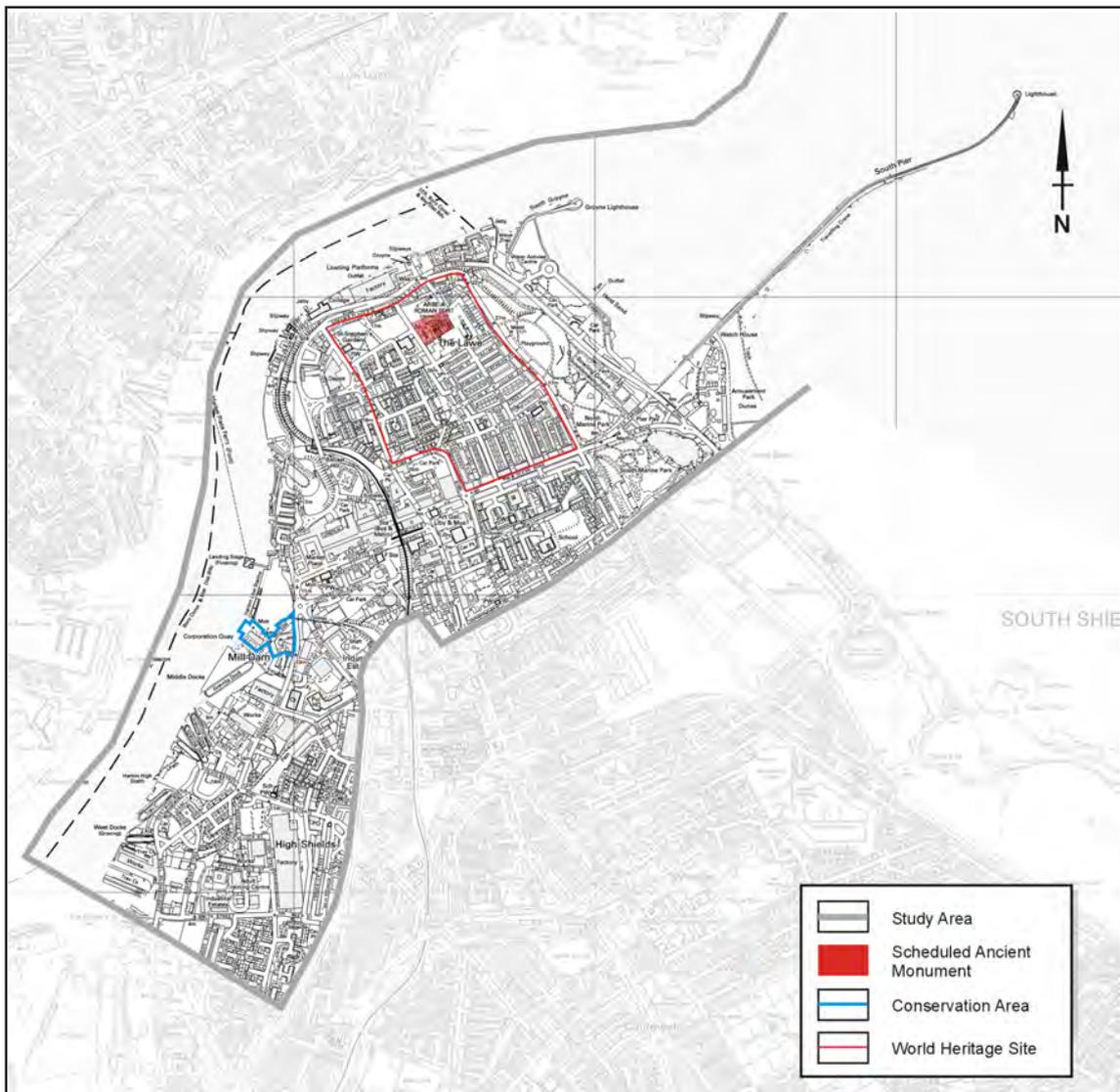
South Shields stands on the south bank of the River Tyne close to the mouth, and on an ancient ferry crossing point linking to North Shields. The two Shields have very different ancestries but have been paired not only in name but also in fortune, enjoying together periods of prosperity interspersed with episodes of upheaval and decline.

Strategic factors clearly determined the location of the Roman fort at South Shields on The Lawe, a headland 20m high. The location at the mouth of an important river was also a primary factor in the economic development of South Shields. Fishing, the shipping trade, shipbuilding and associated industries formed the industrial base of the town. The topography reflects the underlying geology, the soft magnesian limestone forming gently undulating hills, with the riverside area of the town standing on a mantle of boulder clay approx. 12m in depth. Settlement initially grew up on the headland and the secondary focus of settlement was on the riverside around the Mill Dam, a tidal inlet. Filled in during the nineteenth century, this feature is shown on Fryer's map of 1772 as running almost as far inland as the main north-south route out of South Shields towards Gateshead, the present day Fowler Street. To the west of the town, a large area of low-lying land known as Jarrow Slake floods with each tide, preventing any extension of settlement in this direction.

The economic development of the town has been curtailed by limits to the navigability of the river channel, particularly at low tide, which was restricted by various sand banks. Sand banks in the river channel have been mapped from the 16th century onwards; the In Sand extended into the river from the south bank causing a constriction in the river channel at The Narrows. The Herd Sand lay along the shore to the south of the river mouth and another sand bank, Dortwick Sand, constricted the channel on the north side of the river, upstream from the In Sand. The state of the river channel is like to have fluctuated over time. The location of lights to guide shipping through the channel at South Shields had to be changed due to alterations in the channel in the post-Medieval period. In the middle of the nineteenth century man-made improvements to the channel were carried out and the navigability improved.

1.2 Documentary and Secondary Sources

The starting point of the assessment has been the Tyne and Wear Historic Environment Record (previously known as the Sites and Monuments Record), and this report draws heavily on the work of Barbara Harbottle, the former Tyne and Wear



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Fig 1. Study Area showing statutory constraints

County Archaeologist, who created the majority of entries. The majority of the information on the Roman material has been provided by staff of Tyne and Wear Museums, particularly Paul Bidwell, Nick Hodgson and Margaret Snape. Additional sources have been researched, and a number of new HER entries have been created both for this survey and as part of the ongoing enhancement of the record.

A significant source of documentary information about the origins of South Shields derives from complaints by the Newcastle burgesses from the thirteenth century onwards. The records of Durham Priory form another important documentary source. The more detailed research of documentary sources, including medieval and post-Medieval deeds which record individual properties, is outside the scope of this study. Potentially, further work on these would result in a considerable advancement in our understanding of the evolution of the medieval town. The three most important secondary sources are: W Hutchinson’s “History of Durham”, 1787; “The Borough of South Shields”, 1903, by G B Hodgson; and the 1907 “Victoria County History of Durham” vol, II edited by W Page.

1.3 Cartographic Sources

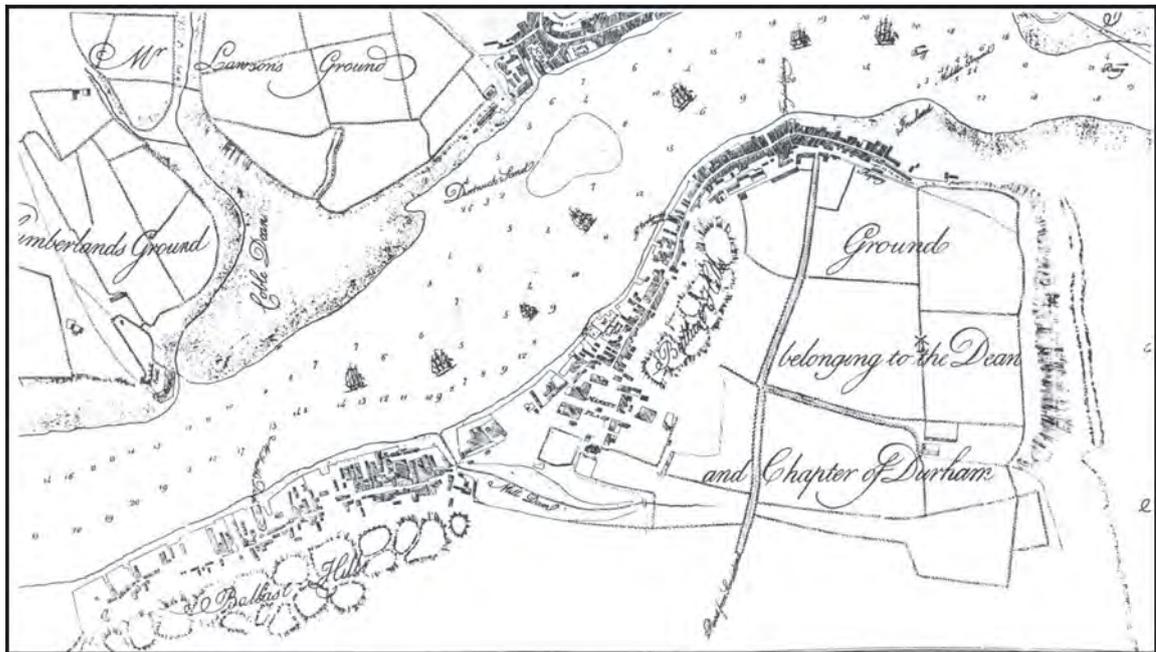
The towns on the banks of the Tyne have been frequently mapped, reflecting the importance of the Tyne as a shipping route. The post-Medieval development of South Shields can be traced from a sequence of maps dating from the 16th century and summarised below. Detailed analysis has focussed on the maps of Fryer, Woods and the OS 1st Edition, as these provide the most accurate information.

A map marked as 1545 is reproduced in Craster 1907, pl 15. Maps by Cecil (1576), Speed (1611) and Saxton (1637) show the river Tyne with settlements at its mouth on each bank, both marked as “Sheales”. Gardiner’s map of 1654 depicts South Shields as a linear settlement on the riverbank to the north and south of the Mill Dam Inlet. Similarly Ogilby’s, “First Survey of Roads In Britain”, 1675, shows the Tyne ferry crossing between North and South Shields. South Shields is depicted as a two-row settlement along the riverbank.

By the eighteenth century settlement has grown up round the promontory, as seen on Richardson’s “Plan of the Township of Westoe and Harton” of 1768, which depicts properties scattered in a narrow band following the riverbank. It appears to be a representational map rather than an accurate survey of the town. It shows a ropery near the Lawe, a tilery and ballast hills. Fryer’s map of 1772, “A Plan of the Low Part of the River Tyne”, is a more detailed survey which shows settlement at South Shields along the river frontage and displays land divisions and ownership by the Dean and Chapter of Durham. Ballast hills lying to the east of settlement both north and south of Mill Dam are marked on this plan. The most densely built-up areas are located immediately south of Mill Dam and at the northern end of the town. Armstrong’s map of 1791 shows a similar settlement at South Shields to Fryer’s map, extending along the riverbank almost to Jarrow Slake. A church, ballast hills, the Mill Dam creek and lake are represented and a windmill is located south-east of the fort. Blackburn’s plan of 1798 shows the development of some of the docks. Wood’s 1827 “Map of South Shields” is the most detailed map of the riverside developments prior to the OS 1st Edition map of 1862. The 2nd Edition OS sheet is dated 1899.

1.4 Archaeological Data

The archaeological data available for South Shields is concentrated heavily on the *Arbeia* Roman Fort site and the associated civilian settlement. The extensive series of excavations at *Arbeia* Roman Fort are presently grouped as TWHHER Event no. 1535 and the detail of this archaeological data has not been reproduced within this assessment. Excavation in the area of the Roman occupation has revealed that occupation both pre- and post-dated the period of the Roman fort, with indications of activity continuing into the 7th century. A programme of excavation at the Roman fort site is on-going and a more detailed record of Roman and post-Roman activity within and around the most completely excavated military station on the Northern Frontier will emerge as the results are published.



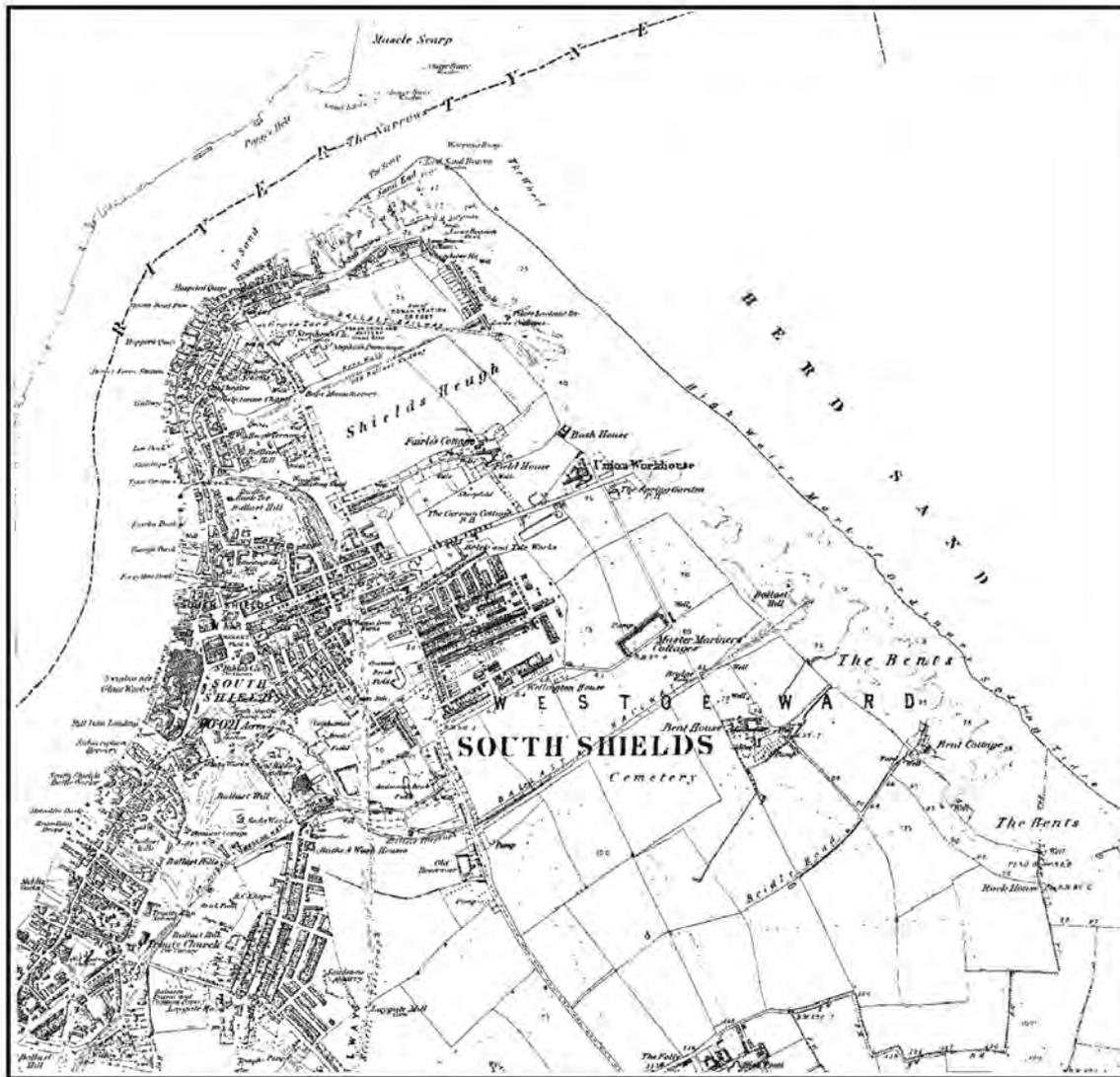
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Fig 2. Fryers map of 1772

There is some excavation evidence available for the Mill Dam area of the historic core of settlement at South Shields. An excavation there in 1993 (TWHHER Event no. 1536) recorded dumped layers of ballast and waste material and industrial structures all dating to the post-Medieval period. Earlier deposits were not examined. Excavations at the former Brigham and Cowan's Shipyard (TWHHER Event no. 1538) show dumps of material were used to reclaim land on the foreshore in the nineteenth century. A cobbled street, running down towards the river, was probably of nineteenth century date but no doubt reflects the earlier street pattern of narrow lanes running down to the quayside. In one trench, a deposit of compact gravel and water-worn cobbles, which sloped towards the west and overlay natural clay, was interpreted as the eighteenth century tidal foreshore of the river (TWM, 1995, p 1. HER Report no.1995/29). A Desk Top Assessment of Coronation Street (TWHHER Event no.1541) covers the riverside area of the Mill Dam inlet and reiterates previous findings in the area.

Excavations further north on the riverside at Wapping Street (TWHHER Event no. 1542 and 1545) discovered two quay walls some 29m behind the present day quayside indicating substantial alteration of the river frontage and land reclamation in the post-Medieval period. These quay walls were probably of seventeenth century date and suggestions of earlier features were also found (Speak, 1994, p 3). A Watching Brief at Velva Liquids (TWHHER Event no. 1544) found remnants of a sand bar, interpreted as part of the In Sand, beneath modern terracing of the area (Stobbs, 1998, Section 3.4).

Further inland, a watching brief in Kings Street in 1997 (TWHHER Event no.1540) revealed levels of natural clay but no archaeological features beneath the basement of the former Binns shop.



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Fig 3. First Edition OS Map of 1862

A Desk Top Assessment of the South Groyne, Littlehaven area of South Shields (TWHER Event no. 1539) which collates some useful information particularly with regard to the depth of made ground of ash, sand and clay. The depth of this material varied from c. 5m to 1m and in some area natural was found as close as 0.30 m to the ground surface (The Archaeological Practice, 1997, HER Report no. 1997/28). The degree of variability of the depth of made ground both in this area and more generally in South Shields indicates that earlier deposits may well have been preserved beneath dumped material and it also emphasises the need for evaluation of each site since predicting the depth of this material at any given location is not possible without below-ground investigation. The archaeological record to date has, outside the area of the Roman Fort, provided negligible evidence of archaeological deposits earlier than the eighteenth century. However, it has indicated that, while in some areas archaeological deposits have been truncated by cellaring, the deposition of deep swathes of ballast and the reclamation of land on the river foreshore, will have resulted in the preservation of archaeological evidence of earlier settlement at South Shields.

2 The Pre-Urban Archaeological Evidence

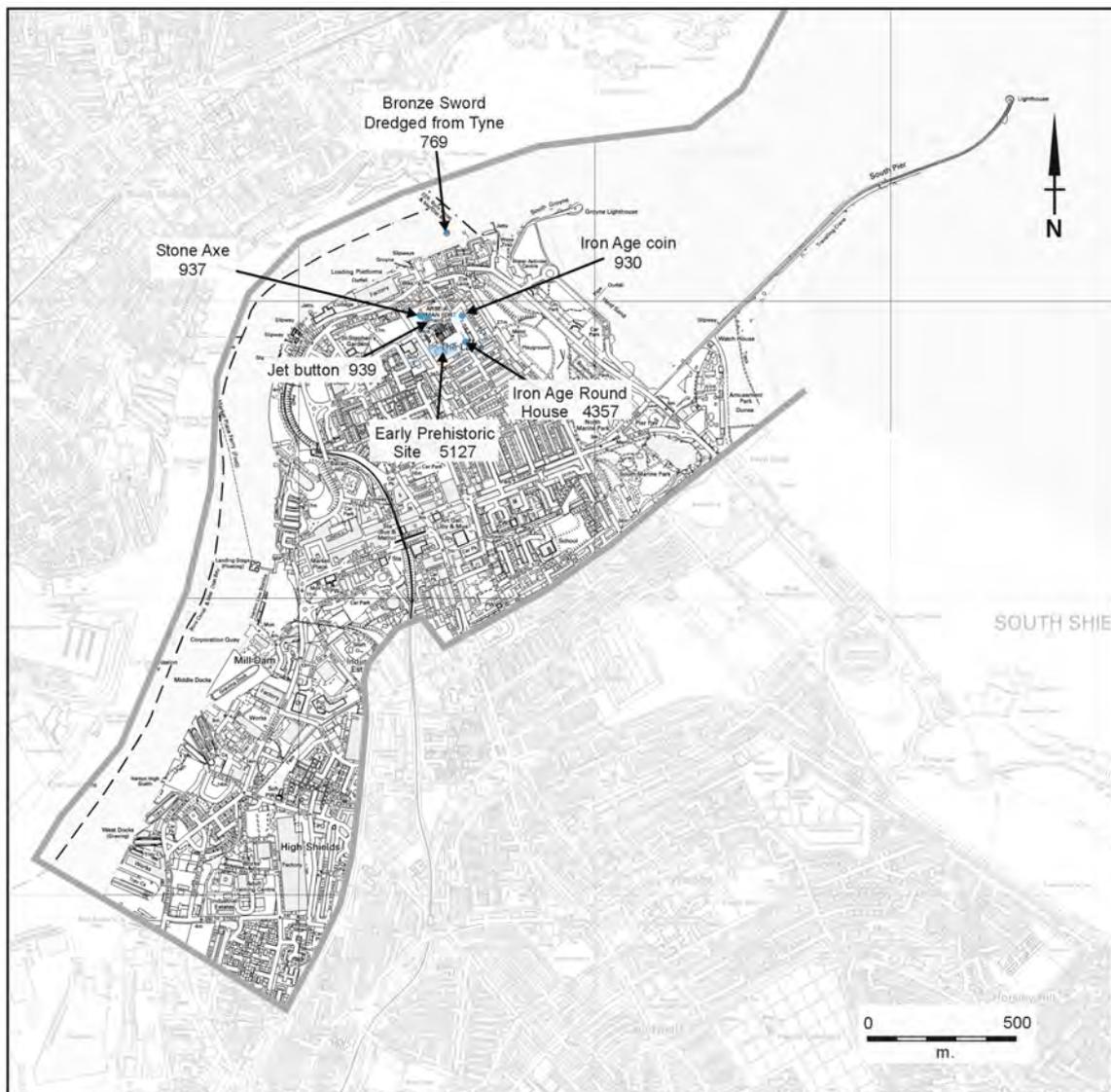
2.1 Prehistoric Archaeological Evidence

Discoveries beneath the Roman fort have complimented the evidence of stray finds to show that the higher ground at the headland was an attractive location for prehistoric occupation. The most startling discovery was made in the middle of the nineteenth century; “The antlers and bones of the *Cervus Megaceros*, or extinct Irish elk, were found in a brickyard were found in a compressed stratum of dry peat, which lay beneath two feet of ordinary soil and a seam of clay twelve feet thick” (Longstaffe, 1858, p 48; TWHER 866). Miket suggest this discovery might derive from a buried landscape, although the exact location has now been lost (Miket, 1984, p 81).

It is clear from the lithic evidence found on the site of the later fort, that the area was frequented by bands of hunter-gatherers in the Mesolithic period, perhaps to exploit the game resources identified by Longstaffe. The type of activity deduced from the processing waste hints at a slow accumulation of material over a long period of time, rather than one or two more intensive episodes. The presence of scrapers and burins is indicative of domestic activity, and the fact that the discard spread extends beyond the area of excavation hints that there may be a very extensive area visited and inhabited by Mesolithic communities over a long time span (Hodgson et al, 2001, p91).

It is in the Neolithic period that the first features are recorded – a possible segmented ditched structure (TWHER 5127), described in the excavation report as “reminiscent of the so-called ‘causewayed enclosures’ of the Neolithic”. The circular structure is overlain by deposits dated by Radio Carbon methods to the late fourth millennium BC. A number of Neolithic flints, including leaf-shaped arrowheads and a polished stone axe may be contemporary or slightly later than the ditch sequence, but the plotted distribution shows that it was the highest point of the headland that was the focus of activity. The presence of a barbed-and-tanged arrowhead and a cup-marked stone, the latter in a residual Roman context, hint that the location continued in importance into the late Neolithic/early Bronze Age period of c. 2000-1500 BC (*op cit*, p 94). A V-perforated jet or shale button, also of Early Bronze Age date, (TWHER 939) was found in the vicinity between 1875-1878 (Miket, 1984, p80, 83).

Elsewhere on the fort site and of unknown date, are “...specimens of flint weapons were also found beneath the level of the Roman station” reported by Hodgson (1903, p 9). More recent excavations outside the fort have produced additional evidence of general prehistoric activity in the area, for example, worked flints found within Roman levels at the Morton Walk cemetery (TWHER Event no. 1537; Snape, 1993, p 59).



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Fig. 4 Prehistoric Activity

In the late nineteenth century, a bronze sword was found (TWHHER 769). It may have been dredged from the Tyne but could equally have come from river gravels dredged from the Thames estuary as the ballast for returning colliers.

The discovery in 1991 of a round house and pits (TWHHER 4357) of mid-late Iron Age date, under the early parade ground, has provided important information for a period that is not well represented in the archaeology of Tyne and Wear. The value of the find lies in the excellent degree of survival of the house, being covered by wind-blown sand after abandonment, possibly as the result of destruction by fire. The resultant quality of the archaeo-botanical, artefact and structural has produced a very clear picture of life on a small farming settlement, giving early evidence of spelt wheat and rotary querns. Ard-marks from cross-ploughing, and field boundaries were also recorded in the pre-Roman strata (Hodgson 2001, p108-155).

A small number of Iron Age finds have been recorded from elsewhere in the study area; an unprovenanced brooch (TWHHER 932, Miket, 1984, p80, 83) and an Iron Age coin (TWHHER 930) from the site of the Roman fort.

2.2 Summary Definition of Settlement

The area of higher ground at the headland, the Lawe, is likely to have been a focus for early settlement, exploiting the broad spectrum of resources available from the coastal margins. The river bank may also have been occupied but any evidence awaits discovery beneath natural and human deposition of sand and gravel. Iron Age occupation has been demonstrated beneath the fort, but the exact form of the settlement (farmstead, village etc) has not been established.

3 Components of Roman Settlement

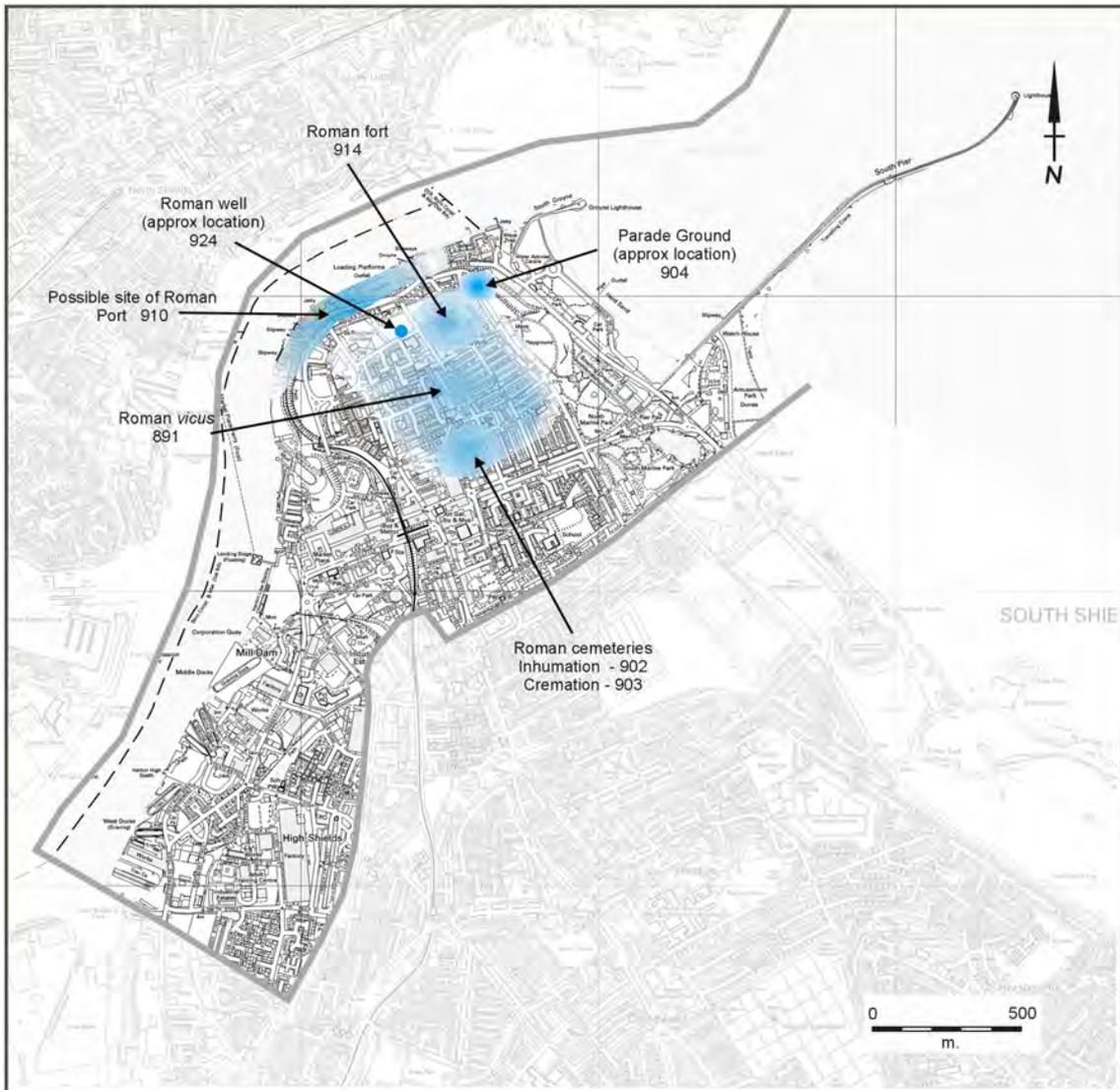
3.1 Fort

3.1.1 Archaeological Evidence

There is a large body of material demonstrating settlement at South Shields in the Roman period (Fig 5). The Roman Fort on the Lawe (TWHHER 914; Scheduled Ancient Monument, T&W No. 2), close to the mouth of the River Tyne was occupied over a long period. The interior which has been partially excavated in stages since 1875, is now in the process of further excavation (Fig 6). The fort is considered to be the principal supply base for the eastern part of the northern frontier of Roman Britain. Associated monuments include a parade ground (TWHHER 904), a civilian settlement or vicus, (TWHHER 891), cemeteries, (TWHHER 902-3), the likely site of a Roman port (TWHHER 910) and possible Roman wells (TWHHER 924-5). The presence of an earlier wooden fort to the south of the stone fort is suspected (Bidwell and Speak, 1994).

After almost 20 years of excavation, the basic sequence of development of the military base is currently described (following Hodgson, 2001) thus:

- 1) The mid-Antonine fort is the earliest known, c. AD 160, of 1.67 hectares.
- 2a) Supply base of 2.1 ha. To accommodate this the early fort was extended south east in the early 3rd century, the HQ was rebuilt, 11 new granaries added NW of a new wall dividing the new facilities from the original buildings of the fort, which included two new granaries presumably for the garrison.
- 2b) Six more granaries were built south east of the dividing wall which was demolished so that the supply base took up three-quarters of the walled enclosure. Troops were accommodated in *contubernia* in paired blocks, back-to-back, with smaller rooms for the troops and larger apartments for officers at the southern (rampart-facing) end. There were now a total of 23 granaries.
- 3) Late fort, built after a fire in the late 3rd/early 4th century. The HQ was remodelled, 10 barracks erected, partly re-using the walls of the south-east granaries, and a courtyard house, which was altered in the mid 4th century.



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Fig 5. Main areas of Roman activity

4) Occupation continued into the 5th century.

In 1959 John Thornborrow excavated at the corner of Beacon Street and Lawe Road roundabout, at a site to the seawards side of the eastern ramparts of the fort. He recovered three stone altar bases (TWHHER 904) *in situ*, a large inscribed altar (TWHHER 905), fragments of a further very large altar, the statue of a bearded god (TWHHER 906) identified by Phillips as Mars, a large moulded panel and a feature interpreted as a tribunal. These discoveries are taken to suggest that a parade ground (TWHHER 904) lay immediately east of the fort, with its long axis parallel with the east wall of the fort, and the shrine area and tribunal at the north end. Re-interpretation of the evidence has questioned this assumption; the remains might equally denote the presence of a temple in this location (N Hodgson, pers comm.) These excavations found Roman deposits sealed beneath 1.5 m of gravel ballast (Thornborrow, 1961, p 7).

An excavation in the Morton Walk area (TWHHER Event no. 1537), which recovered Roman inhumations, demonstrated that Roman features survived immediately beneath the tarmac surface (Snape, 1993, p 59).

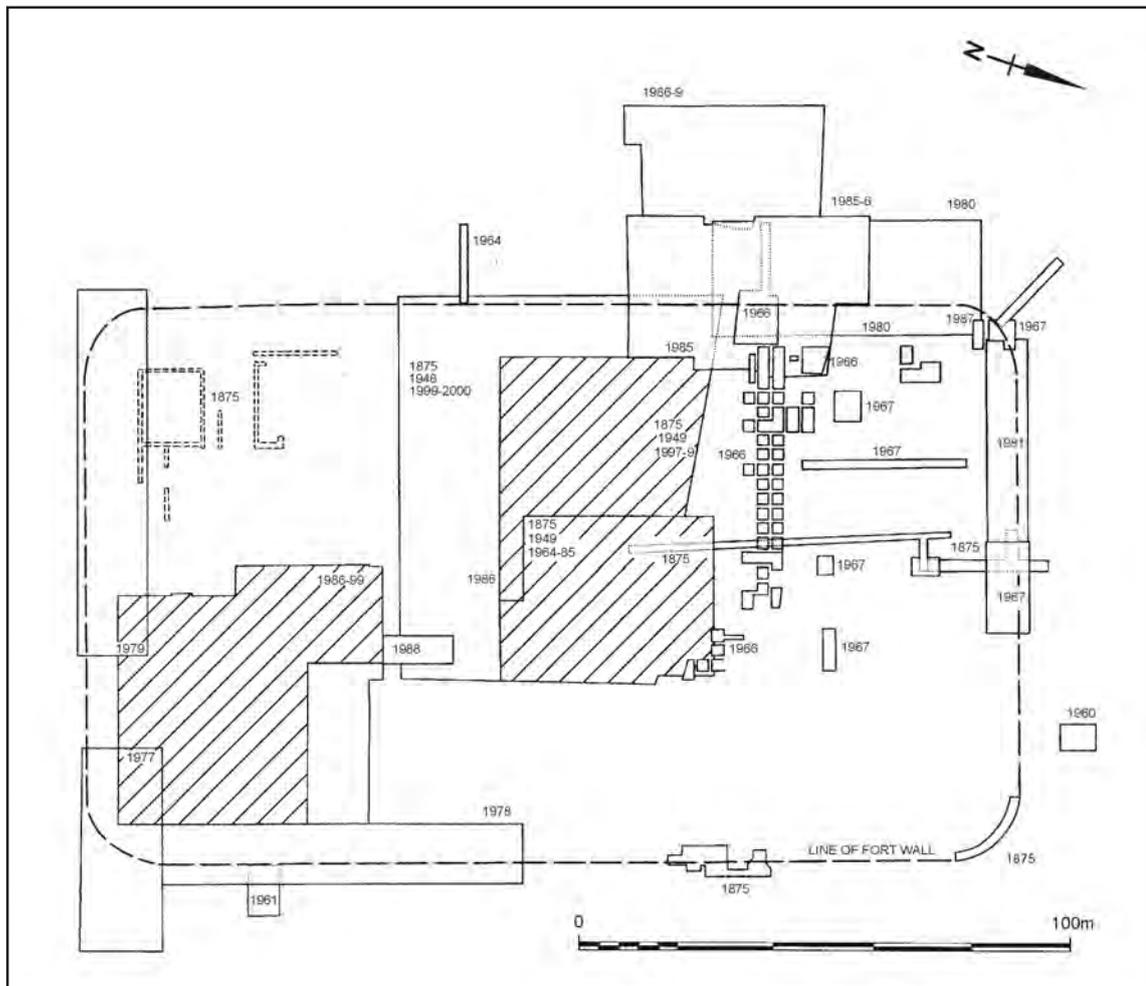
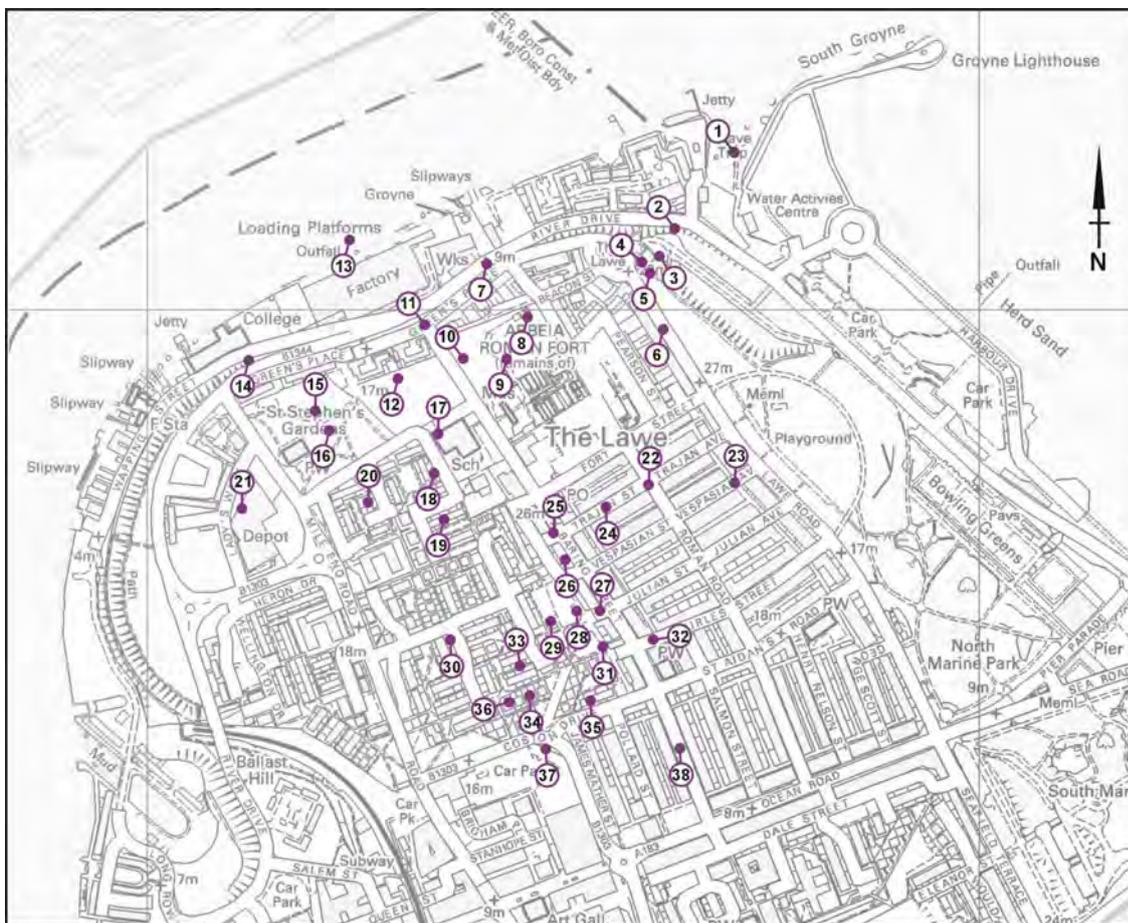


Fig 6. Excavations at Arbeia Roman Fort

3.2 Port

It is argued (Speak, 1994, p 15) that, as a significant supply base and maritime garrison, the Fort of Arbeia would have had port facilities and even that the primary purpose of the early fort at South Shields must have been to control and defend the port. The use of the term “port” however, should not necessarily conjure-up visions of moles, harbours and warehouses, as the unloading of flat-bottomed Romano-Celtic ocean-going vessels needed no more than a beaching strand, with little in the way of structural facilities. Whatever the character of the port, the location has been the subject of considerable debate. Richmond (1934, p 84), at first suggested it may have been located at the Gut (Mill Dam) but later thought that it was unlikely to have been accessible to shipping (Richmond, 1953, p 1). Speak also discounts the Mill Dam as a possible site for the port because of its distance from the fort. On the basis of his topographic analysis of the sand banks mapped in the 16th century, Speak suggests that the closest point to the fort which would have been suitable would have been immediately west of the In Sand, where the main river channel veered towards the south bank (Speak, 1994, p 10-11). Excavations in 1990 (TWHHER Event no.1542) showed that at least a 60 m width of foreshore had been reclaimed since the late medieval period, and a sherd of 4th century pottery was found beneath the reclamation deposits. Speak concludes that there is

virtually no possibility of port facilities downstream of this area and so the port must have been between the Marine Survival School and Mill Dam, probably within the area in which Brigham and Cowan's shipyard was later situated (Speak, 1994, p 15). However, the recorded presence of channels and other features particularly within the Herd Sands, suggest that it may be worth exploring the possibility that the local topography has in former times been more conducive to the requirements of small boat traffic than it is presently (Archaeological Practice, 1997, p 13). The river channels have altered considerably over the course of time, prior to man-made improvements, to the extent that early lighthouses at North Shields were moveable so that they could track the shifting course of the channel. While it is possible to map the configuration of the channels in the post-Medieval period, this is not possible for earlier periods and it is therefore unwise to discount possible areas on the basis of an argument built literally on shifting sands. The whole of the



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Fig 7. Roman vicus and cemetery finds

- | | | | |
|------------------------------------|----------------------------------|---|--------------------------------------|
| 1. Wave Trap, Roman Coin:907 | 11. Roman Pottery & walls:1897 | 21. Gold coin of Magnus Maximus 920 | 31. Roman tombstone: 896 |
| 2. Roman Statue:906 | 12. Samian dish: 1895 | 22. Coin, skull & human remains: 1886 | 32. Samian ware: 1891 |
| 3. Quern: 1901 | 13. Roman Altar: 893 | 23. Roman Altar:895 | 33. Roman tombstone: 900 |
| 4. Parade ground, Roman Altar: 905 | 14. Mortar: 1894 | 24. Bone chape:926 | 34. Linen smoother & mortarium:893 |
| 5. Hypocaust & gold coin: 1899 | 15. Roman Pottery:919 | 25. Roman Altar: 892 | 35. Roman tombstone:897 |
| 6. "Villas" on the Lawe: 1900 | 16. Roman coins: 918 | 26. Sculptured stone & stone trough: 1865 | 36. Pine cone funerary monument: 899 |
| 7. Drain of tiles: 898 | 17. Roman stone-lined well: 1893 | 27. Two parallel Roman Roads/paths | 37. Roman Tombstone: 898 |
| 8. Roman Fort, Bronze figure:917 | 18. Pipeclay statuette | 28. Female skeleton grave goods: 1888 | 38. Stone coffin & skeleton |
| 9. Roman tile fragment: 931 | 19. Silver coin:1802 | 29. Wall of Roman tiles:1887 | |
| 10. Samian dish:1896 | 20. Roman altar:894 | 30. Roman Tombstone:901 | |

river front area, from the headland as far south as Mill Dam should be regarded as of primary importance for the recovery of evidence relating to riverside settlement and commerce from the Roman period onwards.

The likelihood that Roman wrecks and/or their cargoes exist in the estuary is supported by regular chance finds from beaches and dredging. The most spectacular finds are the Roman shield boss and helmet cheek-piece (TWHER 927 + 8) dredged from the river mouth before 1877; and the possibility of wreckage existing under parts of the land reclaimed from the sea since Roman times should not be discounted since there has undoubtedly been a significant encroachment of land into the estuary since the Roman period (Bidwell, 2001, 1-23). Magnetometer survey and periodic diving of the Herd Sands has not produced evidence of pre-modern wreckage in an area of the river which has seen repeated ship-wrecks, salvage operations and channel scouring. Local archaeological divers are maintaining a "Watching Brief" on the possible site of the Roman wreck.

3.3 Vicus, Civilian Settlement and Associated Cemeteries

The extent of civilian settlement adjacent to the fort and its cemeteries appears to have been very considerable. Buildings and chance finds of Roman artefacts have been recorded on all four sides of the fort in the area defined to the west of Mile End Road and to the south by Coston Drive and St Aidans Road, amounting to some 60 acres.

In 2002, excavations by Tyne and Wear Museums on the site of Hadrian Primary School, between the river and the fort, revealed early buildings including a probable granary on a road leading to the riverside. This may represent the earliest evidence of a supply facility at South shields, before the stone fort was built in the Antonine period (c. AD 160). Later activity saw the construction of clearly civilian buildings including a porticoed court-yard building, producing high-status finds which re-inforce the impression from elsewhere at South Shields that the vicus was large, wealthy and cosmopolitan (Snape, forthcoming).

At present, knowledge of the vicus is rudimentary, but an estimation of the extents has been made (Speak, 1994, p 16 and Fig p 17). This area has been mapped (Fig 5) but it should be stressed that its boundary has not been confirmed by excavated evidence.

The isolated finds of Roman date shown in Fig 7 include coins (TWHER 489, 907, 908, 918, 920); bone chape (TWHER 926); patera (TWHER 911, 912, 913); tile fragment (TWHER 931); alters (TWHER 892, 893, 894, 895); tombstones (TWHER 896, 897, 898, 900, 901); funerary monument (TWHER 899); bronze figure (TWHER 917); pottery (TWHER 919, 920); pipeclay statue (TWHER 921); glass object (TWHER 923); jet button (TWHER 939). A bronze key, once thought to be Roman, is now thought to be of seventeenth or eighteenth century date (TWHER 929). In general the specific locations of these finds are not known but they have all

been found in the vicinity of the fort and vicus. It has not been possible to map all of the isolated finds and separate monuments of Roman date mentioned in the text. Further research of primary excavation records would be required to allow a more detailed summary of the archaeological material to be compiled and made accessible via the Historic Environment Record.

3.4 Summary Definition of Settlement

While it is possible to define the area of Roman military occupation, the extent of civilian settlement has not been proved by excavation. There is also a strong possibility that significant remains of riverside activity from the Roman period may survive but the location of the port is still to be discovered, making investigation of the riverside area of primary importance to a fuller understanding of Roman settlement at South Shields.

4. Early Medieval Settlement

4.1 Urban Form

4.1.1 Documentary

A tradition, reported by Leland in the early 16th c. that the Lawe was known as *Caer Urfe* or *Burgh*, the birthplace of King Oswin of Deira (died c. AD 651) remains an unsubstantiated speculation (Pevsner, 1983, p 414). Aside from this, the earliest medieval documentary evidence for South Shields dates to the thirteenth century. It appears likely that a small settlement existed continuously in the area from an early post-Roman date with the focus of post-Roman occupation on the fort extending into the 7th century. Following the final abandonment of the fort, it has been suggested that the focus of settlement shifted west to the low-lying land along the riverside, in the area later known as the Mill Dam (Speak, 1994, p 18).

4.1.2 Archaeological Evidence

An Anglo-Saxon spearhead (TWHHER 938) was found in “the upper occupation levels of the fort” (Bruce, 1885, p 271). Artefactual evidence (TWHHER 915) and inhumations burials (TWHHER 916) suggest 5th century occupation of the former Roman fort site. Evidence is accumulating for the continuation of occupation well into the fifth century and beyond. The granary north-west of the headquarters building was floored in the mid-C4, but was subsequently demolished, and its walls robbed. Later again there was quarrying of the metalling round it, and eventually a new flagged floor. There were alterations to the ditch and road in front of the south-west gate, and finally burials were cut into the surface of the approach road, marking its eventual disuse.

4.2 Components of Early Medieval South Shields

4.2.1 South Shields Anglian Monastery (TWHHER 274)

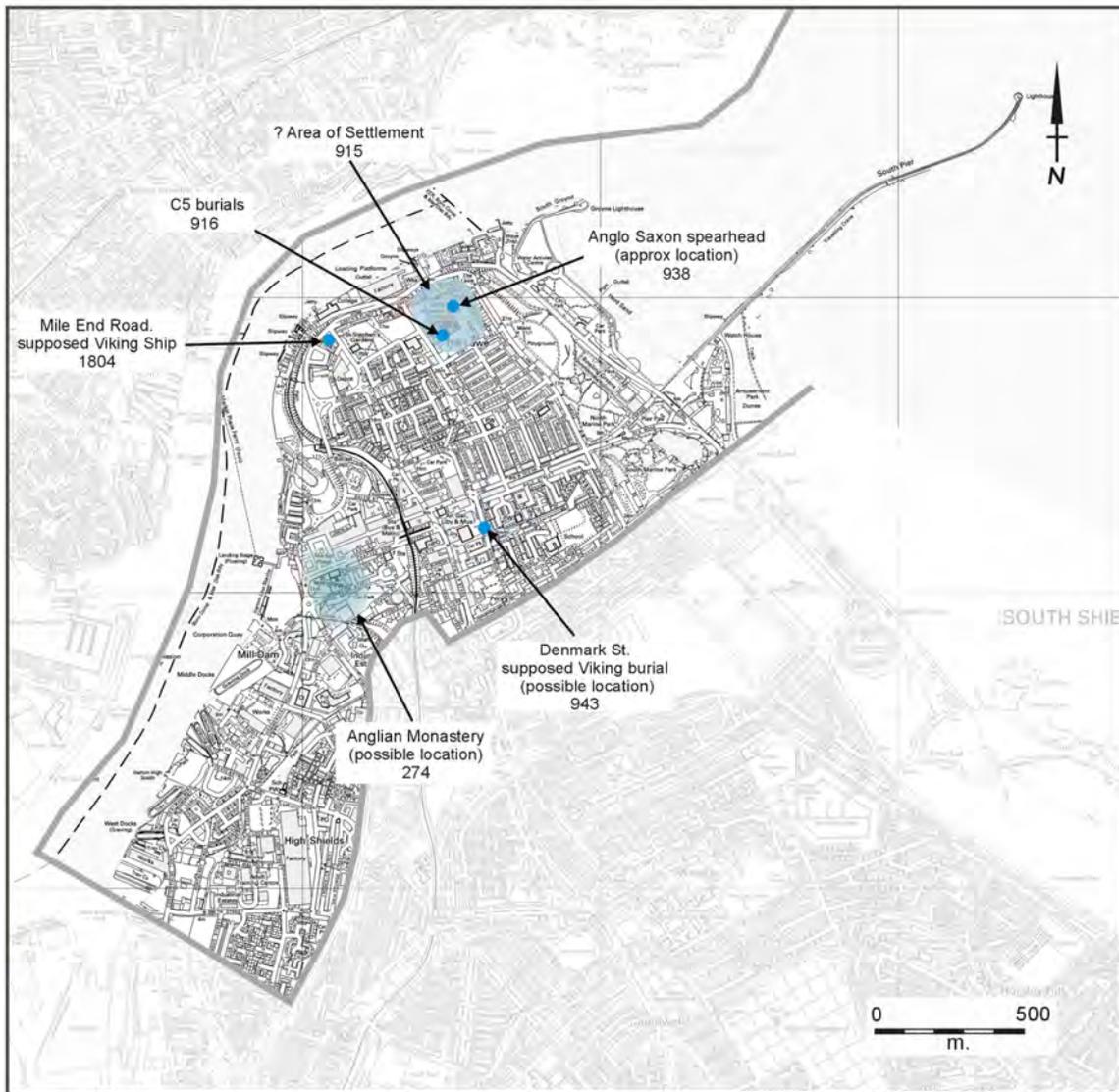
In 648 Hild received a hide of land in the district north of the River Wear called “Werhale” where she dwelt for a year living under monastic rule, before moving to Hartlepool to become abbess (Page, 1907, p 80). While it seems unlikely that in such a short space of time an establishment of any great size would have developed, the fact that Bede refers to a monastery/nunnery not far from the mouth of the Tyne two years after she had left, indicates that it continued after Hild’s time there. It is not known how long this house survived and it is thought (Savage, 1897, 47-75) that it was probably destroyed by the Danes. The location is not known, but the Bede’s description “not far from the mouth of the River Tyne” hints at South Shields. Various authorities have argued that the site of the monastery founded by St Hild c. 648, and last heard of under Abbess Verca c. 685, is under or in the vicinity of St. Hild’s church (TWHHER 274). The present building is post-medieval, and the only earlier fabric is a section of medieval wall, incorporated into the east tower (Pevsner, 1983, p 416).

4.2.2 Port

There is somewhat unreliable evidence which could indicate the presence of a port in the Mill Dam area. There have been two reports of the remains of boats (TWHHER 943) being seen in the centre of South Shields, possibly referring to the same boat. Hodgson (1903, p 2), quoting the Monthly Chronicle of 1890, wrote that some 60 years before “the blackened remains of a large vessel”, embedded in sea sand mixed with shells, had been found at considerable depth in the old river channel between Mill Dam and Marine Park. There is also a handed-down, oral report (O’Brien and Miket, 1982, p 1-3) that, when a sewer was being laid in Denmark Street in the early 20th century, a Viking boat was found c. 15 feet below ground surface. While it is certainly possible that the Mill Dam inlet was used as a haven or small port, this evidence cannot be used to establish it at this location in the early medieval period.

4.3 Summary Definition of Settlement

There is evidence of continued occupation on site of the Fort at the Lawe in the post-Roman period until the 7th century. The location of burials (TWHHER 916) across a Roman road suggest that the layout and form of the Roman site was abandoned but little evidence of the form of settlement in the post-Roman period has been recovered to date. In addition to the headland, settlement may have been located in the Mill Dam area in this period, where the Anglian monastery is traditionally thought to have been located.



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Fig 8. Post Roman Sites

5. Medieval Town

5.1 South Shields, Urban Form

5.1.1 Documentary Evidence

The Prior and Convent of Durham were confirmed in possession of the vill of Westoe in late 11th century/early 12th century, and it appears that the vill of Shields (TWHER 945) was founded as a new town or as an appendage of Westoe. South Shields was certainly a borough town by 1235 (Beresford, 1967, p 432) and in the rent roll of that year, the Melsonby Book, there were 24 tenants. By 1256 there were 27 houses, 2 ovens, 4 breweries, and several fisheries.

The new town was set-up as a commercial rival of Newcastle, which maintained a royal monopoly on the trading of all goods landed or exported from the “Port of Tyne”, which was specifically defined as comprising all of the river from “Sparhawk

to Hedwin Stream” ie from the mouth of the river to the western boundary of Newcastle. At the Assizes of 1254 the Newcastle burgesses claimed that the Prior of Durham set up a trading centre on the Tyne, and specifically mentioning the illegal sale of bread to ships using the port (Surtees, 1890, p 81). The bishop’s response was that the place where the town was founded lay outside the jurisdiction of Newcastle, but the jurors found in favour of the burgesses of Newcastle and awarded damages. In 1256 the Prior of Durham was indicted for “founding a large vill in the port of the Tyne with 27 houses, two ovens and four breweries . . . and fish was sold wholesale” (Hodgson, 1903, p 40-41). The Prior of Durham was also accused along with the Prior of Tynemouth in relation to North Shields in 1279 for having built a town “where no town ought to be, except lodges only where fishermen should abide.” (Hodgson, 1903, p 41). It would appear that the town continued to flourish in spite of constant opposition from Newcastle and attained considerable importance as a seaport, with mill(s) and salt pans. The dispute erupted again in 1345, when in reply to complaints by burgesses of Newcastle, the Bishop of Durham stated that the town was not “new” one in 1235 and itself existed by ancient right. (Hodgson, 1903, p 40).

The constant pressure exerted by Newcastle on both Shields prevented their emergence as major North Sea ports, and in the fifteenth century the town became depopulated and only 15 tenants paid rent (*op cit*, p 59).

5.1.2 Cartographic Evidence

Speak notes that the earliest representation of the settlement of South Shields, the map accompanying Gardiner’s 1654 pamphlet “England’s Grievance”, shows rows of houses on the riverside extending from the In Sands to Jarrow Slake and presumes this was also the pattern of the medieval settlement (Speak, 1994, p 14). The earliest post-medieval map which provides an accurate survey is Fryers, 1772 survey. From this map it is possible to suggest the extents to the linear form of the town in medieval period. Continual riverside development however has left no trace above ground from this period .

5.1.3 Archaeological Evidence

Medieval finds (TWHER 936) have been recovered from the beach at South Shields but may have derived from dumped ballast or from the numerous shipwrecks on Herd Sands and the Black Middens. On three occasions between 1887 and 1913 Blair published lists of medieval coins found “on the Herd Sands between the South Pier and the Fish Pier”, and “on the beach at South Shields”. He considered they had all been washed up by heavy seas probably from a wreck. He listed pennies, half-groats and groats of Henry III, Edwards I, II, III and IV, and of the Scottish kings Alexander II, David II, Robert II and James I. Also found were six-pences and shillings of Elizabeth, James I (and VI) and Charles I, as well as Roman coins (TWHER 908) (Blair, 1887, 1909, 1913). A medieval bone ring (TWHER 941) decorated with a fleur de lys was found at an unspecified location at

South Shields in 1939 (PSAN, 1939, p 170).

An excavation in the Mill Dam area in 1993 (TWHHER Event no. 1536) recorded dumped layers of ballast and waste material with post-medieval industrial structures built directly onto the ash and clinker infill. Water levels prevented any detailed examination of the ground beneath the infill (Hodgson, 1993, p 54, 55). This suggests that ballast dumps may seal earlier deposits and if opportunities arise in the future to examine the earlier deposits beneath made ground it should be ensured that resources are available to enable the material to be examined and fully recorded.

Evidence of quay walls at a distance of c. 29m landward from the modern waterfront and land reclamation in the area of the riverside at Wapping Street (TWHHER Event no. 1542 and 1545) clearly demonstrates the extent that the riverfront has been altered and land has been reclaimed from the river at South Shields. However, the stratigraphic sequence did not establish the date at which these events occurred. A dump of material against one of the quay walls included green-glazed pottery, while seventeenth century pottery was found in river silts immediately above it. The dumped material could have been re-deposited, and may not date the quay walls or the episode of land reclamation which followed. The presence of two quays, at different distances from the river, strongly suggests that there was a series of land reclamation episodes in this area. To unravel the complex development of the river front, a long section of deposits stretching back from the modern day river front will need to be examined.

5.2 Components of the Medieval Town

5.2.1 Religious House

South Shields chapel of St Hild (TWHHER 944) has listed building grade II status. A parochial chapel in the parish of Jarrow, it was probably in existence by the mid 12th century and is traditionally thought to be the successor of an Anglian monastery. Hodgson notes the first regular curate was collated in 1321 (1903, p 234-55), and records a burial in 1565. In the late seventeenth century it is said to consist of a nave and 5 bay south aisle, but no chancel, and medieval work is thought to survive in the lower part of the west wall and the tower arch (Pevsner 1983, p 416).

5.2.2 Port, Quay

Hodgson suggests that evidence from 1303 of the payment of tithes to Jarrow church for a ship suggests that there was a quay and harbourage at South Shields. (Hodgson, 1903, p 47). Newcastle burgesses certainly complained in 1306 that North and South Shields were jointly guilty of providing supplies to 100 to 200 ships and denying Newcastle this trade. There are also records of anchorage dues paid at South Shields (Surtees, 1909, p 68).

5.2.3 Ferry

A ferry landing at the “Coble Landing”, or “Old Ferry Landing” is thought to have existed at least from the fourteenth century and probably earlier. Hodgson quotes a number of early post-Medieval references to the ferry (Hodgson, 1903, p 71).

5.3 Medieval Industries

Throughout the medieval period, fishing formed an important part of the economy of the town. Salt panning, which became established in the fifteenth century, equalled or overtook fishing and shipping in importance by the mid sixteenth century (Pevsner, 1983, p 414).

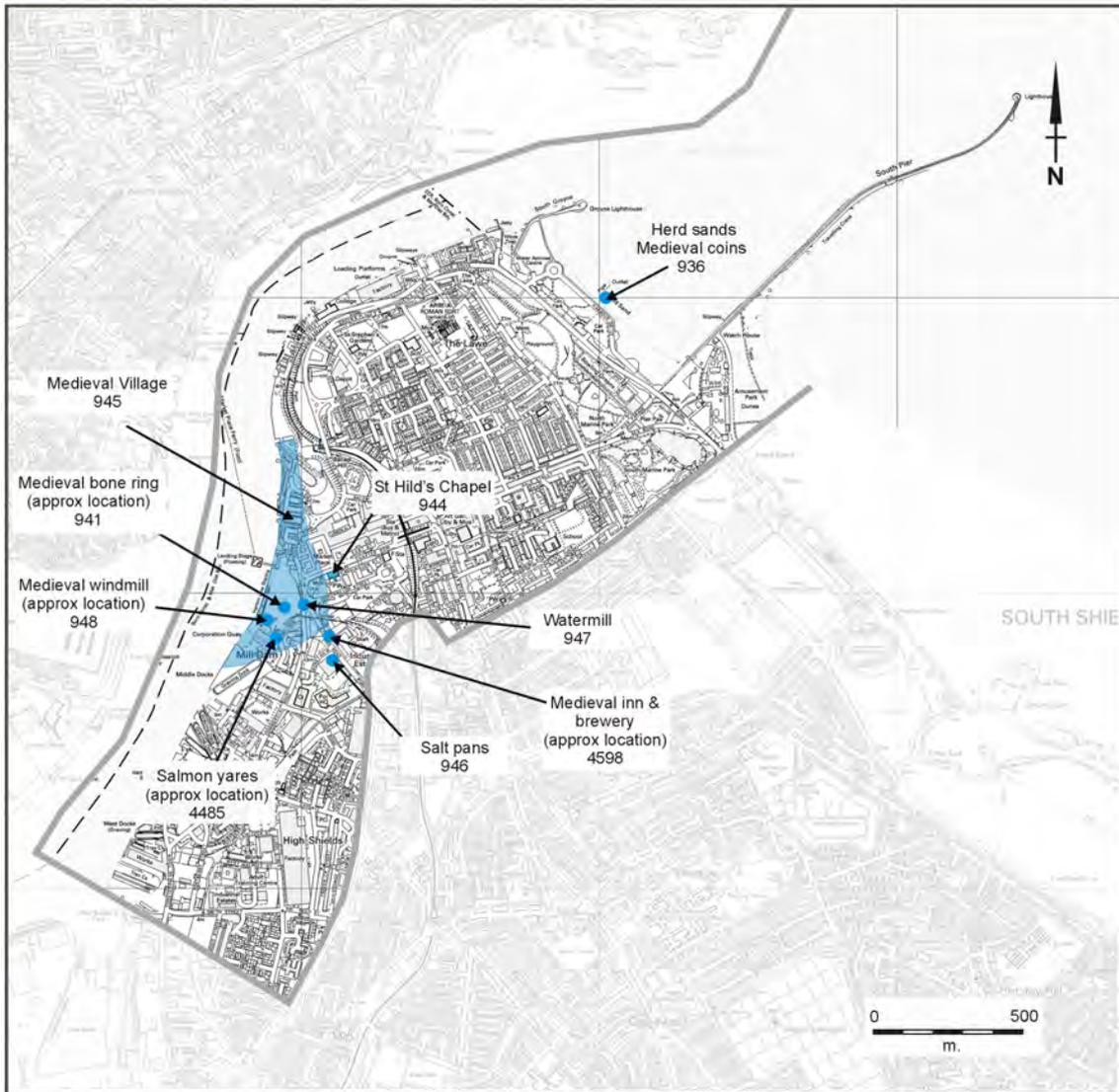
5.3.1 Fishing

There is evidence of both sea and river fishing in the medieval period. There is an early twelfth century itinerary of all the fisheries belonging to the Bishop of Durham which includes *St Hildeyere* and *Ebbeyere* which belong to Westoe suggesting salmon yares (TWHHER 4485) in the vicinity of South Shields. In a charter dated 1154, Henry I granted to the Bishop of Durham all the liberties and processions of Jarrow with the church and fisheries of the Tyne, the church of St Hild and the vill of Westoe. A similar charter dated 1204, confirms all the fisheries of the Tyne and the navigation of the south side of the river to the Durham. The churches jurisdiction was further established in a letter dating from 1213 and this was the basis on which future bishops defended their rights against attempts by the burgess of Newcastle to claim all rights to the Tyne themselves (Hodgson, 1903, p 38-39). The 1256 law suit for “founding a large vill in the port of the Tyne with 27 houses, two ovens and four breweriesand fish was sold wholesale” (Hodgson, 1903, p 40-41) indicates there was a fish market in the medieval period. Further details demonstrating the interests of the chaplain of St Hild’s interests in fishing at South Shields can be found in Hodgson, 1903, p 47-49.

South Shields was an important fishing port in the medieval period; the 1565 Commissioner’s report to the Bishop of Durham of all the ports within the bishopric suggests that there were more fishing boats at South Shields than at Hartlepool or Sunderland (Hodgson, 1903, p 67).

5.3.2 Milling

The prior and convent’s tenants of Shields were bound to grind their corn at the water mill of the manor, always called Westoe mill (TWHHER 947) and, according to Hodgson, it was situated on the west bank of the inlet by the Mill Dam. The earliest reference he cites is 1347, when the mill and its “pond or dam” underwent repairs (Hodgson, 1903, p 71). The bursar’s rental records for 1539 record only one mill let, but by 1580 two mills are mentioned as leased to Cuthbert Fenwick of Shele Milne. That the later mill was probably a windmill (TWHHER 948) is suggested by the fact that repairs included the sawing of wood for sails and mill arms (Hodgson, 1903, p 71).



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Fig 9. Medieval sites

5.3.3 Salt Industry

The first reference to the manufacture of salt at Shields is 1489, “when Lionel Bell of South Shields obtained a lease of a parcel of land near St.Hilde’s Chape on which he constructed 2 salt pans” (Fordyce, 1857, p 714). Ten years later he surrendered the lease, together with two iron salt-pans (TWHHER 946) constructed within the same plot of ground. The industry grew in the following 50 years, and in 1539 there were 9 salt-pans. The early centre of the industry came to be known as West Pans (probably the area of Pan Closes, east of Commercial Road and under the present metro rail track), and it continued to thrive into the eighteenth century (Hodgson, 1903, p 61).

5.3.4 Brewing

The Melsonby Book of 1235 records an inn (TWHHER 4486) held at Shields; it mentions that the brewers of the Shields have paid the Prior and Convent of Durham for *bracinage*, or the right to brew ale. In 1256 there were four breweries in

the town (Hodgson, 1903, p 40-41). In the fifteenth century the rent of the brewery had fallen in value and there was “little brewing there” (*op cit*, p 59). A medieval brewery may have been located in the vicinity of a well known as Beer Brewer’s Well (TWHER 4598) at Waterloo Vale in the Mill Dam area.

5.4 Summary Definition of Urban Form

The precise location of the main parts of the town are not known but the river side area, particularly at Mill Dam, is likely to have been the focus of settlement which probably took a linear form adjacent to the river, mirroring the settlement of North Shields on the opposite bank of the Tyne. It has been suggested that medieval and later settlement required the reclamation of the land adjacent to the Mill Dam area (Speak, 1994, p 22), however evidence to confirm medieval reclamation, or to establish its character has not been found to date. Evidence of land reclamation to the north of Mill Dam at Wapping Street has been found and may have begun in the medieval period. The earliest post-Medieval map that provides an accurate survey is Fryer’s 1772 survey; from this map it is possible to suggest the extents to the linear form of the town medieval period. Continual riverside development has removed above ground evidence of the early form of the town but there is the likelihood that archaeological deposits may be preserved beneath later ballast dumping.

6 Post-Medieval Town

6.1 Urban Form

6.1.1 Documentary Evidence

In a report of 1565 to the Bishop of Durham of ports and havens within the bishopric, Commissioners describe South Shields east of the Mill Dam as “one fishing town or creek, called South Shields, wherein are 51 householders, 50 whereof are fishermen. The town is governed by and is the inheritance of the dean and chapter of Durham, but there is no unloading or loading there, as all that come into the river are unloaded at Newcastle. There are three ships belonging to the town... and six boats or cibles all occupied in fishing; 25 persons get their living thereby. There are also above 20 houses in the town wherein fishermen dwelt which are decayed...” (Speak, 1994, p 26 citing Cal. State Papers Dom. 1565).

The beginning of the sixteenth century saw the enclosure of lands of Westoe Manor from open common to enclosed fields and the beginning of a progressive expansion of urban development. Various South Shields yeomen took leases on parcels of land near to St Hilda’s chapel (Speak, 1994, p 25 citing Fordyce, 1857, p 714). The earliest surviving list of householders occurs in the Book of Surveighe compiled in 1580 and lists 22 tenements and an increased rental value from the medieval period (Hodgson, 1903, p 69 citing Halmote Court Rolls, 198). The growth of South Shields continued to alarm the burgesses of Newcastle, who were granted a



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Fig 10. The Post-Medieval Town

charter in 1600 confirming previous grants and directing the loading and unloading of ships to take place at Newcastle. These monopolistic privileges were confirmed by James I. In spite of Newcastle's attempts to prevent trade and commerce at South Shields, Sir William Brereton's description of South Shields in 1635 as having "about 250 houses, poor ones and low built, but all covered with boards...." (cited by Speak, 1994, p 27) suggests a continued expansion. In 1651 the Commonwealth Committee of trade took up the grievance between Newcastle and North and South Shields and found in favour of the latter. This encouraged development, particularly on the riverside, at South Shields.

Increased trade and commerce meant that the town not only developed its trading and industrial base focused on the riverside but experienced an increased demand for housing, and by 1667 the farms of Westoe were divided and common land was enclosed. All four of the purchasers of the North farms were salt manufacturers and it is possible that some of the land was used in connection with salt manufacture. From the early seventeenth century the town also profited from the export of coal and in the late seventeenth and eighteenth century from glass (first established 1650) and chemical manufacture (established 1720). In 1743 the

Universal Magazine described the town as a “large village in which are two hundred pans for boiling seawater in salt, of which such quantities are made here as not only furnishes the city of London but all the towns between the Thames and the Tyne. The river before this village is full of ships, either to load or unload salt or coals which are brought from the staiths in barges, lighters or keels” (Pevsner, 1983, p 414-415).

Until the middle of the eighteenth century the town stretched along a narrow street, parallel with the river from The Lawe to the present West Dock. Salt making was concentrated in the area to the west of the church and fishing to the east of it. Hodgson describes a raised footpath of pan rubbish that led across the fields from the end of Saltwell Lane to the church gate (1903, p 120).

A planned urban development began in the 1760’s with the improvement of the church and in 1768 the dean and Chapter of Durham enclosed 8 acres of land in the centre of the town for the purpose of a market and buildings (Hodgson, 1903, p 123). Between 1768-70 St Hild’s glebe-lands were laid out with a market place (TWHHER 4593) and streets (East Street, West King Street, Thrift Street, Dean Street, West Street and Church Row) round it on a grid pattern with King Street, which still remains, as the main one, built up by 1826. Hutchinson in 1787 remarked that the town was much improved of late years. Pevsner notes that, while the large rectangle of the eighteenth century planned space with the church on one side and a central town hall remain today, all sides are what he describes as “the dreariest grey concrete commercial buildings of the 1950’s and 1960’s” (Pevsner, 1983, p 421).

6.1.2 *Cartographic Evidence*

John Ogilby’s map of 1675 gives a bird’s eye view of South Shields on a route north from Sunderland. In the seventeenth century the town of South Shields retained its medieval form, consisting of a long narrow street with lanes and landings at right angles running down to the riverside. The only open area within this linear form was St Hild’s churchyard running down to the riverside at Mill Dam. Markets took place in the street until the eighteenth century when a planned market square (TWHHER 4593) and regular development around it was built. Richardson’s plan of South Shields and Westoe, 1768, shows this development and in the centre of the market place a cross (TWHHER 4597) is marked. As part of this development, a Town Hall was built in the centre of the Market Place facing St Hild’s Church (TWHHER 4526, Scheduled Ancient Monument No. 27). Pevsner presumes it was designed by John Wooler, who was paid for a plan of the Market Place in that year (Pevsner, p 418). The rest of the town is shown by Richardson as a two-row street with linear form running parallel to the shore. Buildings are marked at regular intervals with space between them and are likely to be to some degree representational rather than accurate in detail. Fryer’s survey, dated 1772 and only four years later than Richardson’s map, shows the town to be more build-up but with similar extents. Fryer’s map appears to be a more accurate survey of the detailed

development of the buildings within the town. Both Richardson and Fryer show ranges of ballast hills forming the eastern boundary of the town, with the area behind them to the coast open ground. The southern boundary of the town is formed by Jarrow Slake.

6.2 Components of Town

6.2.1 Defences

6.2.1.1 Fort

The area of higher ground at South Shields called the Lawe was recognised as a strategically important position at the mouth of the Tyne. During the Civil War a fort (TWHHER 949) was built on the Lawe in 1643, at the command of the royalist Marquis of Newcastle, governor of Newcastle, who sent 300 men and 5 or 6 pieces of ordnance for the purpose. The fort was 9 feet high, surrounded by a ditch 12 feet wide and 11 feet deep, and garrisoned by 100 Royalist soldiers. After two attempts, the Scots captured the fort on 20 March 1644, and lost it briefly in May before eventually retaining it. Its precise site is uncertain although it is described as not far from the Roman fort, and close to the beacons. The fort is not shown on maps of 1768, 1772 or 1827 although the TWHHER entry states that there has been a suggestion that it survived into the nineteenth century. Hodgson stated that the Bank Tops, now known as the Lawe, was covered with wormwood scrub (1903, p 120) suggesting it was open wasteland at the end of the nineteenth century.

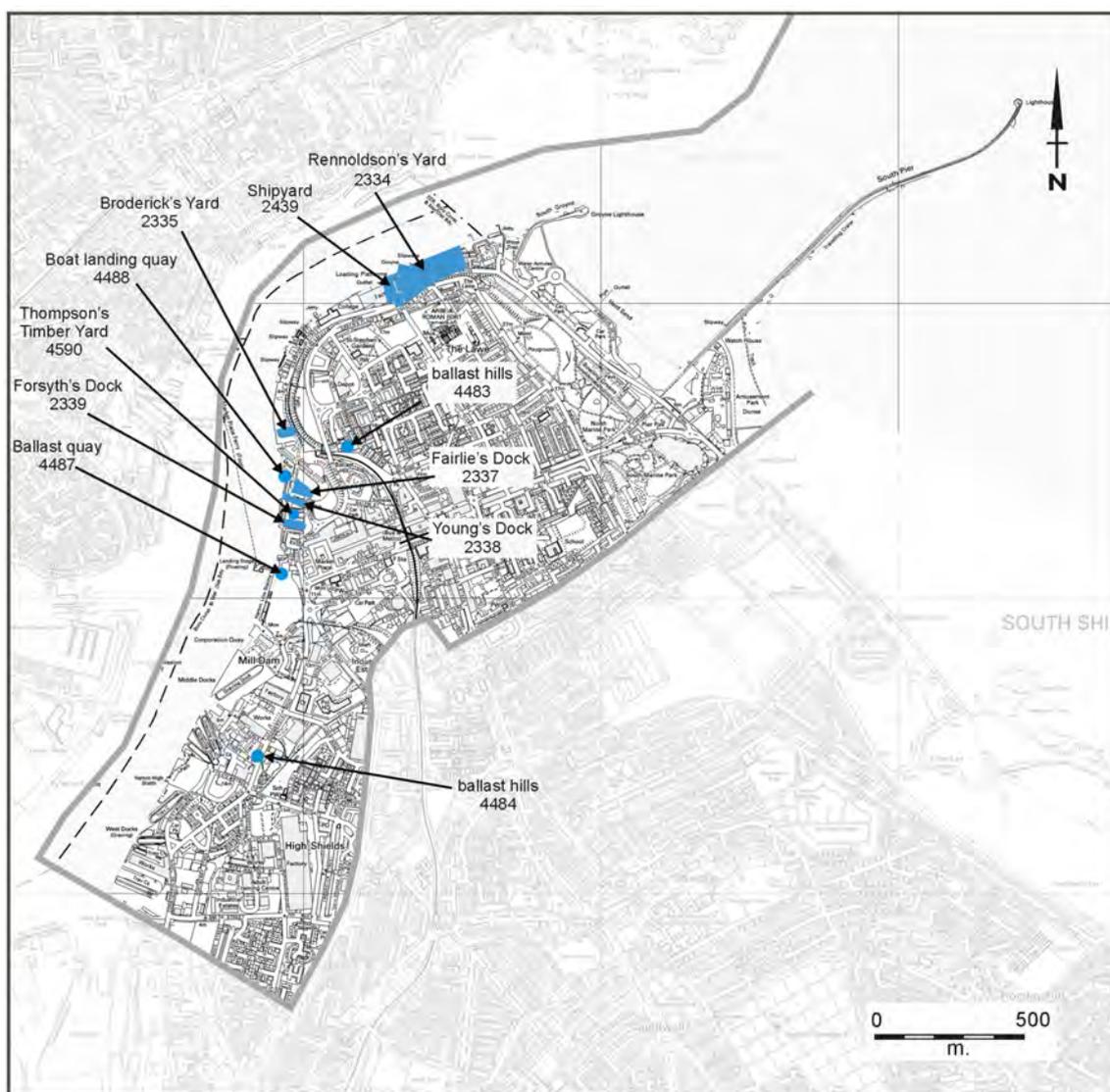
6.2.1.2 Battery

Hodgson suggests that there was a Napoleonic battery (TWHHER 950) on the Lawe bank facing the sea (1903, p 86), which was removed to Tynemouth after 1815 (Brockie, 1851, 68-70).

6.2.2 Places of Worship

Hodgson quotes Bourne describing St Hild's church in 1731 as "going into decay and about to be rebuilt" (Hodgson, 1903, p 121). The north aisle was added in 1753 to the chapel of St Hild (TWHHER 944); the tower heightened and re-covered in 1764; the south aisle widened in 1784-6. The principal rebuilding seems to have been in 1810-12 when the north wall was rebuilt, the arcades removed and the church re-roofed in a single span (Pevsner, 1983, p 416). Close by, the parsonage was "an unlovely brick building erected c. 1770" (Hodgson, 1903, p 121) and has since been demolished.

The Quaker Burial Ground (TWHHER 889) at South Shields was situated in Robert Linton's garden. The first recorded burial was in 1673, the last in 1697 (Phillips, 1917, p 179). Hodgson states that Linton's house was in West Pans Way, "now Laygate Lane" (1903, p 97-8), and the TWHHER quotes the South Shields museum



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Fig 11. Post-Medieval Maritime sites

curator as saying the burial ground was situated west of the present Trinity Church in Commercial Road.

The Baptist Meeting House (TWHER 4596) was used in the eighteenth century and was possibly on the site of the later Trinity Schools (Hodgson, 1903, p 100).

6.2.3 Well

Beer Brewer's Well (TWHER 4598) or Mill Dam Well is marked on Richardson's plan was located in Waterloo Vale and was rediscovered during the rebuilding of the Mechanics' Arms Inn c. 1900.

6.2.4 Bridge at Mill Dam

A bridge (TWHER 4599), possibly called Deanbridge, carried a lane across Mill

Dam. There are frequent accounts of seventeenth century repairs to this bridge (Inkster and Speak, 1998, p 8). A wooden bridge crossing the Mill Dam is described by Hodgson as a barely wide enough for one vehicle to cross (Hodgson, 1903, p 121). This bridge divided the town into the “over” and “under dammers”, who lived in “Fishergate” and “Panngate”, respectively (Hodgson, 1903, p 121), emphasising the focus of fishing at one end of the town and salt making at the other. A bridge is shown on Richardson’s 1768 map and Fryer’s 1772 survey. The bridge may have been preceded by or coexisted with a ford over the Mill Dam. Hodgson states that “a series of water worn boulders... probably constituting either stepping stones or the stone causeway of the ford were found below foundations of an old house at the corner of Waterloo Vale and Oyston Street which was pulled down in 1875 to make room for St Hilda’s YM Institute” (1903, p 138). Fryer’s survey shows both a bridge joining the main parts of the town across Mill Dam and another crossing of the Mill Dam inlet by a path from the church following the boundary of glebe land to the east.

6.2.5 Mill Dam

In 1748 the churchyard to the south of St Hilda’s was described as “sloping down to the edge of the Mill Dam Creek or the river Branin, as it is sometimes called, a fine sheet of water, up which the tide flowed as far as the modern St Catherine Street. The creek when filled with water at high tide formed a picturesque lake” (Hodgson, 1903, p 121). Mill Dam (TWHHER 2591) is shown on Richardson’s plan of South Shields 1768 and Fryer’s 1772 survey. The dam is infilled at the beginning of the nineteenth century but the name survives on the 2nd Edition OS as Mill Dam Valley. There is known to have been a medieval mill at Mill Dam, TWHHER 947, and this may have been altered and be on the same site as Hodgson mentions where there were “two water mills from which the Mill Dam inlet took its name were contained in a large stone building, which stood where is now the entrance to Cowen’s Place, a little above the Seamen’s Institute in Commercial Road. The mills only worked when the tide was in and in later times the building was transformed into a tenement property” (Hodgson, 1903, p 121).

The major episodes of reclamation of the area date to the nineteenth century, when ballast was used to infill the inlet of Mill Dam. However archaeological evidence excavation on the site of the Custom House in 1993 (TWHHER Event no. 1536) may indicate some reclamation in the area at an earlier date. The work aimed to recover evidence for the location and topography of the Mill Dam inlet and for settlement or industrial activity. An area measuring 21m by 4.50m was exposed and “traces of stonework were noted below dumps (which may have been terraced) of gravel, red ash and industrial clinker. A series of stone walls were constructed on the dumped material. This appears to have been used for coal storage and a stone-lined cellar was inserted and used as a furnace. This structure was infilled by material that contained finds dating no later than the mid eighteenth century. The area of the furnace was later cut by a large pit which contained industrial waste and a further pit which contained gravel, ash and slag was found to the north

west. Both pits contained finds which dated to the eighteenth century and were cut by a further pit also containing industrial waste. The features were sealed by a layer of ballast. It appears that the Mill Dam inlet in the area excavated had been filled in before the later seventeenth century or first half of the eighteenth century, the probable date of the industrial structures which had been built directly on the ash and clinker infill. The water level prevented any detailed examination of the ground beneath the infill. The specific use of the furnace cellar could not be identified and it went out of use in the eighteenth century when the area was used for the disposal of further industrial waste before becoming a ballast dumping ground (Hodgson, 1993, p 54, 55; Inkster and Speak, 1998, p 6).

6.2.6 Quays and Docks, Shipbuilding

Newcastle Trinity House documents describe moorings at 16th century South Shields as located “from West Pans all the way down to the Ferry Landing on the South Side where 14 feet of water at low tide allows 50 ships may ride at anchor all moored conveniently” (Hodgson, 1903, p 71). This indicates moorings were located along the river frontage from the Mill Dam inlet north to the headland.

Evidence for the construction of quays and docks begins in the seventeenth century in the area to the north of the Mill Dam inlet. There is a court record in 1670 of a ballast quay (TWHER 4487) separated from the water mill by a bridge (Hodgson, 1903, p 113), just to the north of the Mill Dam Inlet (Fig 11). In 1754 John Burdon was refused permission by Trinity House to build a ballast quay on the sands at the east end of South Shields. Two years later Isaac Cookson, who was a freeman of Newcastle, secured a site for a quay (Hodgson, 1903, p 122), presumably Cookson’s Quay as shown on Woods’s map. In the same year, Burdon was then allowed to build a wharf (TWHER 4488) at Broad Landing (Hodgson, 1903, p 122) which can be approximately located from the information that two quays belonging to Fairlie, advertised in 1791, are described as being on either side of Burdon’s Quay. The advertisement indicates that the site would provide a good situation for a dry dock. One was built here (TWHER 2337; Fig 11), but not until the later eighteenth century; a dry dock is shown as a single dock on Blackburn’s plan of 1798 (Flag, 1979, p 45-46, map on p. 60). At Wapping Street evidence of two stone quays some c. 29m behind the modern river front were found and may date to the post-Medieval period.

In the eighteenth century shipbuilding was initially concentrated in the northern part of South Shields at Shadwell Lane. At first occupation of the area and construction of sheds was somewhat *ad hoc*. This casual occupation of the land continued until well into the nineteenth century but by 1845 the open foreshore had been enclosed and the continuation of Shadwell Street became known as Pilot Street (Flagg, 1979, p 1). A shipyard (TWHER 2439) at the northern end of South Shields is documented from 1729 to 1919 under various owners. In 1729 the Newcastle Courant had notice of the sale of “a row or onset of houses at the east end of South Shields, with a yard and parcel of waste ground adjoining and a key or wharf

and the cobble landing". In 1753 the Wharf was again for sale but not the adjoining land so Flagg assumes that Robert Wallis bought the site for shipbuilding (Flagg, 1979, p 3) and locates it on the foreshore and waste ground at the foot of the Lawe.

In the eighteenth century other yards in Shadwell Lane, at Low End, belonged to William Forster c. 1773-1791 who was possibly succeeded by James Evans (1788-1831) in the same yard or next door to Evan's yard (Flagg, 1979, p 5). Wallis's yard and possibly the others in Shadwell Lane were incorporated into Charles Rennoldson's yard (TWHHER 2334) in the nineteenth century.

In the later part of the eighteenth century shipbuilding yards and docks developed on the riverside. The Cess Book in St Hilda's Church names the owners of three docks in 1770: Lockwood Broderick, George Smith and John Wallis. Mr Broderick's dock is shown on Fryer's 1772 map, at the site of Low Dock (TWHHER 2335). A dock depicted as Mr Smith's Dock on Fryer's 1772 plan to the south of the Mill Dam may be the original of No 1 Dock at Middle Docks constructed c. 1768 (Flag, 1979, p 85). Several documentary references to the Dock as Middle Dock (TWHHER 2345) date from the later eighteenth century (Flagg, 1979, p 86). Fryers 1772 plan shows Mr Thompson's Timber Yard (TWHHER 4590) in the Mill Dam area on a site later occupied by Fairles Dock (TWHHER 2337) and Young's Dock (TWHHER 2338). A further dock is shown on Blackburn plan of 1798 (Flag, 1979, p 60) in the area of the new market. On Woods 1827 map there is also Market or Forsyth's Dock, Spring Lane, (TWHHER2339) formerly Temples Dock. Further details of the ownership of the yards can be found in Flag, 1979, p 50-69.

6.2.7 *Ballast Hills*

During the post-Medieval period, the increase in shipping and trade led to the accumulation of a large amount of ballast which formed substantial hills (TWHHER 4483 and 4484) sited to the east of the town. They are shown covering extensive areas on the Fryer and Richardson maps.

6.3 **Post-Medieval Industries**

6.3.1 *Tile Making*

Two Tileries (TWHHER 2593 and 2590) are shown on Richardson's plan of South Shields (1768) beyond the extents of the settlement; one at the southern extent of South Shields in ground to the east of the ballast hills and another to the north of the Mill Dam inlet east of the new market place.

6.3.2 *Rope Industry*

A ropery (TWHHER 2589) at the northern end of South Shields is shown on Richardson's plan of South Shields, 1768, also appearing on Fryer's 1772 map and Woods 1827 but not on the 1st edition OS map.

6.3.3 *Salt Industry*

The medieval salt pans (TWHER 946) were located at “West Pans” near to St Hilda’s chapel and it is likely that this area continued to be the focus of the industry in the post-Medieval period, with the number of pans increasing greatly. However, other areas of South Shields may also have been involved. There is a record in 1618 of damages against a salt manufacturer for the nuisance of the manufacture which resulted in the destruction of grass of the great pasture of Westoe (PSAN, VIII, p 182). While adding to the impression of the scale of the industry, the reference does not help to specifically locate any pans. Further evidence of the scale of the industry is provided by the fact that Icelandic and Greenland fishing fleets came to load up with salt at Shields (Hodgson, 1903, p 75). In 1539 there were nine salt pans but by 1663 the accounts of the chapel wardens included an assessment of 121 salt pans. In 1635 Sir William Brereton describes South Shields having “...more salt works and more salt pans made than in any part of England” (cited by Speak, 1994, p 27). By 1693 there were 143 pans; seven salt pans were recorded near Mill Dam (Speak, 1994, p 20). In 1725 Lord Harley visited South Shields and described it as “the chief place for making salt. The houses there are poor little hovels and are in a perpetual thick nasty smoke. It has in all 200 salt pans, each employs three men... and each consumes 14 cauldrons of coal in 7 days” (Harley, 1725, *Journeys in England*). This estimate of c. 200 pans is confirmed by Thomas Kitchen’s Map of County Durham, c. 1750 which incorporates an embellishment showing a salt pan and the inscription “South Shields, the station of the sea coal fleets, is a very large village eminent for its salt works, here being upward of 200 pans for boiling the sea water into salt. Tis said that 100,000 cauldrons of coal are yearly consumed in these works”. However, by 1820 the salt trade had almost disappeared with only five salt pans remaining at South Shields (Surtees, 1820).

6.3.4 *Coal Trade*

The manufacture of salt was the stimulus for a trade in coal at South Shields since coal was needed to fuel the fires to boil the brine in the salt pans. Around 1760, coal worked out of Langley and Harlaw pits was carried to South Shields on the backs of ponies to supply the salt pans (Hodgson, 1903, p 116).

6.3.5 *Glass Industry*

In the eighteenth century manufacturing expanded to include glass-making, the first documented works being Cookson’s Crown and Plate Glass Works, trading from Cookson’s Quay from 1737, although Thornborrow suggests that the company started in South Shields in the mid-seventeenth century (Thornborrow, 1961, p 16). It was taken over by Swinburne’s Glassworks (TWHER 2340) in the nineteenth century. South Shields Bottle Works (TWHER 2342) is shown, to the south of the Mill Dam, on Fryers’s 1772 map as a “Bottle House” with two circular structures which were probably kilns. By the time of Woods survey in 1827 the site included at least three free standing circular structures. It was out of use by 1895 as the site was then occupied by the Stone Quay Boiler Works (TWHER 2457).

6.3.6 Chemical Industry

Developing from the glass industry, the manufacture of alum was the beginning of a larger chemical industry which developed in the nineteenth century (Hodgson, 1903, p 114). The Alum Works were located on a site still known as Alum House Ham by John Cookson in 1738. Messers. Cookson went on to found what became the largest alum works in Europe, just to the south of the study area, at Templeton (The Archaeological Practice 1997, p 17).

6.4 Summary Definition of Urban Form

Until the middle of the eighteenth century the town retained its medieval linear form with properties on both sides of a long, narrow street running from The Lawe to Jarrow Slake with lanes and landings at right angles running down to the riverside. Land reclamation on the river frontage may have taken place in this period. Salt making was concentrated in the area to the west of the church and fishing to the east of it. In the eighteenth century the riverside began to be developed with docks and shipyards, and other industries began to be introduced. Planned urban development began in the 1760's with the improvement of the church and between 1768-70 St Hild's glebe-lands were laid out with a market place (TWHHER 4593) and a grid pattern of streets around it. The eastern boundary of the town was lined with a range of ballast hills, with the area behind them to the coast open ground. To the north of the town the headland was again occupied by a fort.

7 Nineteenth Century Town

7.1 Urban Form

7.1.1 Cartographic Evidence

A comparison of Fryers 1772 map (Fig 2) with the First Edition OS Map of 1862 (Fig 3) shows the areas where South Shields expanded during the late eighteenth and the early nineteenth century. By 1828 the population was about 17,000 and the town's riverside industries included 12 shipyards alongside glass and chemical works. At the northern end of the town, building extended eastwards with the construction of Greens Place, and the existing riverside area became more built up particularly in the area between Wapping Street and Wellington Street. In the area of the new Market Place a "suburb" developed with King's Street and King's Street East. This included land east of the church, called Broken Gardens, which previously formed part of glebe land but which was sold for development in 1801 (Hodgson, 1903, p 137-140).

At the beginning of the nineteenth century, the Mill Dam Creek was still tidal as far as Waterloo Vale. In 1816 churchyard ballast on the north side of the Mill Dam Inlet was used to partially infill the inlet. The remaining part of the inlet was used as a shipyard in 1828. Other industrial development took place in the Mill Dam area with the Cookson Glass Works (TWHHER 2342) occupying a large site to the north

of the previous inlet which Newcastle Corporation bought to construct a Customs House (TWHHER 4529) and Quay in 1861 (Inkster and Speak, 1998, p 6-8). The area south of the infilled inlet became heavily developed with docks and shipbuilding yards. Behind the industrialised river front, the post-Medieval ballast hills were reduced and the area built over. Two areas of higher land were left standing, upon one of which a windmill (TWHHER 4493) was constructed.

In the second half of the century the previously open area between the coast and the north-south route from Sunderland started to become developed. On Woods 1827 map, a planned grid development is shown as "Projected Street" with one short street, Ogle Terrace, built. By the time of the 1st Edition OS map, c. 1862, a series of terraces cover this area; Catherine Street, Woodbine Terrace, Saville Street, Winchester Street, Anderson Street etc.. Today only Anderson Street and part of Saville Street retain the original layout. In 1831 South Shields was formally merged with Westoe and grid-pattern growth continued to the south.

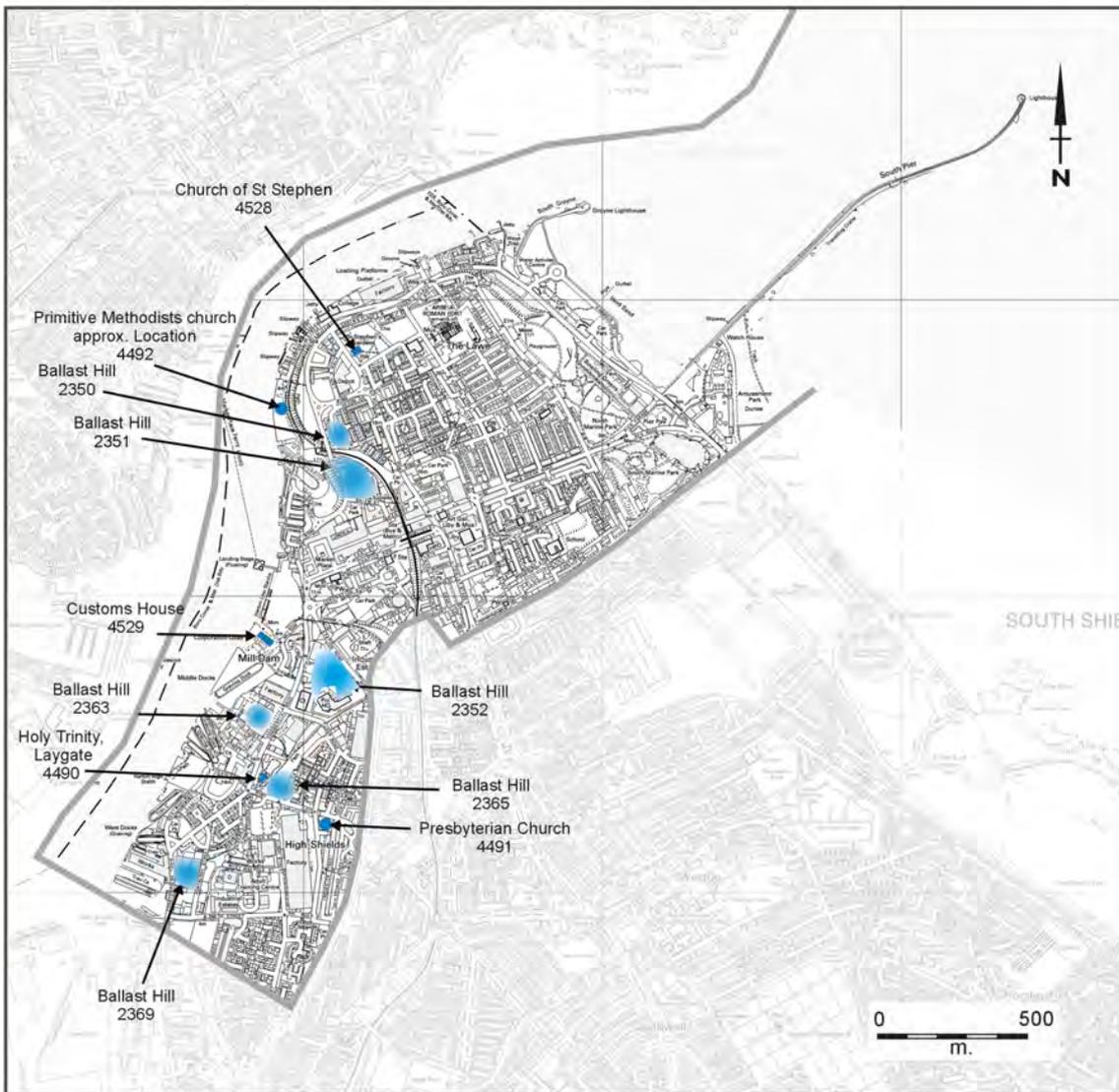
The industrialisation of the town increased after coal extraction began at Jarrow (1803), Templetown (1810) and St Hilda's colliery (1825) and the need to link the collieries to the river saw the development of several new wagon ways. New harbour facilities at Tyne Dock, just to the south of the study area, were built in 1856-8. The chemical industry, boasting the largest alkali works in the world, also flourished at this time. To feed the increase in industrial production, a wave of immigration into the town saw the population increase from 16,500 in 1821 to over 27,000 by 1850. The wealthier families moved into speculatively built terraces stretching east to the sea (e.g. Beach Road). A new system of main roads - Baring Street, Roman Road, Mowbray Road etc - was laid out in the 1870's, and the Marine Parks created on the levelled ballast hills over a period of years, opening in 1890. The Parks gave South Shields a new seaside face. The town became a Municipal Borough in 1850 and a County Borough in 1889 (Pevsner, 1983, p 414-415).

7.2 Components of Nineteenth Century Town

7.2.1 Places of Worship

The rising population led to problems with overcrowding in the churchyard of St Hilda's and in 1816 it was decided to seal it with material from the ballast hills to the north so that the yard could be reused. This in turn became full and taken out of use in 1856 (Hodgson, 1903, p 33-4, 54, 120, 139-140, 194, 234-256). To minister to the expanding population, the Holy Trinity, Laygate, (TWHHER 4490) was built between 1832-4 by Salvin, eventually being demolished in 1980 (Pevsner, 1983, p 416). The Church of St Stephen, Mile End Road (TWHHER 4528) dates from 1844-46, and is extant.

Mr Barker, the owner of Low Dock (TWHHER 2335) allowed the Primitive Methodists to use his sail-loft there from 1827 as a meeting house (TWHHER 4492) (Flag, 1979, p 33). The Presbyterians built a church in Frederick Street, Laygate (TWHHER 4491) in 1847-9 which was demolished in 1977 (Pevsner, 1983, p 416).



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Fig 12. The Nineteenth Century Town

7.2.2 Buildings

A number of nineteenth century buildings to the south of the Market Square have listed building status, e.g. 16, Barrington Street (TWHER 4500) and the Trustees Savings Bank (TWHER 4501) also in Barrington Street. To the east of the Market Square, King Street has lost through re-building most of the original development. At 105-7 King Street (TWHER 4525), the present elevation may represent the uniform re-fronting in the early nineteenth century of two late eighteenth century buildings. Of note in the nineteenth century town are a number of fine streets. The first houses on Beach Road were built as Ogle Terrace, the western-most in construction in 1816, (Newcastle Courant, April 1817) and the complete terrace is shown on Woods plan of South Shields (1827). Three quarters of the Beach Road is shown complete on the 1st Edition OS map, 1862. The Broughton Road Master Mariners almshouses are single-storey ranges around a central green, the north side of 1843-7, and the south side of 1859-62 (TWHER 4511- 2). Pevsner commends the riverside area of Coronation Street, where some of the shops and inns are carved and painted in the naval vernacular tradition (1983, p. 422). The

Customs House (TWHHER 4529) of 1863-4, gives Corporation Quay an imposing civic frontage and is now a thriving arts centre. At the northern end of South Shields, several early houses in Greens Place are listed.

7.2.3 *Ballast Hills*

The rate of ballast dumping on the riverside accelerated in the early nineteenth century as more and more colliers crowded into the wharves. The OS 1st Edition, 1862 shows a number:- TWHHER 2350, 2365, 2369. TWHHER 2358 probably related to the adjacent St Hilda's Colliery (TWHHER 2355). The ballast hills on the Bents (TWHHER 2452) were connected to the riverside by a light railway (TWHHER 2427) to transport the sand and gravel away from the areas now devoid of dumping space.

7.2.4 *Pier*

The long South Pier (TWHHER 2429) and the north pier at Tynemouth were constructed during the years 1854-95 (Pevsner, 1983, p 416). The harbour works were begun by James Walker and continued from 1862 by John F. Ure for the Tyne Improvement Commission (Sinclair and Carr, 1990, p 8). The 2nd Edition OS map shows the pier construction works and the railway (TWHHER 2432, 2495) associated with this structure. The Volunteer Life Brigade Watch House (TWHHER 2430) was at the south end of the pier and a lighthouse was built at its northern end.

7.2.5 *Beacons*

A pair of beacons in the form of obelisks (TWHHER 2346, Lawe Beacon west; TWHHER 2347, Lawe Beacon east) were built in 1832 as navigational aids for ships entering the Tyne, replacing the eighteenth century beacons. A further beacon was sited on Herd Sands (TWHHER 2333).

7.2.6 *Docks, Quays and Staiths*

An advert of a site for sale near Mill Dam in 1779 stated it had "a very large Key capable of being converted into a dry Dock for shipbuilding" (Flag, 1979, p 75). This is probably the later Metcalf's Dock (TWHHER 2343) shown on the OS 1st Edition, of 1862. The first dry dock in South Shields was Low Dock (TWHHER 2335) in Fairles Street (later incorporated into Wapping Street). The dock flourished, went out of use and was brought back into use, before being replaced with a new dock at a different angle (Flag, 1979, p 27). The dock is shown on Woods map as Mr Fairles Dock, on the 1st Edition as Low Dock, but is referred to as "Barker's Dock" in most directories from then up to 1905 when it was taken over by Brigham and Cowan (Flag, 1979, p 28) who built a new dock incorporating part of the Low Dock. Details of changes of ownership (Barker, Winship, Broderick and various other tenants) can be found in Flag, 1979, p 28-38.

Middle Docks (TWHHER 2345) had enlarged from one to two docks by the time of the 1st Edition OS survey in 1862. Middle Docks and Engineering Co. land extended along the entire riverside of East Holborn (Flag, 1979, p 73).

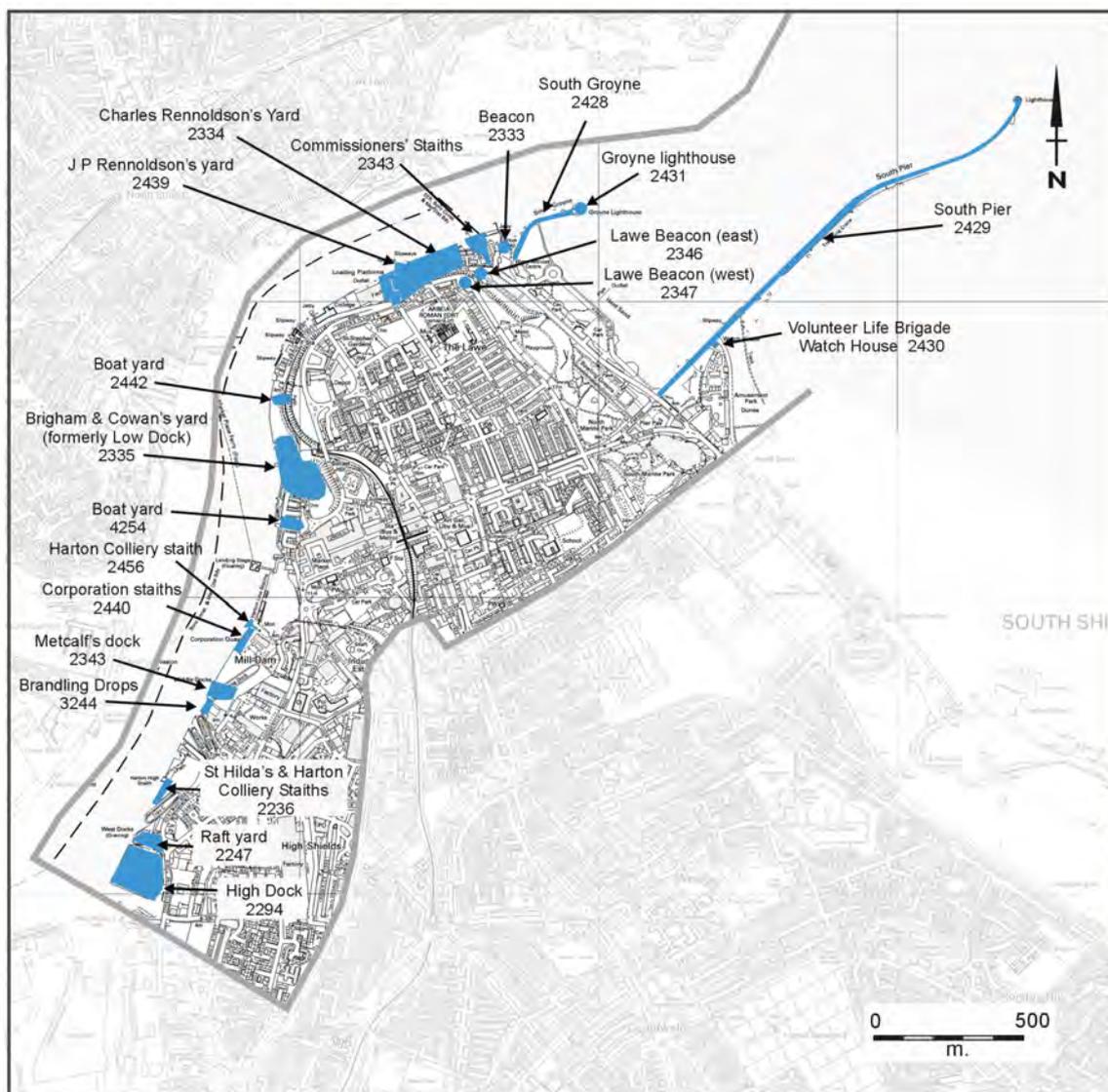
South Groyne, (TWHHER 2428) was built between 1861 and 1867, the dates of two plans made by the Tyne Improvement Commissioners. In 1881 Newcastle Trinity House added an iron lighthouse set on a rubble base, faced with large, roughly dressed stone blocks. The upper surface is of concrete slabs and asphalt. In 1883 the Tyne Improvement Commission constructed the southern wave trap at its western end forming its present shape; it has Grade II listed building status (Archaeological Practice, 1997, p 7). A Railway (TWHHER 2433) ran along the Groyne to the Lighthouse, (TWHHER 2431), possibly associated with the construction of both.

In the second half of the nineteenth century, many staiths were built to take the burgeoning river trade, including: the Commissioner's Staiths (TWHHER 2434) served by railway TWHHER 2433; Brandling Drops (TWHHER 3244); South Shields Staith (TWHHER 2437 & 8); Corporation Staith (TWHHER 2440). Harton Colliery New Staiths (TWHHER 2456), also known as the Harton Low Staiths, opened in 1904 as one of the termini of the Harton Railway. They were unique in that coal was loaded into waiting ships by steam cranes, until an electrically powered conveyor belt was built in 1914 (Sinclair and Carr, 1990, p 18). The St Hilda & Harton Colliery Drops (TWHHER 2236) were served by the Harton Colliery railway (TWHHER 2449) and were known as Harton High Staiths (Sinclair and Carr, 1990, p 4).

7.2.7 Railways

When the Stanhope & Tyne Railway opened in 1834 it was the first public railway built on Tyneside. It carried minerals from County Durham to the Tyne and, from 1835, passengers from South Shields to the Durham Turnpike. In 1842 the northern section was taken over by the Pontop and South Shields Railway (Sinclair and Carr, 1990, p. 4-8) and in 1854 by the North Eastern Railway, which ended a protracted period of instability in the early public railways of the region. The N.E.R, Pontop and South Shields Railway, as it was now known, had its northern terminus at the Stanhope and Tyne Drops (TWHHER 2336), although it may have had a short branch to Fairle's Dock (TWHHER 2337), immediately upstream. There was a Wagon Making Works (TWHHER 2453) on the northern side of the line. Originally, there was no passenger station, *per se*: tickets were bought at a local pub and passengers alighted the carriages at a siding near Salem Street (*op cit*, p. 6).

The Brandling Junction Railway was built in 1839 to connect South Shields with Gateshead and Sunderland (*op cit*, p. 6) but its northern section (TWHHER 2288) was added in 1842 to place a new station (TWHHER 2353) nearer the Market Place, the original track (HER 2564) terminating at a station (TWHHER 2366) near Hill Street. Becoming part of the North Eastern Railway empire in the 1850s, the N.E.R South Shields Branch (HER 2288) had stations at Jarrow Docks (TWHHER



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Fig 13. Nineteenth Century Maritime sites

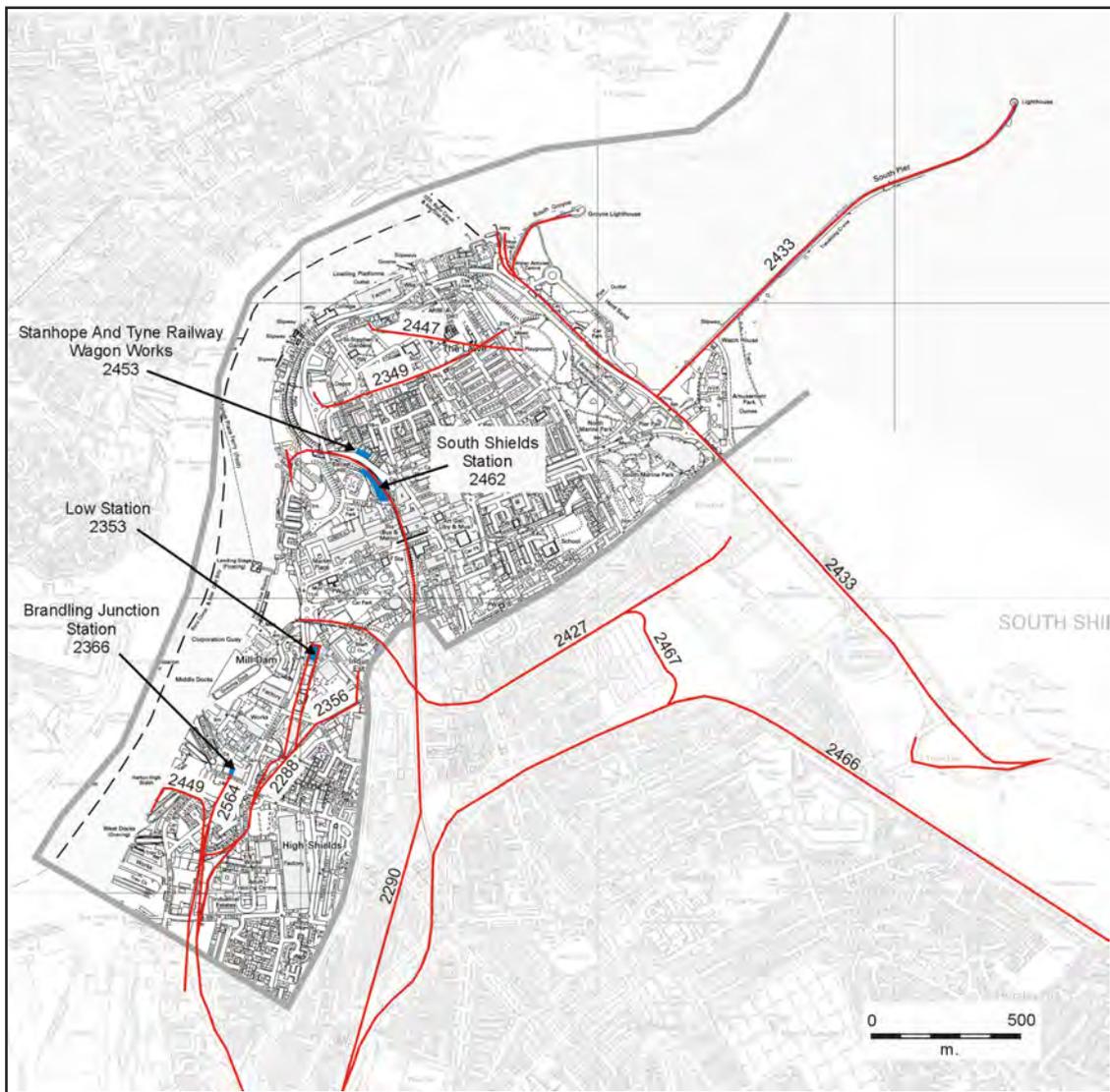
2378), Brockley Whins (TWHER 2285) and Low Station (TWHER 2353) which formed its northern Terminus in South Shields. South Shields Station (TWHER 2462) was built in 1864 to replace the Low Station as the centre of gravity of the town drifted north. Early in the 20th Century, electro-pneumatic signals were installed between Brockley Whins and the Tyne Dock, the first use of this system in the country (*op cit*, p. 6, 7, 14,15).

South Shields Ballast railway (HER 2349), was the first ballast wagonway in South Shields and was marked as "Old" on the 1st Edition OS map and so was probably out of use by 1862. It was crossed by the line of the later Ballast railway (TWHER 2447) which superseded it in the 1830s (*op cit*, p. 4). TWHER 2447 ran through a small tunnel from Salmon's Quay across the site of *Arbeia* Fort until it was closed in 1856 (*op cit*, p 4). The hard packed gravel foundations for a light railway were discovered during excavations immediately outside the west wall of the Roman fort on the line of this railway (Thornborrow, 1964, p 17).

St Hilda's Wagonway/Harton Colliery Coal Co. Railway (HER 2356) was con-

nected to St Hilda's Colliery (TWHER 2355) and to the Templetown Wagonway (TWHER 2449). It was built in 1822 by the Brandlings and eventually became part of the Harton Colliery Coal Co. Railway. The line was modernised in the 1890's and electrified in 1908 (Sinclair and Carr, 1990, p. 3, 17-21).

Ballast railway TWHER 2427 ran from St Hilda's Colliery to a ballast hill on The Bents (TWHER 2452). By 1895 it was linked to the South Shields, Marsden and Whitburn Colliery Railway (TWHER 2466) by a spur (TWHER 2467). Built c. 1832 as a wagonway, it used a stationary steam engine near the present day Derby Terrace to haul wagons along the lower section and horses for the upper section. Locomotives were introduced in 1879 and the line became part of the



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Fig 14. Wagonways & Railways

- | | |
|---|---------------------------------|
| 2466 - South Shields, Marsden & Whitburn Colliery Railway | 2447 - Ballast Railway |
| 2433 - South Shields Railway | 2349 - Ballast Railway |
| 2290 - Stanhope & Tyne, then NER Pontop & S. Shields Rly | 2356 - St. Hildas Waggon way |
| 2427 - Harton Coal Co. Railway | 2288 - NER South Shields Branch |
| 2564 - Brandling Junction Railway | 2449 - Harton Coal Co. Railway |

Harton Colliery system in 1890's. It became part of the unique electrified Harton Railway in 1908 having been extended to the new Harton Low Staiths (TWHER 2456) in 1904 (*op cit*, p. 4, 17-21).

The South Shields Railway (TWHER 2433) was associated with the construction of the south pier and groyne (TWHER's 2429, 2390) and linked these sites with Trow Rocks Quarry and the Commissioner's Staiths (TWHER 2390, 2434). The line was built by the Tyne Improvement Commission in 1854 and was first worked by horses and then by locomotives (*op cit*, p 8, 11).

7.3 Nineteenth Century Industries

South Shields became increasingly industrialised during the course of the nineteenth century. This activity continued to be focused on the river frontage. Trades and industry already developed in the post-Medieval period are seen to continue and develop in the nineteenth century and the area becomes densely occupied. The main industries are briefly listed, but a comprehensive account of the nineteenth century industrialisation of South Shields has yet to be written.

7.3.1 Iron and Engineering

A small but important heavy engineering sector developed to service the shipbuilding and coal-fitting industries on the riverside. The Stanhope & Tyne Railway wagon building works, TWHER 2453, is the first large facility, built c.1834. The works closed in 1862, replaced by sheds at Simonside (TWHER 2561; Sinclair and Carr, 1990, p 14). The Phoenix Iron Works (TWHER 2381) is shown on the OS 1st Edition, 1862. At stood next to the present day Metro line and Waterloo Square. In 1893, the Central Police Station was built on the site of the iron works, and these buildings have extensive cellaring (Inkster and Speak, 1998, p 6). The Stone Quay Boiler Works (TWHER 2457) occupied the site of the former South Shields Bottle Works (TWHER 2342) on the river front, south of Corporation Staiths (TWHER 2440). Also on the riverfront were two small works on Wapping Street: an Engine Works (TWHER 2441) and a Marine Engineering Works (TWHER 2443), both shown on the 2nd Edition OS of 1893.

7.3.2 Colliery

St Hilda's Colliery (TWHER 2355) was located to the south of the Mill Dam area and was served by St.Hilda's Wagonway (TWHER 2356) and by a Ballast Railway (TWHER 2427). A shaft was first sunk in 1822 by the Brandlings and the colliery was opened in 1825 and closed in 1940, when the site was cleared except for the engine house and winding house.

7.3.3 Gas Works

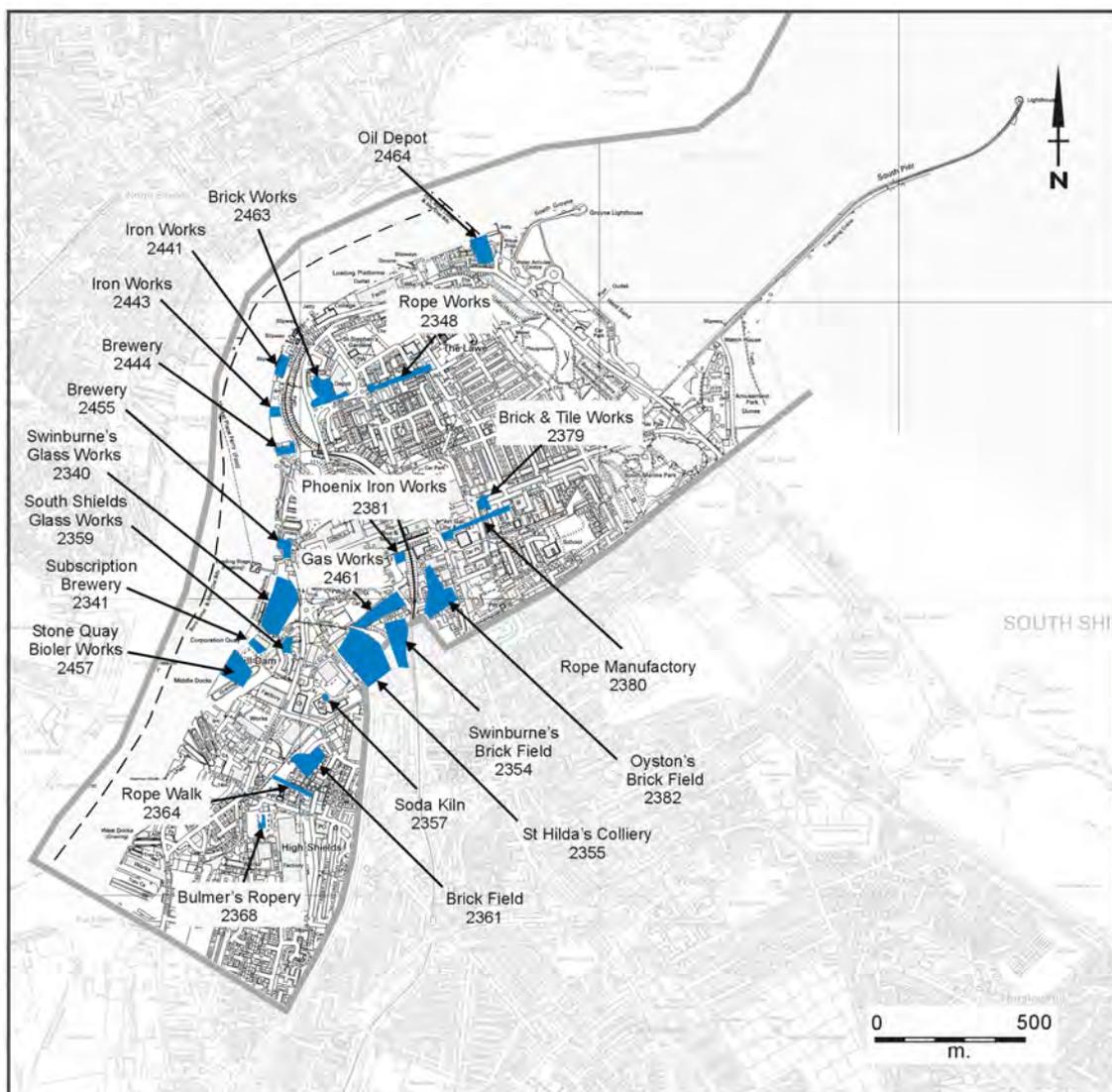
The South Shields Gas Company, formed in 1824, built a Gas Works (TWHER

2461) on the north side of St Hilda's Colliery, on an area of land called "paradise". Gas was piped to houses and shops from October 1824, and the town had 38 public lamps by November 1839. It was expanded greatly in 1855 (Hodgson, 1913, p 146, 192), amalgamated with the Newcastle and Gateshead Gas Company in 1938 and finally closed in 1957 (Carlson and Carlson, 1998, 26).

7.3.4 Rope Making

A common feature on early maps, the rope works served the ship building and repair industries. From cartographic sources, the earliest is Green's Ropery, on the Lawe, above present Green's Place (TWHER 2389), which is first shown on Rennie's Survey of 1813 (Archaeological Practice, 1997/28, Plate 1). with only one, TWHER 2380, shown on Woods 1827 map. The following roperies are shown on the 1st Edition OS map 1862, :-

- TWHER 2383 South Shields Rope Walk, on the site of Oyston's Brick Field, (TWHER2382), and following almost exactly the line of St Hilda's Street.
- TWHER 2368, Bulmer's Patent and Common Ropery



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Fig 15. Nineteenth Century Industry

- TWHER 2364, South Shields Rope Walk
- TWHER 2380, South Shields Rope Manufactory, on the east side of Fowler Street and described as Mr. Shadforth's Ropery on Woods 1827 map.
- TWHER 2348, Rope manufactory with rope walk.

7.3.5 Brewery

To meet the demand of the growing urban population, three new breweries were operational in the late nineteenth century. The first to open was the Subscription Brewery (TWHER 2341), shown on the from OS 1st Edition of 1862. The South Shields Brewery (TWHER 2444) occupied part of the site of the former Stanhope and Tyne Drops (TWHER 2336) and a third (TWHER 2455) occupied a vacant plot on the riverfront, adjacent to the market place.

7.3.6 Brick Making

Local exposures of boulder clay supplied the raw material for a brick industry to meet the demand for building material as the town expanded:-

- TWHER 2382, Oyston's Brick Field, from the OS 1st Edition, 1862.
- TWHER 2463, Brick Works from the OS 2nd Edition, 1898.
- TWHER 2379, Brick and Tile works, on the southern side of German Street, from the OS 1st Edition, 1862.
- TWHER 2361, South Shields brick field, from OS 1st Edition, 1862
- TWHER 2354, Swinburn's brick Fields

7.3.7 Glass Industry

1790-1830 was the peak period of glass making in South Shields (Thornborrow, 1961, p 16). Swinburn's Glass Works (TWHER 2340), formerly Cookson's, used the Ballast Wagonway (TWHER 2427) to take waste to the Bents and to bring in coarse sand to use in grinding. The glassworks was acquired in 1892 by the Harton Coal Co. and demolished to give access to Harton Low Staiths (TWHER 2456, Sinclair and Carr, 1990, p 4, 18). South Shields Glass Works (TWHER 2359) occupied a smaller site just to the south of Swinburne's, recorded from the OS 1st Edition, 1862. Shortidge's Flint Glass Works were located at West Holburn (Woods Map of 1827).

7.3.8 Shipbuilding

In the nineteenth century ship building in South Shields followed the same trajectory as elsewhere in Britain, with smaller yards being amalgamated or expanded into concerns of sufficient size to build on the scale needed by the ocean-going marine fleets, or developing to service niche industries of small boat construction and repair.

Charles Rennoldson & Sons were the last of a series of owners on the site of

Wallis' yard (TWHHER 2334), closing as a result of the Great Depression in 1929. Next door, J P Rennoldson & Sons, (TWHHER 2439) was established in 1862. From the 1870s they built iron ships and in 1890 the yard was rebuilt for paddle and screw tugs. By 1916 there were four berths, the largest 230 feet long (Middlemiss, 1993, p 137). A patent slipway was added and was extended in 1872 but two years later the concern suffered a set-back when fire damaged the engine works. The yard was remodelled in 1890 to meet the demands of new techniques and expanded again in 1896 to encompass engine works in Pilot Street (Flag, 1979, p 14). This yard also failed in 1929.

The old Low Dock (TWHHER 2335) in Wapping Street and the premises of Hepple & Co., in Fairles Street, were absorbed into Brigham and Cowans Yard. The firm originated as a small engineering works in River Street c. 1874 but their notable expansion began with their move to Wapping Street. They excavated a new dock, converted an old foundry, a row of shops, warehouses and houses, and demolished two quays (Flag, 1979, p 41).

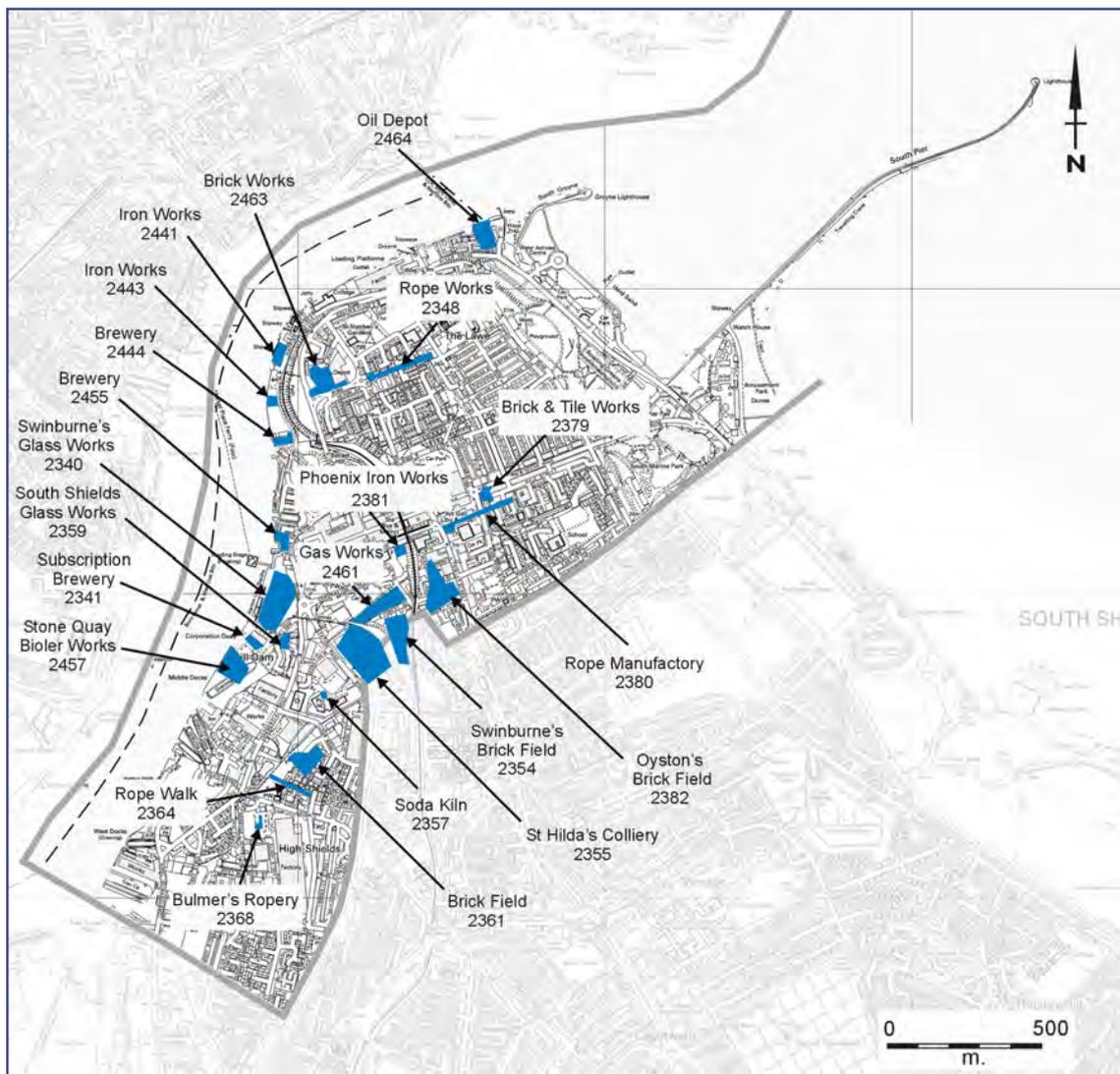
James Young built a graving dock (HER 2338) to the east of the Old High Dock in 1865. This area had previously been an area of salt panning (Flag, 1979, p 97).

High Dock (TWHHER 2294) is shown on the OS 1st Edition map, 1862. There is some uncertainty about the date of construction of the first dry dock here but by 1812 there was "one dry dock, a wooden shipbuilding yard and a fine dwelling house..." (Flag, 1979, p 102). The house was demolished and a second dock was built in 1874 followed by a third dock in 1881. Part of the ballast hills had to be moved in order to build the third dock (op cit, p 104). By 1895 this site had expanded and had engulfed the West Docks 2293 and a raft yard (TWHHER 2247). West Docks (TWHHER 2293) were laid out and occupied on agricultural land by a Sunderland firm in 1811. Previously only an eighteenth century stone quay occupied the site at the extreme west end of South Shields (Flag, 1979, p 108-109).

Smaller, family businesses occupied smaller premises on the riverfront. A ship repairing yard (TWHHER 2445) was built over part of the northern end of the N.E.R, Pontop and South Shields Branch (TWHHER 2290), and in turn amalgamated into Brigham and Cowans Yard (TWHHER 2335) in 1905. Other small yards shown on later nineteenth century maps include a boat building yards on Wapping Street (TWHHER 2442) and a repairing yard (TWHHER 2454) to the south of Young's Dock.

7.3.9 Fuel and Chemical Industry

The chemical industry continued to expand during the century. A new soda kiln (TWHHER 2357) was built on levelled ballast west of St Hilda's Colliery to service the glass industry, and a new Oil Depot (TWHHER 2464) was constructed on former



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Fig 14. Nineteenth Century Industry

shipyards at the seaward end of the river frontage, next to the Commissioner's Staiths (TWHER 2434), appearing on maps of 1882 and later (The Archaeological Practice, 1997, Plate 8)

8. Modern

8.1 Defences

In May 1940 Devon Battery, Royal Marines, set-up at Park Battery (TWHER 966) with two 6-inch Mk XII/VII guns. Eleven months later they were replaced by 348 Coast Battery, with two 6-inch Mk XI/VI guns removed from Frenchman's Battery to the south. For a time in 1941-3 the guns were removed, and only a searchlight remained, until a new battery was constructed in 1943; three 5.25-inch Anti-Aircraft/coast defence guns. When the Coast Defence role ceased in 1951 the battery was handed over to AA Command and finally, in 1956, the battery was dismantled, and the site landscaped by South Shields Corporation.

PART II - ARCHAEOLOGICAL STRATEGY

9 Research framework

Decisions on the future management of the various archaeological sites and deposits likely to be affected by re-development in the historic town centre need to be informed by an appreciation of the importance of the archaeology encountered. That will be largely determined by their potential to add to our knowledge and understanding of the history of the town, its dependant hinterland, and, in certain circumstances, to contribute to national and international research themes.

To assist in assessing the RESEARCH POTENTIAL of the archaeological resource, it is helpful to draw-up a framework within which archaeological work should be undertaken, and to define (as far as possible, and in the light of present knowledge) in what parts of the town the differing research questions will come into play. As the results of new work are absorbed, new and more detailed questions will be formed, which can be brought into the research framework periodically, perhaps every five years, when the Unitary Development Plan is reviewed.

9.1. Earlier Periods

9.1.1 *Prehistoric landscapes on the river margins – Potential for survival of deposits*

Given the extent of channel-movement, shoaling and erosion along the riverbank and the degree of subsequent ballast dumping on the foreshore, it is now impossible to re-construct the ancient topography of the area, but a long-term programme to collect ground investigation data, and observe and excavate deposits as appropriate, will assist in re-constructing the former landscape using terrain-modelling software. In time, this tool will be capable of predicting where potentially important landscape horizons might be encountered during re-development.

9.1.2 *Earlier Periods - Research Agenda*

The following is specific to South Shields, but must be viewed within the context of the overarching research scheme.

- What was the prehistoric topography and to what extent was there permanent settlement and exploitation of marine resources on the banks of the river?

9.2 Roman South Shields

The position of the supply base in the wider framework of the frontier forms part of the research framework for Hadrian's Wall. That section of the linear monument

has been written by Paul Bidwell for the Hadrian's Wall on Tyneside Management Group.

9.2.1 *Potential for Survival of Deposits*

The above assessment gives some indication of the excellent state of preservation of Roman deposits and structures in and around the fort. Any disturbance of the surface of the ground, including carriage-way and pavement, in the vicinity of the fort and *vicus*, must be regarded as a threat to the archaeology of the World Heritage Site and assessed for impact on the shallow remains of buildings, roads and burials of the Roman period.

On the river margins and Mill Dam inlet, the landscape has been subject to massive transformation, through the agencies of river erosion and silting, ballast dumping, human re-clamation and industrial development. As with the prehistoric period, terrain-modelling is needed to assist in predicting where the remains of the harbour and its facilities might survive.

9.2.3 *Research Agenda*

- What was the pre-fort land-use of the Lawe?
- What was the full history of use, adaptation and abandonment of the fort?
- What was the extent and character of the surrounding *vicus*?
- What was the layout of the approach road network and how did this influence the development of cemeteries around the fort?
- Where was the character of the harbour and what type of permanent facilities were constructed?
- Are there surviving remains of ships and/or cargo debris in the river mouth, off Herd Sands?
- What was the fifth century history of the fort, *vicus* and harbour?

9.3 **Medieval South Shields**

9.3.1 *Potential for Survival of Medieval Deposits*

Much of the discussion of the preceding section is equally applicable here. Uncertainty remains about the potential for the survival of deposits around the Mill Dam area, where the origin and focus of the medieval riverside community seem to have been located. In addition, there is the issue of the location of the Saxon monastery. Was this on the site of the medieval and later church of St Hilda's?

9.3.2 *Research Agenda*

- What evidence survives, if any, of pre-Conquest activity in the study area?
- What was the date of the establishment of the main road layout?

- Is there evidence of centralized planning or standardization in plot size and layout?
- What was the date of the establishment of the quayside and what commercial and industrial activities were located on the riverside?
- What economic and industrial activities were taking place in and around the river and its hinterland, how did these change through time and what was the town's relationship with the rural but increasingly industrialized hinterland?

9.4 Post Medieval South Shields

9.4.1 Potential for Survival of Post-Medieval Deposits

The locations of the important Post Medieval industrial sites were often occupied into the modern period and have been subject to intensive and destructive renewal of production facilities, in some cases preceding total annihilation during recent regeneration. Any understanding of the archaeology of this period must involve the integration of archaeological, industrial and documentary research.

9.4.2 Research Agenda

- Where are the surviving remains of buildings of this period?
- Can we define the locations of industrial activity already established through documentary sources, eg, salt-panning?
- How can archaeology improve our understanding of the site-specific development of industries located, predominantly, along the riverside?

To these ends where the opportunity arises archaeological briefs and specifications will direct archaeological contractors to consider:

- The value of intensive research to identify site usage along the riverside to recreate the time-deep overlay of industrial activity.
- The potential for excavation within the identified historic core for evidence of the interweaved small scale industrial, commercial and residential nature of the pre-industrial town.
- The potential role of building recording in the identification of early domestic and small scale manufacturing activity in the post-medieval town.

9.5 Nineteenth Century South Shields

9.5.1 Assessment of Potential for Survival of Deposits

The intensity of industrial activity, while offering the potential to yield information relating to the industrial development of the town, has often led to the truncation of

below-ground remains. Nevertheless, important components remain. Documentary and cartographic sources have the potential to substantially add knowledge of the early industrial development of the town.

9.5.2 Research Agenda

- What was the chronological order and relative spatial position of the layers of industrial development?
- To what extent did the older, small-scale craft and industrial activity in the historic core continue along side the dominating Victorian heavy industrial complexes?
- To what extent can the intensive study of individual structures and complexes shed light on the interaction between industrial processes, transport facilities and the development of the urban landscape?
- The survey has illustrated the size and complexity of the massive industrial concerns which dominated large geographical areas, which are understood as units but not as complexes of components suggesting the need for more detailed study of the technical development of these major sites.
- In highlighting the difficulties in the correlation between historical source material and contemporary street patterns and numbering, the need for further study into street development is urged to aid the clarity of documentary research.
- Specific concentrations of upstanding remains of railway and engineering heritage

In pursuit of these aims, archaeological briefs and specifications will be structured to:

- Pursue research to form a more complete picture of the changing elements in the development of the town and to establish the palimpsest of industrial activity
- Enhance the understanding of the surviving heritage through recording
- Examine the potential for archaeological activity to study and record the subsumed layers of development.

10 The Existing Statutory framework

The management of archaeological sites and deposits, both known and suspected, is achieved through a number of different legislative measures, concerning both archaeological monuments and planning law. These operate at a national level for the most important sites (Scheduled Ancient Monuments) and at a local level for sites thought to be of lesser (local or regional) importance. Sites of local and regional importance are managed through a combination of planning law and policy guidance notes.

10.1 Scheduled Ancient Monuments

The most important archaeological sites in England are listed and protected under the terms of the Ancient Monuments and Archaeological Areas Act, 1979. Consent is required from the Department of Culture, Media and Sport (who act on the advice of English Heritage) for any works carried out on or in the vicinity of a Scheduled site. The main criteria for Scheduling is the importance of the monument measured against national criteria.

There is only one SAM in the study area, the Roman supply fort of Arbeia. The development of the fort as a major regional museum and education resource secures the long-term future of the fort and plans to enhance the monument will form part of the Hadrian's Wall UNESCO World Heritage Site Management Plan.

It is not suggested that any new sites be recommended for Scheduling.

10.2 Listed Buildings and Conservation Areas

Those archaeological monuments which incorporate substantial above-ground fabric and are deemed to contribute to the quality of the built environment can be listed under the terms of the Planning (Listed Buildings and Conservation Areas) Act 1990. These enhance the powers of the Local Planning Authority and can indirectly preserve buried deposits by preventing development which would be permitted elsewhere. The Conservation Areas within the study area are shown on Fig 1.

10.3 Planning Policy Guidance and the Unitary Development Plan

The protection and management of the majority of archaeological sites is the responsibility of the Local Authority, and is effected through Planning Policy. South Tyneside has a comprehensive approach to the preservation and enhancement of the built and natural environment that is detailed and made widely available through the South Shields Unitary Development Plan. Archaeological issues are the subject of Policies ENV8/1-2 and ENV9 (Sections 6.5.30 to 6.5.37).

ENV8 ALL ARCHAEOLOGICAL SITES AND MONUMENTS AND THEIR SETTINGS, SHOULD BE PRESERVED IN SITU, AND ENHANCED WHEREVER POSSIBLE. APPLICATIONS WHICH MIGHT THREATEN ANY SUCH LOCATIONS WITH WITH DAMAGE OR DESTRUCTION WILL NOT BE DETERMINED UNTIL AN EVALUATION REPORT HAS BEEN SUBMITTED TO, AND ASSESSED BY, THE LOCAL PLANNING AUTHORITY. PLANNING CONDITIONS WILL BE USED AND WHERE APPROPRIATE, PLANNING OBLIGATIONS SOUGHT AND ARTICLE 4 DIRECTIONS MADE TO ENSURE THAT:

- A) DAMAGE IS MINIMISED
- B) ANY PROTECTIVE OR MITIGATION MEASURES ARE IMPLIMENTED

- C) AN APPROPRIATE LEVEL OF RECORDING IS COMPLETED BEFORE DEVELOPMENT COMMENCES

Archaeological policy in South Tyneside reflects national awareness of the importance of preserving and building upon the physical remains of the community's common past. South Shields has seen a great deal of regeneration over the past decade, much of it in the historic core, and the importance of conservation-led redevelopment can be seen in the character and design of new building, particularly in the riverside area, centred on the Custom House Arts Centre.

ENV8/1 THERE WILL BE A PRESUMPTION IN FAVOUR OF THE PHYSICAL PRESERVATION OF ALL NATIONALLY IMPORTANT ARCHAEOLOGICAL REMAINS AND THEIR SETTINGS. THE LOCAL PLANNING AUTHORITY WILL ONLY GRANT PLANNING PERMISSION WHICH WOULD ADVERSELY AFFECT SUCH SITES, REGARDLESS OF WHETHER THEY ARE SCHEDULED OR NOT, IN VERY EXCEPTIONAL CIRCUMSTANCES. THE COUNCIL WILL PROMOTE AND ENCOURAGE THE PREPARATION OF LONG TERM MANAGEMENT PLANS FOR ALL OF THE SCHEDULED ANCIENT MONUMENTS IN THE BOROUGH.

The Roman fort of *Arbeia*, and the area of the associated vicus are specifically mentioned in the UDP as coming under the terms of this policy. It should be noted that the full extent of the vicus and its cemeteries is not known at present, and that Roman finds are known from an extensive area of the Lawe.

ENV8/2 THE LOCAL PLANNING AUTHORITY WILL ONLY GRANT PLANNING PERMISSION FOR DEVELOPMENT AFFECTING OTHER IMPORTANT ARCHAEOLOGICAL REMAINS WHERE, IN IT'S OPINION:

- A) SUFFICIENT KNOWLEDGE OF THE CHARACTER AND EXTENT OF THE SITES' ARCHAEOLOGICAL INTEREST HAS BEEN OBTAINED (THROUGH A FIELD EVALUATION SURVEY IF NECESSARY); AND
- B) APPROPRIATE PROTECTIVE AND MITIGATORY STRATEGIES TO PROTECT THIS INTEREST, WITHIN THE SCHEME OF DEVELOPMENT CAN BE AGREED

Important archaeological remains across the known and suspected historic core will be afforded protection as a material consideration in the Planning Process.

This policy ensures that the applicant is aware of the need to demonstrate that any significant development within the vicinity of historic sites will not inadvertently destroy archaeological remains. A fuller explanation of the way archaeological issues are dealt with during the Planning Process is given below.

ENV9 WHEN ARCHAEOLOGICAL REMAINS OR FINDS ON SITES NOT IDENTIFIED UNDER PROPOSALS ENV8/1 OR ENV8/2 ARE DISCOVERED

DURING THE COURSE OF DEVELOPMENT, THEY SHOULD BE REPORTED IMMEDIATELY TO THE PLANNING AUTHORITY. IN ALL CASES:

- A) ANY WORK LIKELY TO DAMAGE THE ARCHAEOLOGICAL INTEREST SHOULD CEASE; AND
- B) FINDS OR REMAINS SHOULD ONLY BE REMOVED FROM THE SITE UNDER THE GUIDANCE OF THE LOCAL PLANNING AUTHORITY AND IN CONSULTATION WITH THE COUNTYWIDE JOINT CONSERVATION TEAM

In all cases of an unexpected discovery, every effort will be made by the County Archaeologist to minimize disruption to the development programme, while arrangements and measures are put in place to deal with any archaeological discoveries.

11 Archaeology in the Planning Process

In areas of the town where archaeological deposits are predicted, a number of stages are recommended by the Department of the Environment (Planning Policy Guidance 16, DOE November 1990) to ensure that the Local Planning Authority has sufficient information to achieve the correct balance between encouraging urban re-generation and economic development on one hand, and respecting and preserving the historical heritage on the other.

11.1 Pre-Application Discussion

Early consultation with the County Archaeologist and the Industrial Archaeologist is of enormous importance. They can provide an initial appraisal of the likelihood that archaeologically sensitive deposits need to be considered for any specific planning application, and give advice on the steps that may need to be taken at each stage of the process.

Should advanced warning be received, the applicant will need to provide the Planning Authority with information of the likely impact of the scheme on any buried remains. This is estimated from existing records (including this report), historical accounts, and reports of archaeological work in the vicinity, in conjunction with a number of sources which suggest the nature of deposits on the site, like bore-hole logs and cellar surveys. This is presented in a standard format, known as a Desk Based Assessment, prepared by an archaeological consultant on behalf of the applicant, to a specification drawn-up by the County Archaeologist/Industrial Archaeologist, who can also assist by providing a list of organisations which do work of this sort. A Desk Based Assessment must be done to the highest professional standards, by staff who are suitably qualified and experienced in handling the source material (documentary, cartographic, archaeological) and aware of the wider research background for the period under study.

On the basis of the information provided in the Desk Based Assessment, the Planning Authority will determine the need for further work to test whether deposits predicted in the Assessment have survived on this plot. This is usually achieved by trial excavation and is known as a Field Evaluation. This programme will also be defined by the County or Industrial Archaeologist, and may employ a range of survey and analytic techniques besides excavation. Should important remains be brought to light, the preferred option would be avoidance of disturbance (Policy ENV 8) for example by the use of building techniques that ensure minimal disturbance of the buried remains on the site.

With the benefit of the Assessment and Evaluation reports, the Planning Authority can make the appropriate decision (in the context of the Policies set out in the Unitary Development Plan, Section 6.3 above) on whether to give consent to the scheme or not, and, if so, what further steps need to be taken to mitigate the destructive effects of the development on the archaeological remains (Policy ENV8/2). This will ensure that any remains that will be unavoidably destroyed are archaeologically excavated, analysed and published, so that the site is “preserved by record” if not in fact. The requirements for further work will normally be attached to the Planning Consent as negative conditions, such as the model condition outlined in PPG16 (Section 29):

“no development will take place within the area indicated (this would be the area of archaeological interest) until the applicant has secured the implementation of a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority”

11.2 Archaeological Planning Conditions

The Written Scheme of Investigation is a detailed document which sets out the precise work required, covering the area to be excavated, the volume of deposits to be recorded, the methodology employed, the degree of expertise required, the amount of analysis and research required, finds collection policies, conservation of perishable artefacts, the deposition of finds and archives and the eventual publication of the results. Such programmes are expensive and time-consuming, and represent to the developer a construction cost against which to balance the real benefits of locating in the historic centre of the town.

Clearly, many sites in the urban area will not require the degree of work outlined above. In many cases the small scale of the disturbance associated with the development, or the low probability that archaeological remains will have once existed, or survived on the site, will mean that a much lower level of observation and recording is required. Known as a Watching Brief, this is the timetabled attendance of a suitably qualified archaeologist at the point when digging is underway. Any archaeological deposits encountered will be quickly recorded and any finds collected, without undue disruption to the construction work. Again, the County Ar-

archaeologist will provide the specification for the Watching Brief. The wording of the Condition attached to the particular consent will be as follows:

“no development shall take place until the developer has appointed an archaeologist to undertake a programme of observations of foundation and construction work to record items of interest and finds in accordance with a specification provided by the County Archaeologist. The developer must contact the County Archaeologist at least three weeks before the proposed commencement of works to allow this process to take place.”

Where standing buildings form a component of the archaeological resource, there may be a need to undertake Building Recording in advance of demolition or renovation. This will not be restricted to Listed Buildings, which are selected mainly on architectural criteria. South Shields has a number of outwardly unprepossessing structures which are important in forming a link with past communities and industries, and which will merit recording by qualified archaeologists or building historians to an agreed specification which will reflect the importance of the structure and detail the most suitable recording methodology (e.g. photographic survey, elevation recording etc).

An alternative method of arranging for archaeological work during the course of a long and complex development programme is through the use of a Section 106 Agreement, where one is used for other elements of a re-development. It is not recommended to use a 106 Agreement purely for archaeology.

11.3 Unexpected Discoveries

PPG16 provides advice on the extremely rare circumstance that exceptional and unpredicted remains are encountered while development is in progress. There are powers at the discretion of both the Secretary of State, and the Planning Authority to intervene to ensure that nationally important remains are protected. The developer can insure against any resultant loss, and would, if all appropriate steps have been taken, be entitled to compensation. In most cases, it has proved possible to achieve a satisfactory conclusion through voluntary negotiation. The best insurance is to take the appropriate steps (Assessment, Evaluation etc) at the right time.

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| Roman bronze figures 3 photos, 1907 | VF 2363, 2365 |
| Dock Street, slum clearance photo 1954 | VF 10125 |
| South Shields Roman station 2 photos 1976 | VF 2360 |
| Tyne and Wear Archives | |
| Deed relating to property near Ferry landing, 1762-1779 | 18/40-54 |
| Deeds, 1788-1937 | 2003/4/10 |
| Deed re tenement and Seahouse and property in | |

| | |
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| Wapping Street, 1811-1865 | 18/75-95 |
| Deed re Orange Street ,1862-1884 | 10/5 |
| Abstract of title of Jarrow Chemical Co. to ground at South Shields, 1891 | 47/29-33 |
| Photograph of the construction of Plessey factory, n.d | 1295/104 |
| Common Seal of the Borough of South Shields, n.d. | 1936/4 |

