

## **The 1825 Stockton & Darlington Railway: Historic Environment Audit**

### **Appendix 3. Shildon to Heighington and the Durham County/Darlington Borough Council Boundary.**

October 2016 (2019 revision)

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Borough Council and Stockton  
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## **NOTE**

**This report and its appendices were first issued in October 2016. Subsequently it was noted that some references to S&DR sites identified during fieldwork and given project reference numbers (PRNS) on an accompanying GIS project and spreadsheet had been referred to with the wrong PRN in the report and appendices. This revision of 2019 corrects those errors but in all other respects remains the same as that issued in 2016.**

## Introduction

This report is one of a series covering the length of the 1825 Stockton & Darlington Railway. It results from a programme of fieldwork and desk based research carried out between October 2015 and March 2016 by Archaeo-Environment and local community groups, in particular the Friends of the 1825 S&DR and the Friends of the NRM. This report outlines a series of opportunities for heritage led regeneration along the line which through enhanced access, community events and improved conservation and management, can create an asset twenty-six miles long through areas of low economic output which will encourage visitors from across the world to explore the embryonic days of the modern railway. In doing so, there will be opportunities for public and private investments in providing improved services and a greater sense of pride in the important role the S&DR had in developing the world's railways.

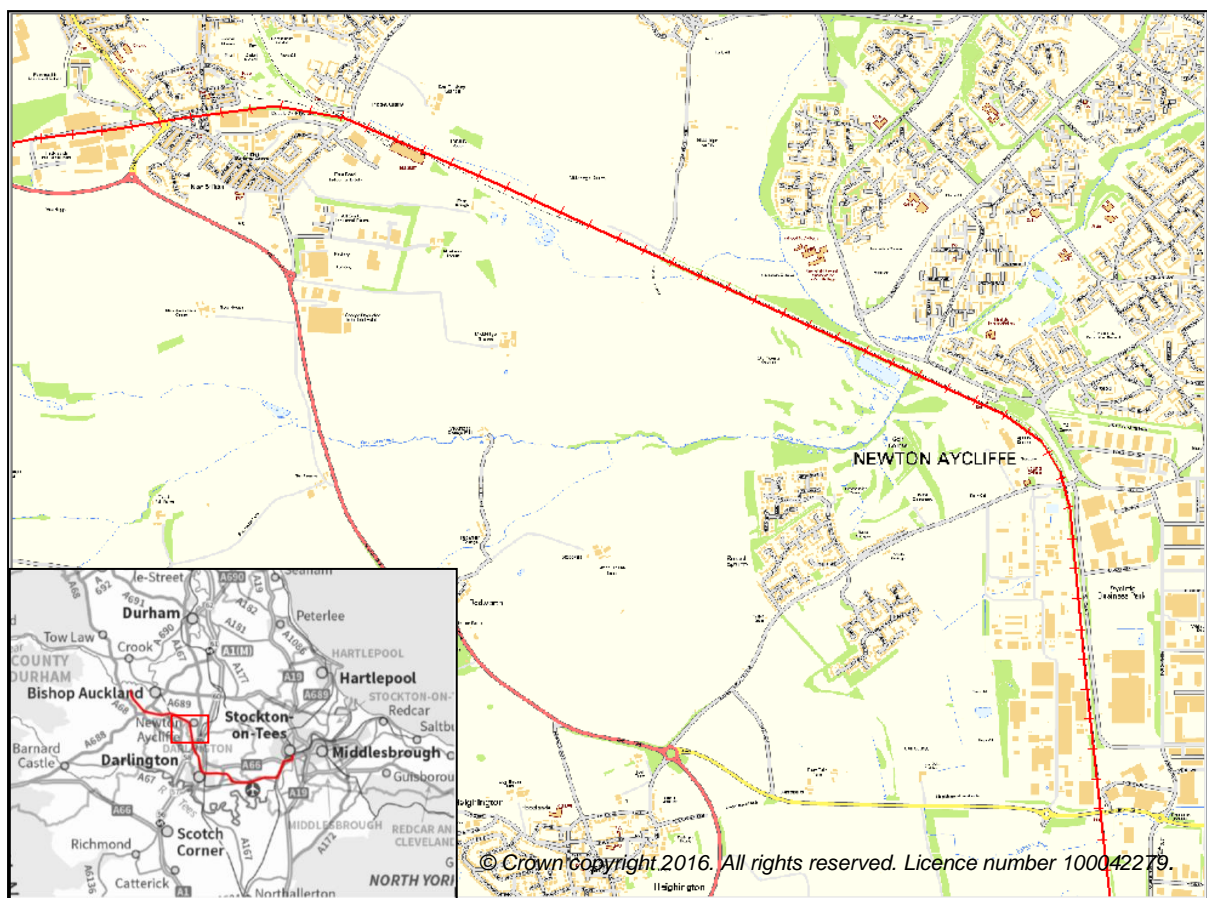


Figure 1. Area discussed in this document (inset S&DR Line against regional background).

This report covers land that falls entirely with Durham County Council and starts at Shildon and covers the next 6.78km to the boundary of Darlington Borough Council. This includes Locomotion, the National Railway Museum at Shildon and sections of live line as well as the 1826 public house and depot at Heighington which is still the site of a railway station. Access to live line has been limited to views from public access areas (figure 1). It outlines what survives and what has been lost starting at Shildon and heading south to the County/Borough Council boundary north of Coatham Lane. It outlines the gaps in our knowledge requiring further research and the major management issues needing action. It highlights opportunities for improved access to the line and for improved conservation, management and interpretation on the line, at Locomotion and in Shildon so that visiting the remains of the S&DR merits a trip from the other side of the world.

## Historic Background

Shildon has a special place in the history of the railways and was the location of an important stopping point during the opening ceremony of the Stockton & Darlington Railway on the 27<sup>th</sup> September 1825 where the waggons were transferred from the rope pulled incline at Brusselton to the power of Locomotion No.1’.

A few days previously, on the 20<sup>th</sup> September, the passenger coach Experiment arrived at Shildon from Newcastle where it had been made, and was coupled to Locomotion No.1 . The passenger coach was described by a reporter at the time as being fitted like a long coach with passengers sitting face to face along its sides. It was designed to carry 16 or 18 passengers inside and from the start was intended to travel daily between Darlington and Stockton.

Several members of the Committee on the evening of the 26<sup>th</sup> September ran down from Shildon to Darlington in the passenger carriage pulled by Locomotion No.1. Those committee members were Edward Pease (senior), Edward Pease (junior), Joseph Pease, Henry Pease, Thomas Richardson, William Kitching and George Stephenson. James Stephenson, George’s younger brother, drove the engine (Heavisides 1912, 55). This group dominated by the Pease family was not to be repeated on the grand opening day of the 27<sup>th</sup>. Edward Pease’s son Isaac, aged twenty two, died at home in Northgate, Darlington after a long illness on the 27<sup>th</sup> and so no members of the Pease family attended the opening of the line, despite being pivotal in the creation of the railway. However, the passenger coach Experiment was retained for other Committee members to use on the grand opening day.

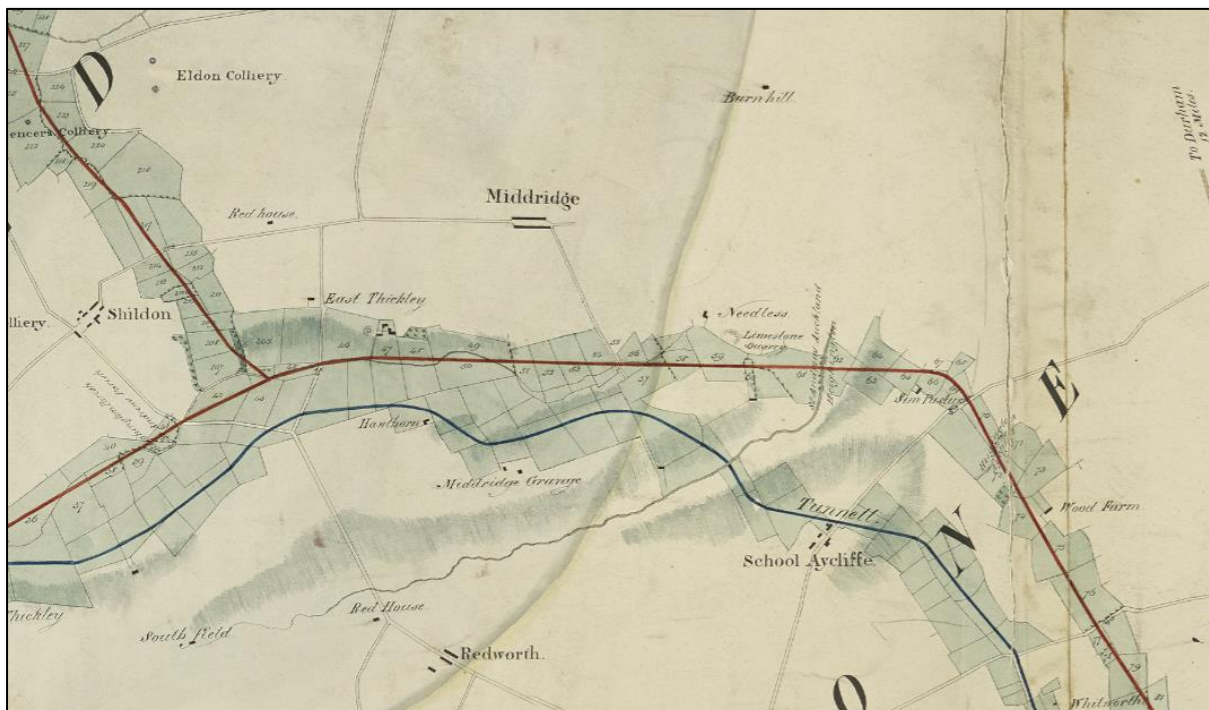
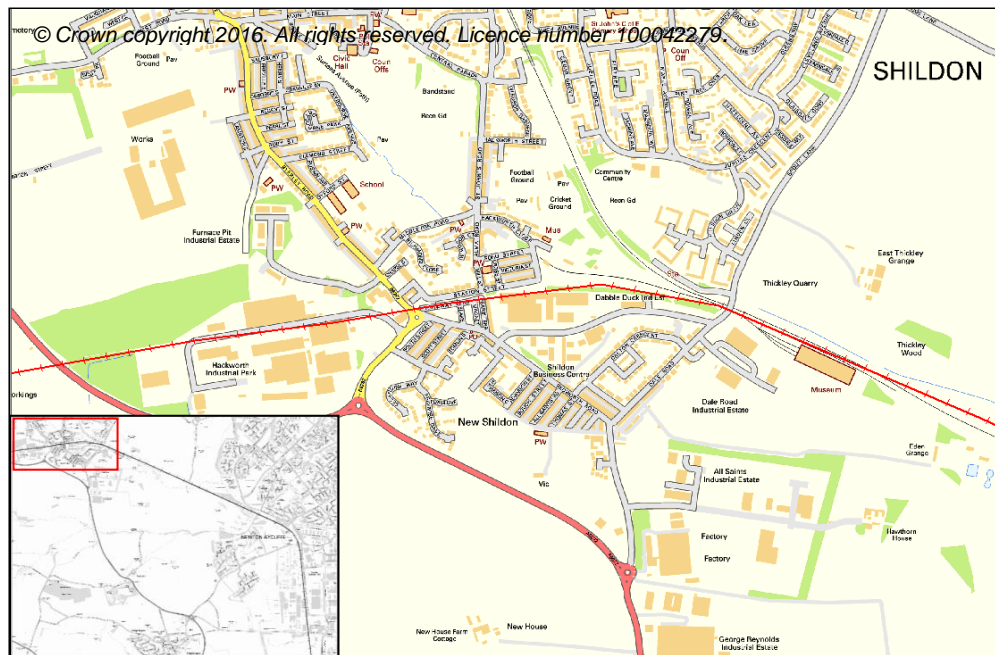


Figure 2. George Stephenson’s map of the proposed S&DR railway, showing the route, in red, from Shildon to Heighington and surveyed in 1822 (DRO Q/D/P/8/1). The blue line marks the route, as originally conceived by George Overton. The red line heading north from Shildon was the proposed Black Boy Branch Line opened in 1827.

## 1.0 HACKWORTH INDUSTRIAL ESTATE TO LOCOMOTION

The route enters Shildon via what was the S&DR's Works which grew from 1825 under the supervision of Timothy Hackworth. The Works went through significant periods of expansion and all of the original buildings have been replaced from the 1880s onwards. The route then passes the centre of New Shildon and the Mason's Arms Crossing and approaches Locomotion, the National Railway Museum. Free tours are often run at the NRM looking at the historic buildings at the western end of the museum site and incorporate the historic coal drops; the plate layer's cabin and site of the stables on the Black Boy Colliery branch; the 1857 goods shed and parcel office; Soho Shed and Hackworth's House. The museum also includes the site of Hackworth's Soho Works which he established in 1833 but now largely consists of grassy banks. Access to the modern museum building at the east end of the site is freely available during opening hours and includes Hackworth's 1829 San Pareil which competed in the Rainhill Trials. Access to the museum is generally free and there is ample free parking. A recently opened cycle path follows the 1825 line, which is live line, as far as Aycliffe Station and then access is via modern roads, pavements and through a wartime industrial estate where it reaches Heighington Station.

Figure 2.  
Hackworth  
Industrial  
Estate to  
Locomotion  
NRM.



### 1.1 What survives and how do we protect it?

No 1825 buildings survive in the industrial estate that has grown out of the S&DR Works (SDR508). The Works started as a single engine shed with space for two locomotives (that was all the S&DR owned by November 1825, although two more would arrive by January 1826) and another narrow shed for joiners and blacksmiths. It employed 20 men in 1825 and 50 by 1827. Boilers, cylinders and wheels were made by outside contractors and it was not until 1829 that the first complete locomotive (0-6-0 No.8 'Victory') was built at Shildon (Holmes 1975, 11). It became the headquarters of the S&DR locomotive department and in 1855 absorbed Hackworth's Soho Works after Hackworth's death. In 1853, a new engine shed costing £2,345 7s 2d was authorised by the S&DR and opened in April 1854 (SDR507). This appears to have been an early roundhouse and was named Sebastapol after the siege in the Crimean War of the time. Seen on the 1<sup>st</sup> edition OS map of 1856, it had been demolished and replaced by larger workshop buildings by the 1890s. This area also includes the site of Hackworth's first house where he lived from 1826 to 1831.

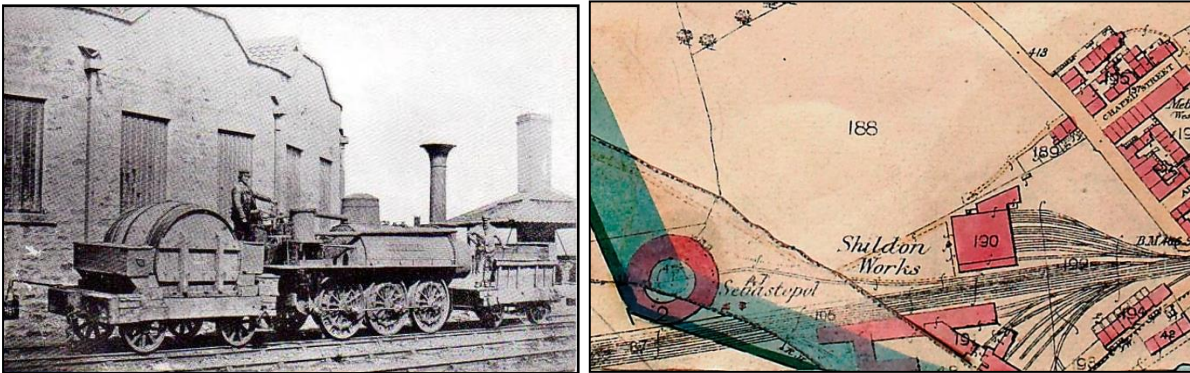


Plate 1. Shildon 'Sebastapol' round house, built in 1853/4, but demolished and overlain by Shildon Waggon works as these expanded in the later 19<sup>th</sup> century. The engine is thought to be Wilberforce. (Copyright Ken Hoole Study Centre at Head of Steam – Darlington Railway Museum). Right: the 1<sup>st</sup> edition 25-inch map of 1855

The buildings that survive today and are in use as an industrial estate, date to the late 19<sup>th</sup> and early 20<sup>th</sup> centuries and operated as the Shildon Waggon Works (SDR509). These include clocking in office, assembly sheds, and a hydraulic pump house. The buildings currently occupied by Triple T engineering still have rails heading towards them from the outside yard. There is also a semaphore signal (SDR134) in the bushes opposite the Crossings Pub and another has been mounted on a roundabout nearby. The area therefore still has evidence of railway history although you need to know what to look for.

Figure 3. The same area in 1856 as shown on the OS 25" to 1 mile mapping series.



Plate 2. Hydraulic Pump House of the S&DR Engine, later Waggon Works – located south of the S&DR line but worthy of protection as one of the oldest buildings remaining on what is now the Hackworth Industrial Estate.



Opposite the brick former NER offices there is The Crossings public house which was previously called The Mason's Arms (SDR135) and lent its name to The Mason's Arms Crossing which existed until the 1980s. It was from here that the waggons which arrived from the Brusselton Incline were attached to Locomotion No.1 on the 27th September 1825. However, the date of the inn and the process of commissioning its construction is not known. It did not exist when the line was surveyed in 1822. It was therefore not a pre-existing inn that the S&DR chose to use. There is no reference to it in the minutes of the S&DR Company Committee between 1821-36 or the Sub Committee between 1825-30; therefore, it is unlikely that it was an S&DR inn. It is possible that it was built speculatively by a private developer in anticipation of the railway arriving and was designed to serve the masons working on the line. It was rebuilt in late Victorian times but elements to the rear are Georgian.

**Hundreds of onlookers lined the track to witness the spectacle and see George Stephenson at the controls of his steam engine pulling the 36 waggons which also included the passenger coach, Experiment, filled with local dignitaries and investors. Three hundred tickets in all were issued for the journey but over 700 people were thought to have, pushed, scrambled and elbowed their way on board for the momentous journey. There was some debate and confusion about the order of the procession, but in the end it consisted of:**

- ***The Company's Locomotive Engine No. 1***
- ***The Engine's Tender, with water and coals***
- ***Five waggons, laden with coals and passengers***
- ***One waggon, laden with flour and passengers***
- ***One waggon, containing surveyors, engineers etc.***
- ***The Experiment , containing the Committee and other Proprietors***
- ***Six waggons, with workmen and others standing***
- ***Six waggons, laden with coals and passengers***

**The Durham County Advertiser later reported:**

***The scene, on the moving of the engine, sets description at defiance. Astonishment was not confined to the human species, for the beasts of the field and the fowls of the air seemed to view with wonder and awe the machine, which now moved onward at a rate of 10 or 12 mph with a weight of not less than 80 tons attached to it (1<sup>st</sup> October 1825)***



**Plate 3. The Mason's Arms in 2016 (left) and around 1900 (right) with rails and crossing gates in-situ.**

In the absence of a purpose built railway station, tickets to use the line could be bought at the newly constructed Mason's Arms. The S&DR Company had taken over the available rooms at the Mason's Arms to be used as a Railway Booking Office and a directors' committee room. A waiting room was built on the opposite side of the railway, and the first railway clock was placed in the wall of a house near the end of Redworth Road. This became the new station and opened in 1833, and the one near Dan Adamson's Grey Horse Inn which had been in use since 1827, was utilised as a goods station (Bainbridge 1933, 4).

The closing of the Mason's Arms Crossing Station in 1842, when the new station was built near the Shildon Tunnel, freed up the waiting room and so a reading room and library were installed there for the Mechanic's Institute who rented it from the S&DR. The S&DR furnished the room with a large cupboard for the library, two deal tables were purchased and a chandelier presented and hung in the centre of the reading room. Hat pegs were also put up. W. Kitching of the ironworks in Darlington donated a fender and fire irons, T. Hines presented roller blind fittings and W. Bouch and R. Corner presented blind rollers and blinds (ibid). A number of these names had strong management and engineering links with the S&DR. The new institute opened in April 1843.

The inn today is in an architectural style that reflects later Victorian fashions, such as the corner door and ornate woodwork around the windows and doors. The windows are also replacements.

The path from the Mason's Arms towards Locomotion follows the 1825 line and includes a substantial stone wall and the abutments of a footbridge shown on the 1<sup>st</sup> ed OS map dating to 1855. The stone wall also has a small archway set into it; probably a refuge for banksmen or brakemen.

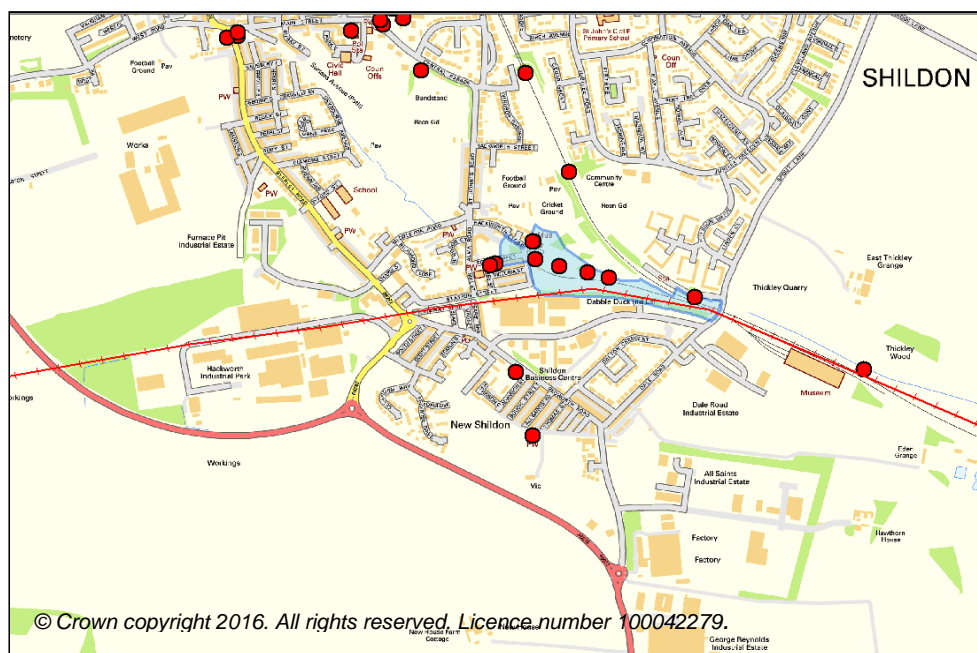


*Plate 4. A terrace including Hackworth's first house in New Shildon in the foreground with an engine works building to the rear (photo courtesy of Jane Hackworth-Young)*



## 2.2 Existing Designations

Figure 4.  
Existing  
designations  
(red dots =  
listed buildings,  
blue =  
conservation  
area)



## 2.3 Management and Protection



The Hackworth Industrial Estate is the site of the earliest S&DR railway works and the site of Hackworth's first house. As such it has a high degree of historic and archaeological significance. Developments which take place within the extent of the Works as established by 1855, should be the subject of pre-determination archaeological investigation which will inform the nature of development and the extent to which it should incorporate exposed remains or open spaces.



The Hydraulic Pump House although post S&DR is a significant building relating to Shildon's railway heritage and should be preserved. Future development of this area should consider re-exposing at least some of the three currently hidden elevations. Similarly, there are extant buildings dating to the 1880s onwards which retain a number of railway features such as rails and these have a contribution to make to the area's local distinctiveness and historic interest.

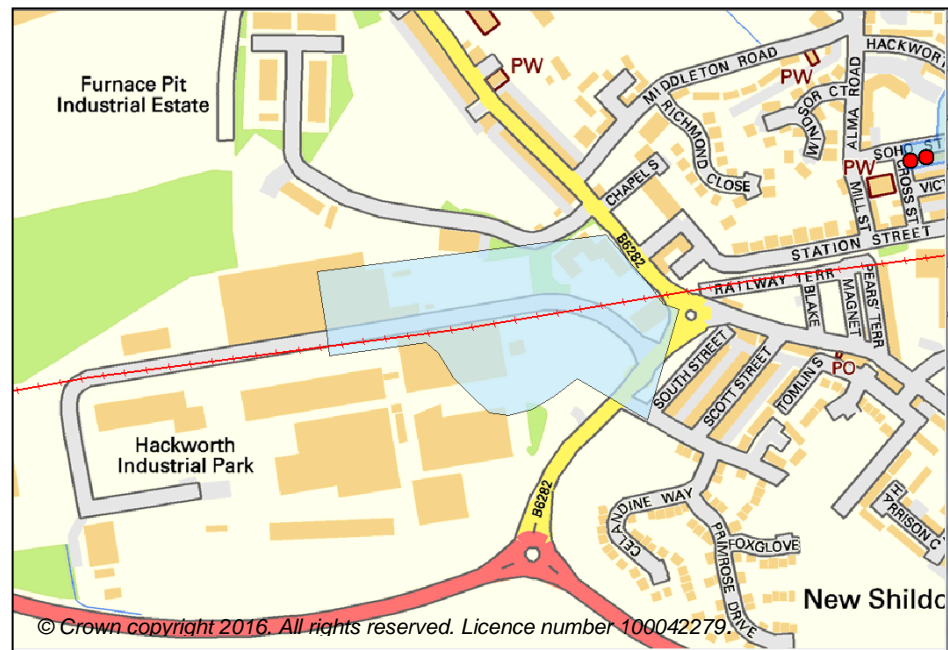


A Statement of Significance should be carried out on the former Mason's Arms to help inform future alterations, to assess its suitability for listing (or more likely local listing) and to explore a conservation programme in time for 2025. In particular the research should help to contribute towards our understanding of how the inn was built and how the S&DR used it between 1825-30. The building appears to have been wholly rebuilt in late Victorian times, but given its historic interest, the survival of any architectural fragments should be investigated. This will feed into the wider research programme looking at the role of inns and depots as railway stations.



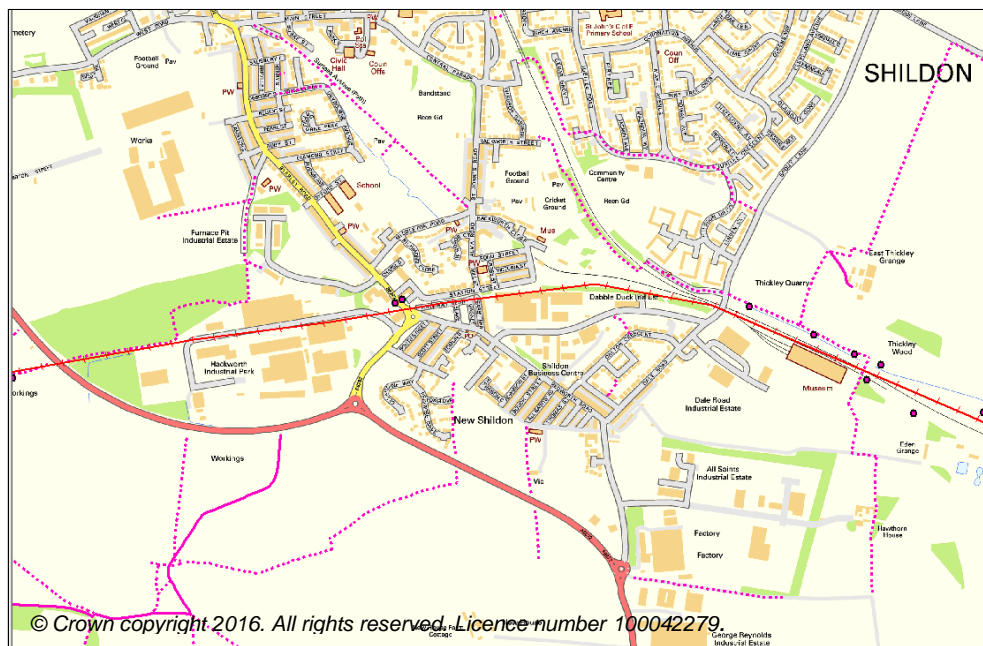
The practicalities of extending the current railway line within the Locomotion site, through the cutting up to the Mason's Arms should be considered. This would allow longer steam journeys for visitors, encouraging them into Shildon itself, and have the major benefit of allowing the live steam events of 2025 to start where Locomotion No. 1 began its journey in 1825.

Figure 5. Extent of the S&DR Works in 1855: this area requires archaeological intervention in the planning process and careful review of any proposed demolition or new build. Other Edwardian buildings outside this area merit recording and the Hydraulic Pump House should be preserved.



## 2.4 Access

Figure 6. Existing public rights of way.







-  Access through the industrial estate to Locomotion is well established and surfaces are firm. There may be a need to look at pavement edges to allow mobility vehicles to mount and dismount pavements.
-  There is ample free parking at Locomotion for people wishing to explore the line from there.
-  The path from the industrial estate to The Crossings pub might need widening a little to accommodate a range of users.
-  The path that runs along parallel to Station Road on the 1825 route is narrowing and will need widening if it is to accommodate a range of users.

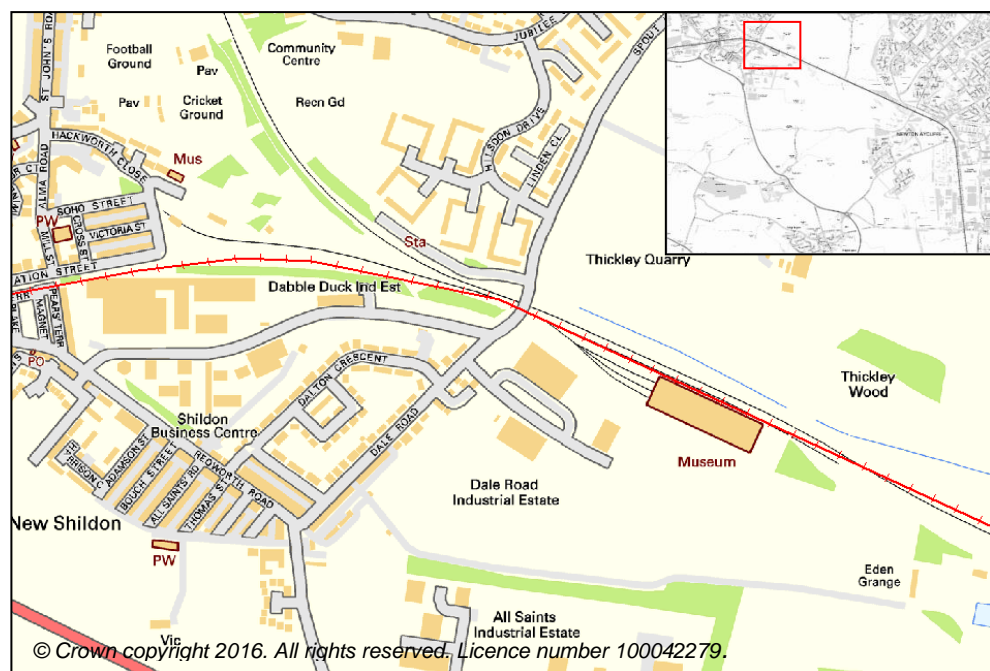
Plate 5. The narrowing footpath, descending from Station Street to the trackbed (below), and approaching the Hackworth end of the Locomotion site (right).



## 2.0 NATIONAL RAILWAY MUSEUM LOCOMOTION

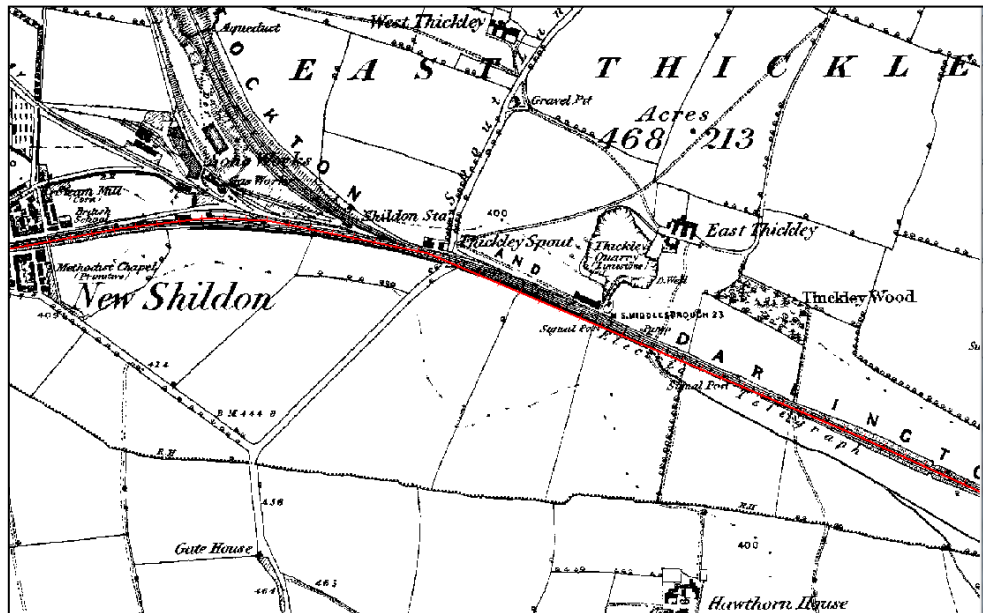
There is a significant cluster of nationally important buildings here associated with the birth of the railways and so this report concentrates on those and does not cover the locomotives or collections of the NRM, worthy of a separate report. Locomotion is at the heart of Shildon's Conservation Area and also contains a number of listed buildings. The Conservation Area was designated largely to protect the railway heritage of the area and its associations with Timothy Hackworth and includes the 1830s domestic buildings, the industrial railway related buildings and the later 19th century public buildings such as the Methodist Chapel and Sunday School. There are also a significant number of railway related features outside Locomotion. These are not included here but the town merits an additional management plan covering those features. However, because of the poor condition and vulnerable nature of Daniel Adamson's Coach House, it has been included in this section, although it is not part of Locomotion.

Figure 7. The Hackworth Museum & Locomotion NRM site



## 2.1 What survives and how do we protect it?

Figure 8. The same area in 1856 as shown on the OS 6" to 1 mile mapping series.

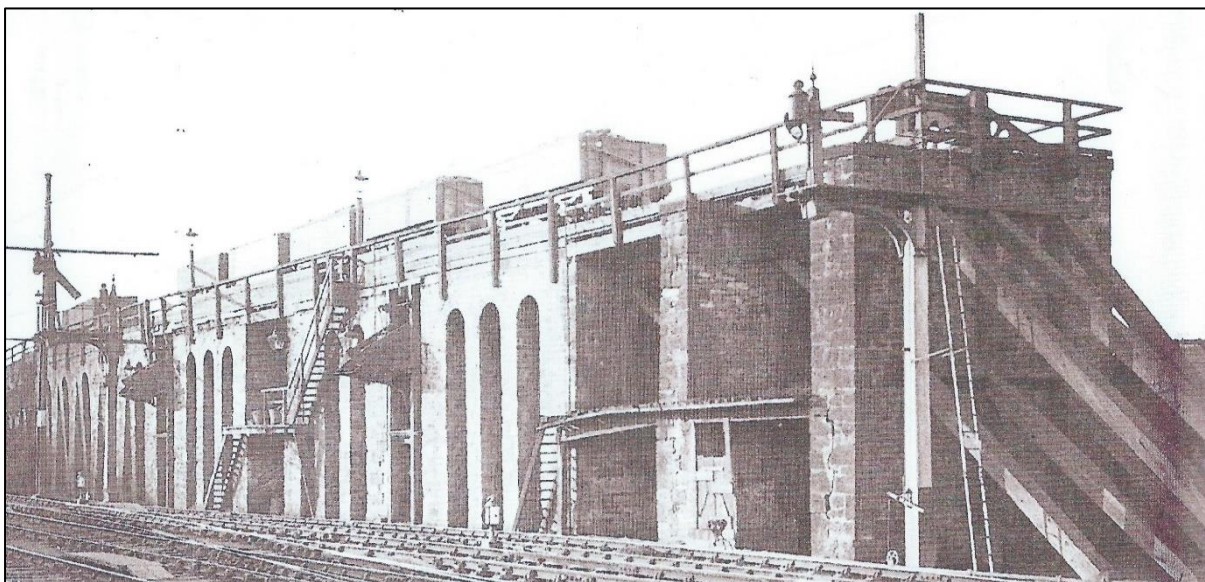


### *Coal Drops (Listed Building Grade II, HER 35606)*

These stone arched structures possibly date from 1846/7, although no research has taken place to confirm this. They are thought to be the largest surviving examples left in the country. They were used for fuelling the tenders of railway locomotives. Waggons loaded with coal were shunted up the ramp on the west side and along the top of the coal drops where the coal would be released into a wooden hopper and then an iron chute which directed the coal into a waiting tender below.<sup>1</sup> There was enough capacity to load four tenders at once because this was an extremely busy loading area and once the loading was complete, the empty waggons were shunted backwards and replaced with the next set of waggons. There were four coal drops in the rectangular spaces, but one was subsequently adapted as an office space. Other narrower arches, some of which are blocked, are engineering arches designed to strengthen the structure and minimise the use of materials. If you look carefully you will see that some of the materials were old four-hole stone sleepers used from the 1830s by the S&DR, but here split and reused. The pale coloured bricks were a mixture of local bricks and Bolckow Vaughan Company<sup>2</sup> bricks from the wider area.

<sup>1</sup> Information from Simon Smalley, NRM

<sup>2</sup> Bolckow and Vaughan set up an ironworks together in 1840 near Middlesbrough to provide iron rails to the S&DR. After the railway reached Crook in 1843 they opened collieries and coke works there and then iron works at Witton Park to manufacture rails (Stokes 2016, 237-8).



*Plate 6. Undated, but possibly 1920s, historic photograph of the coal drops complete with hoppers (photo the National Railway Museum).*



*Plate 7. The near end of the coal drops has since been demolished to create the access to the present day station.*

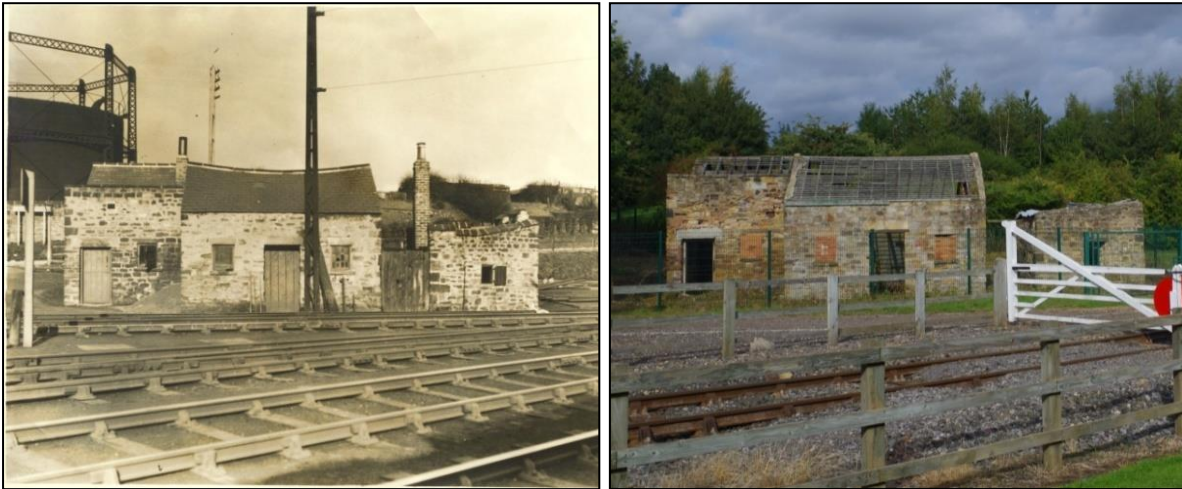
### *Black Boy Plate Layer's Cabin and Outbuildings (Listed Building Grade II, HER35933)*

There are three small roofless buildings behind safety fencing. This is where the S&DR (1825), The Surtees (1831) and the Black Boy (1827) lines all met. The function of the central building with the door and windows on either side is unknown, but may have been a meter house associated with the gasworks that were once located to the rear (Walton pers comm). The building to the right was a plate layers<sup>3</sup> cabin. It now has a sloping roofline, but was built with a castellated roof that soon lent to it being called the 'castle cabin'. This roof type has also been recorded at the plate layer's cabin at Simpasture, now destroyed, and the Tallyman's Cabin at Westbrook in Darlington. The small building to the left (west) may have been a banksman's cabin. Banksmen hopped on to waggons to apply the brakes. The buildings were vandalised in 1985 and have remained roofless since then. It is likely that the stables were located to the rear where horses that pulled the early waggons were accommodated.

The site also featured its own gas works built in 1841 to provide for both the Soho Works and the railway. This provided the Soho Works with gas lighting, the only other area to be afforded

<sup>3</sup> A plate layer is a railway employee whose job is to inspect and maintain the permanent way of a railway installation. The term derives from the **plates** used to build plateways, an early form of railway.

such luxury at the time being Grey's Street in Newcastle. A section of wall to the southwest of the building group probably dates to the first phase of the Soho Works sometime between 1833 and 1866.



*Plate 8. The incorrectly named 'Black Boy Stable', plate layer's cabin and outbuildings with gas works to the rear first built in 1841 (left). Vandalised in 1985, these listed buildings stand unconserved and fenced off.*



*Plate 9. The Goods Shed and detail of reused two hole sleepers in the fabric of the building*

### *The Goods Shed with Coal Depot (SDR510)*

The Goods Shed was built in 1857 reusing old stone sleeper blocks, presumably taken from the 1825 line which ran adjacent to it. The Goods Shed was the hub of the distribution network operated by the railway. The parcels office administered the movement of goods in and out. At the back there is a ramp to bring waggons up for unloading coal. Laden waggons would tip the coal from the elevated ramp into coal cells below for the local domestic market. Other goods would be taken into the shed for distribution and horse drawn carts would arrive at the arched door on the front to take them away. It has been suggested that the reconstruction of

the ramp is not accurate and that it should be higher.<sup>4</sup> There is very little on site interpretation to explain how the building would be used and how goods, coal and lime would be sorted, delivered and collected.

*Plate 10. The elevated ramp to the rear for dropping coal into waiting carts for domestic sale, known as 'landsale' (as opposed to being taken to the port for export known as seacoal)*



#### *Parcel Collection Hut*

The small wooden shed is a parcel collection hut, possibly of LNER origin from 1923 (Jane Hackworth Young pers comm). Local suggestions that it is not painted the correct colour may be wrong; there is a large degree of variation in the copper beech shade as each of the area works foreman mixed his own paint but from research on paint fragments it is considered to be correct (Mark Sissons, Archivist, North York Moors Historical Railway Trust pers comm).

#### *The Soho Shed and site of the Soho Works (Listed Building Grade II, HER35625)*

This is the oldest surviving industrial building in New Shildon. It was built as an iron merchant's warehouse in 1826 by Messrs Kilburn of Bishop Auckland, presumably sited here because of the proximity of the railway which could bring merchandise in and transport it away. It may have been acquired by Hackworth's Soho Works in 1842 (indenture held by Hackworth – Young pers comm) although this requires further research. It was later reused by the NER from 1863 as a paint shop for locomotives. Under floor heating, modelled on a Roman hypocaust, helped the paint dry and two locomotives a week were painted here during the 1870s. In the twentieth century it was used as a practice room for the Shildon Works Silver Band and as a boxing gym.<sup>5</sup> It now houses the NRM's collection of chaldron waggons, the beam engine used by the Hackworths from 1833 and the locomotive Braddyll (or Nelson as it may have been called) which was built, or rebuilt, by Fossick and Hackworth (Thomas Hackworth, Timothy's brother) at Stockton.<sup>6</sup> Internally it is clear that the building has been

<sup>4</sup> Ken Hutchinson, Friends of the NRM

<sup>5</sup> Information from Simon Smalley, NRM

<sup>6</sup> Jane Hackworth-Young pers comm

widened from within and in addition to the important waggon collection, there is the works bell that called workers to work (and indeed woke them up) and a model belonging to Hackworth.

The interpretation panel is located behind security fencing which prevents access to the building and makes reading the panel difficult, but not impossible.



*Plate 11. The Soho Shed*

In 1833 Hackworth renegotiated his contract and took over the workshops, starting his own engineering works with his brother Thomas and colleague Nicholas Downing creating the trading name Hackworth-Downing. Although Timothy owned the works it was his brother Thomas who managed them. When Downing left in 1837, the works became known variously as Thomas Hackworth & Co until 1840 and Soho Engine and Foundry Works<sup>7</sup>. The name Soho was derived from a hunting cry meaning 'Go to it!', although it also had strong associations with the Soho Foundry of 1795 founded by Boulton and Watt and which was quickly recognised as being pivotal in the industrial revolution. Whatever the historic connections, it was apparently suggested by Joseph Pease as a suitable name<sup>8</sup>.

Timothy Hackworth acquired further land and set about erecting more workshops, forges and sheds, providing facilities for the building of engines not just their repair throughout the 1830s<sup>9</sup> and 40s. These works were located just behind his house and consisted of a foundry, machine shop, blacksmith's shop, coal drying ovens and an adjacent gas works closed by 1883 and which survived until 1946. The very close proximity of the erecting shop behind Hackworth's house begs the question; what was behind it that stopped it being built further back? Perhaps there was an earlier erecting shop; the one behind his house may have been built to help Hackworth fulfil a large contract for twelve locomotives from the London & Brighton Railway in 1846 (notes from Reginald Hackworth Young 1977 in the care of Jane Hackworth Young). The site is now a grassy green bank, (although some walling may survive) and is of significant archaeological interest.

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<sup>7</sup> Hopkin 2004, 284-6

<sup>8</sup> Young 1975, 338

<sup>9</sup> Hutchinson 2003, 114.



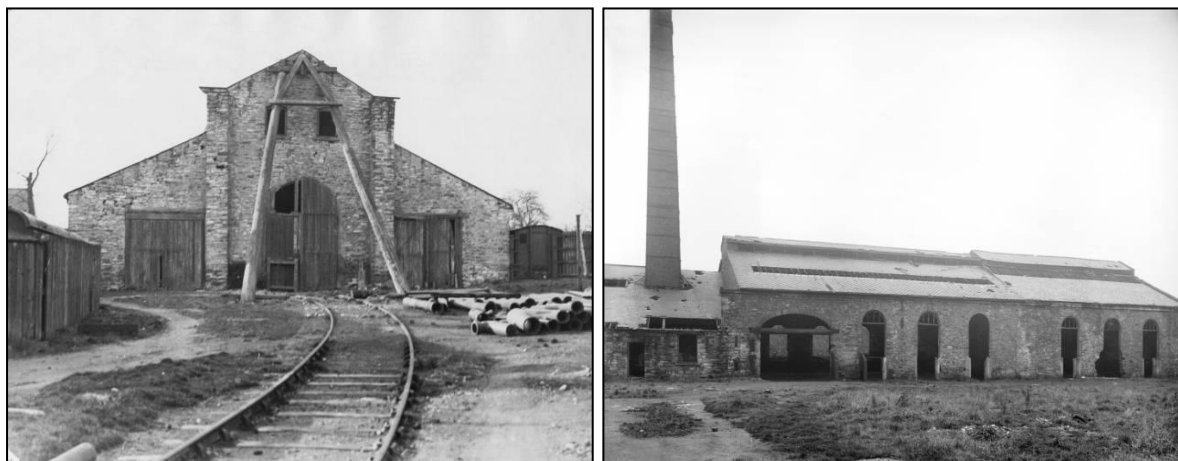


Plate 12. Hackworth's Erecting Shop, seen here in 1945 shortly before it was demolished. © National Railway Museum.

During its operation Soho Works had produced a large number of influential locomotives such as the Lord Brougham, Shildon, Magnet, and Arrow however the Royal George was built at the nearby S&DR Works and Hackworth obtained permission to build his Sans Pareil there too. It was at his own works that Russia's first locomotive was built and it was Timothy's 16-year-old son John Wesley Hackworth (who also lived here) who travelled to Russia to unpack the crates containing the locomotive built here for the Tsar and the Tsarkoye-Selo Railway in September 1836. Later in 1838 three 0-6-0 engines were commissioned by the Albion Mining Company and shipped to Nova Scotia, Canada. The company ran into financial difficulties in the 1840s, yet in 1852, after Hackworth had died and the business was about to be sold, Timothy Hackworth (junior) wrote to his sister:

***'There is quite a mania for our patent engines. Mr Fletcher is wild about his. He tells nearly everybody he meets with that it is the best Engine in the world. I quite believe if we had a few more put down that we shall plenty of work and grow charmingly.'***

Hackworth had considered selling the business in 1839 but no sale took place. After his death his two sons could not agree or could not afford to split the business and it went up for sale. It never sold (the valuers could not agree on its price, although there may have been some incentive in reducing its value to help the sons purchase it<sup>10</sup>) and eventually the S&DR bought it at a much reduced price.

#### *Hackworth's House and adjacent cottages (Listed Building Grade II HER 34592 & 35608)*

This row of cottages was where the extended Hackworth family lived from 1831. Timothy, his wife Jane and 8 surviving children lived in the house on the right. His extended family occupied the house adjacent and the smaller cottage. The cottages on the left were built later. The S&DR black and white ceramic plate still *in situ* on the front of No. 3 Soho Cottage is one of many placed on terraces or houses owned by the S&DR in 1857 in which its employees lived. After Hackworth's death (he died in 1850 of typhus but Jane his wife stayed on at the house until she died two years later), the sale documents described the house as 'An excellent Dwelling House, containing on the Ground Floor Three Sitting Rooms, Kitchen, Dairy, and Store Pantries, over which are Seven Bed Rooms and a Lobby.'<sup>11</sup> The S&DR bought the house and works from the Hackworth family in 1855 when William Bouch<sup>12</sup> moved in and it continued

<sup>10</sup> Letter from valuer George Hardcastle 1.2.1853, Sunderland Sale Offices to Mr Greener and other Trustees under the Will of Timothy Hackworth (copy provided by Jane Hackworth Young)

<sup>11</sup> Copies of the sale documents and inventory courtesy of Jane Hackworth-Young

<sup>12</sup> Brother of Thomas Bouch who was disgraced after the collapse of his designed Tay Bridge

to accommodate each of the Work's Managers at Shildon until about 1905 – including Ronald Smith, John Mackay Wright and Robert Pick.<sup>13</sup> The house has also been subdivided over the years on occasion being split into six. The house became derelict in the 1970s and was saved by the District Council and opened as the Timothy Hackworth Museum in 1975 and later became part of Locomotion, the National Railway Museum at Shildon. Sadly, the buildings are in poor condition once again.

The buildings have been through many alterations and sub divisions, even when still occupied by Hackworths and much has been rebuilt or lost. Reports by Andy Guy<sup>14</sup> and Dieter Hopkin<sup>15</sup> have carried out some research into the evolution of the buildings and this is a significant start towards understanding the buildings, but further work is required. As the buildings clearly need major intervention, it may be appropriate to commission detailed archaeological recording.



*Plate 13. Hackworth's House and adjacent cottages. The green area to the right is the site of the workshops seen in plate 11.*

#### *Wesleyan Sunday School (now the Welcome Building) and Chapel*

This large Wesleyan Chapel was built on Soho Street in 1865. In 1888, the red brick Sunday School was built at the other end of the row using bricks from either the Shildon Brick and Tile works further west on the Surtees Line, or the New Shildon Brickworks adjacent to the S & DR Works at New Shildon. It consisted of a large hall and seven classrooms.

#### *The Surtees Branch, the Black Boy Branch and the Tunnel Branch*

The path in front of Hackworth's house runs on the site of the Surtees line which was built in 1831. Up the hill to the back, the Black Boy Branch line ran which was replaced by the Tunnel Branch which is still live line. This path links into the town centre and the Surtees path links to Hackworth Park.

There are other railway heritage assets within Locomotion, but they are owned by Network Rail. These include a small group of three buildings on the north side of the track:

#### *Signal Box (Listed Building Grade II HER35936), and Railway Cottages/ Weigh House.*

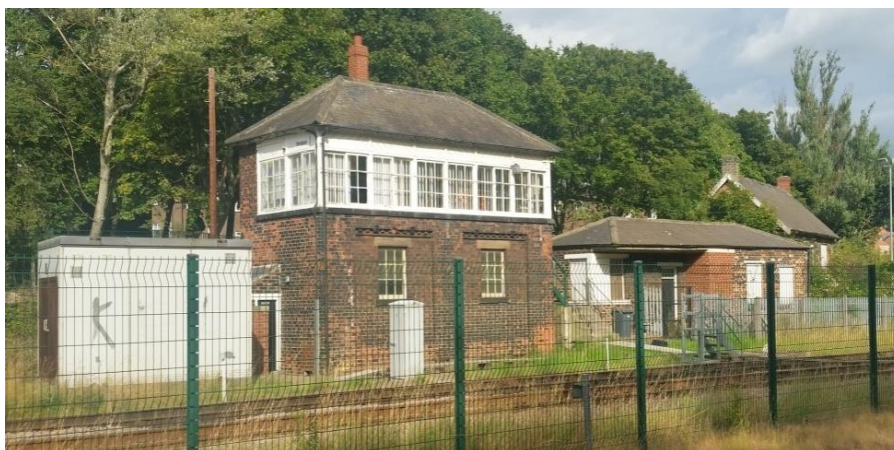
The signal box dates to 1887 but was modified in 1928 and 1984 – various alterations are apparent in the brickwork. This was built for the Central Division of the North-Eastern Railway Co. Ltd., possibly designed by Thomas Prosser, architect to the NER. This box is a variant of

<sup>13</sup> From Graham Tunbridge's account on Timothy Hackworth dated 27<sup>th</sup> November 1945

<sup>14</sup> Unpublished but in the ownership of the NRM

<sup>15</sup> Hopkin 2010

the Central Division's Type C2 signal box. The interior retains its McKenzie & Holland pattern 16 frame lever system installed in 1928, and reduced from 55 levers to 42 levers in 1984. There are two other railway buildings here, one of which was the signalman's cottage. The other may have been a weigh house, but probably not the original weigh house that was home to Joseph Anderson and his wife, who was appointed on the 14<sup>th</sup> May 1827 as the first railway accountant and also had responsibility for timekeeping at Shildon works and dealing with tickets for trains passing over Brusselton bank (Holmes 1975, 18 and Slack and O'Neill 2015, 25). Anderson was listed as a weighing machine keeper in the local trade directory for East Thickley in 1828.<sup>16</sup>



*Plate 14. The 1887 signal box, signalman's cottage and possible weigh house*

#### *Thickley Bridge (Listed Building Grade II)*

There was no bridge here in 1825, but this was built in 1857 by Harris of Stockton to provide access for the farmer between fields. It has since been much enlarged southwards to accommodate the many sidings that ran along here by the late 19<sup>th</sup> century. The 1857 construction marked quite a technological achievement as the span was made of a single casting.<sup>17</sup> The remains of electric overhead wiring complete with insulator blocks introduced in 1914 as part of the electrification of the line still survive attached to the bridge and as electric poles in the grass. The bridge is in poor condition but offers a means to improve access between the modern engine shed and the new cycle path to Aycliffe.



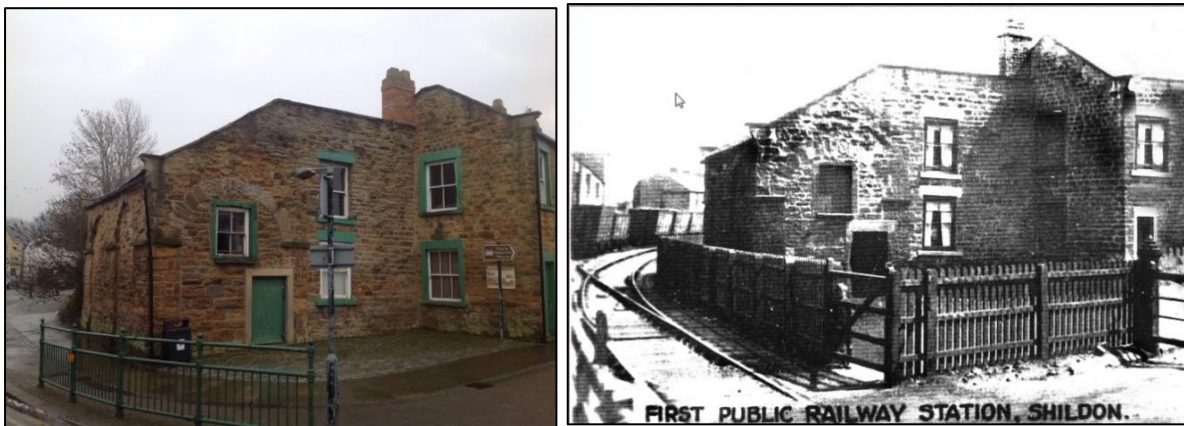
*Plate 15. Thickley Bridge, Grade II listed, built 1857 and extended several times.*

<sup>16</sup> White's Directory 1828

<sup>17</sup> Listed building description 112196

### *Daniel Adamson's Coach House and the Grey Horse Inn (Listed building Grade II)*

The Adamson family lived in Old Shildon before the railway was built and Old Dan Adamson was the landlord at the Grey Horse Inn in 1827. The present day Grey Horse Inn opposite appears too modern to be the original, but it may have been modernised in the late 19<sup>th</sup> century. However historic images suggest it was the building to the right that was the inn.<sup>18</sup> The building next to the coach house appears older and so it is worth considering that this might have been the inn or at least the inn-keeper's house in 1822. When John Dixon recounted his time surveying the line in 1822 he said that here was nothing in New Shildon and that the nearest house was Dan Adamson's. As this house is older and nearer New Shildon, it would suggest that this was Adamson's house and not the buildings on the other side of the road. In the early days of the railway he ran a horse drawn passenger railway coach service to Darlington along the Surtees Line and the 1825 S&DR line. The Surtees line ran immediately on the left of the building as you face it, on what is now Main Street. He is reputed to have built this building c.1831 to house his coach 'Perseverance'. Passengers may have boarded here, as well as other regular stopping points. The two archways have been blocked at a later date; they presumably had doors in place when Adamson stored his coach the 'Perseverance' here.



*Plate 16. (above left), Daniel Adamson's Coach House on the left with the blocked archways (photo: Paul Harle). The building on the right appears to pre-date it and may have been Adamson's house. (above right), An undated photo of the Coach House with the Surtees Line running alongside, complete with waggons.*

The building is owned by Durham County Council and is currently empty and its condition is declining. It has an attractive garden space to the rear that is currently disused but not owned by DCC.

### **Associations with Dan Adamson junior**

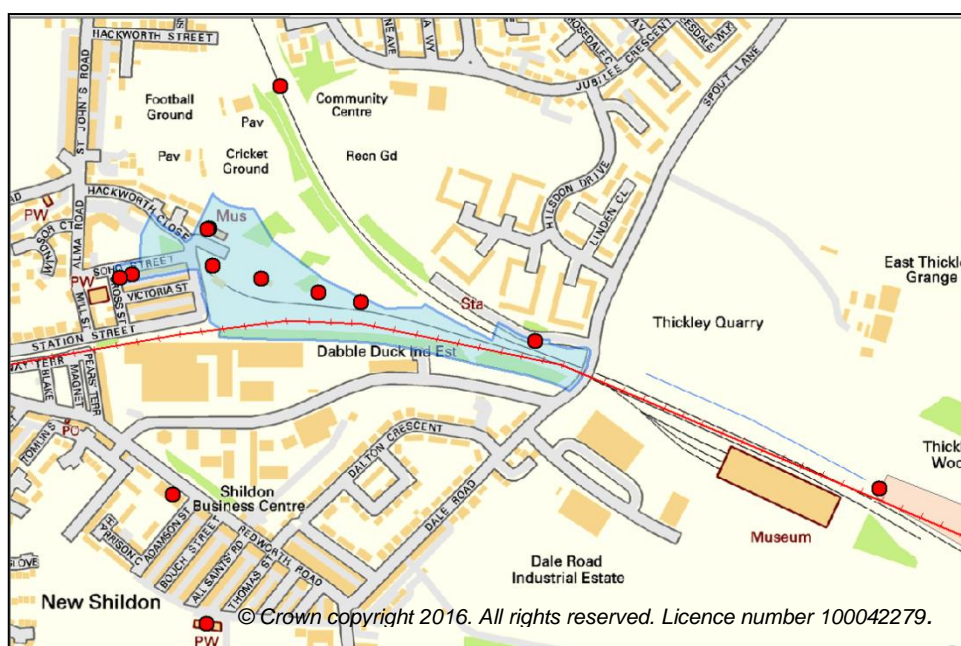
One of Old Dan's fifteen children also called Daniel Adamson was born in 1820 – he could just remember being present at the opening day of 1825. In 1833 at the age of 13, after attending a Quaker school in Old Shildon, Adamson was apprenticed to Timothy Hackworth, with whom he later (1841) served as a draughtsman and engineer. He afterwards served under Hackworth's successor, William Bouch, as draughtsman and superintendent of stationary engines at the Shildon Engine Works, until in 1847 he became general manager of the works at the age of twenty-seven. In 1850, Adamson became manager of Heaton

<sup>18</sup> However William Adamson was listed as a victualler at the Grey Horse, Shildon Lodge in White's Trade Directory of 1828

Foundry in Stockport, near Manchester. A year later, at Newton Moor near Dukinfield, he established an iron works, Daniel Adamson and Co, specialising in engine and boiler making. Initially, he followed designs created by Hackworth, but he improved the design and manufacturing process over the next 36 years, exporting 'Manchester Boilers' worldwide, and building a business, the Newton Moor Iron Works, which by 1890 employed some 600 people. He had many other business interests across the north of England and he championed the Manchester Ship Canal (1890 Institute of Mechanical Engineers Obituary and Grace's Guide to British Industrial History.<sup>19</sup>

## 2.2 Existing Designations

Figure 9. Existing designations



















## 2.3 Management and Protection




The NRM/DCC owned historic buildings at Locomotion are clearly suffering from a lack of investment. While some buildings will only ever cost money (the coal drops for example), others have the potential to make money, but they require capital expenditure first to put them into good condition. Locomotion is failing to generate enough income in Shildon itself – when thousands flock to see visiting steam engines, there is little opportunity to spend money – these are limited to a small café and a small gift shop. There is no encouragement or reason for these visitors to move into the town and spend money there either. Consequently, the museum is failing to have the beneficial economic impact on the wider area that it was intended to have.

<sup>19</sup> [http://www.gracesguide.co.uk/Daniel\\_Adamson](http://www.gracesguide.co.uk/Daniel_Adamson) [accessed 200316]

-  Given their poor condition, it is only that the Historic England Heritage at Risk Register (HAR), does not include Grade II buildings outside of London, which has prevented the coal drops from being included on the register. They may well merit either being upgraded to Grade II\* or scheduled and so warrant inclusion on the HAR. In any event urgent action is needed as they are falling down.
-  The Goods Shed and Coal Depot should be listed. Some research and excavation might establish if the reconstructed ramp is at the appropriate height. If any internal works are proposed a Statement of Significance must be carried out first.
-  Hackworth's house and adjacent cottages should be considered 'at risk' due to their poor condition. Historic associations may warrant their elevation to Grade II\* and formal inclusion on the HAR.
-  Thickley Bridge should also be considered as 'at risk'.
-  Dan Adamson's Coach House should be considered as 'at risk'.
-  Before conservation work is carried out to the following structures, a detailed statement of significance and recording should take place in order to inform the most appropriate conservation approach, to prepare suitable text for interpretation, to inform new uses and to review status for statutory protection.
  - The Coal Drops
  - The Black Boy Plate Layers Cabin and other outbuildings
  - The Goods Shed Depot
  - The Soho Shed
  - Hackworth's House and adjacent cottages
  - Dan Adamson's Coach House (and ideally the privately owned adjacent building)
-  A new interpretation strategy is required for the outdoor parts of the museum. The walk's leaflets for Locomotion are short on detail. The interpretation panels are un-maintained and sometimes conflict with the leaflets. The interpretation panels are not all accurate. The panel for the Soho Shed is hidden behind security fencing. The signage for the plate layers' cabin etc is misleading – they are not stables. The Friends of the S&DR, with considerable support from the Friends of the NRM, offer a more detailed Heritage Lottery Funded leaflet – the Shildon Circular. This could be published or quarried for information. Design and printing could be paid for through local advertising. Signage to the buildings in Locomotion is too large and visually obtrusive. While referencing a (later) railway theme their large scale in prominent positions detracts from the historic buildings and makes it difficult to photograph them without intrusive signage.
-  The Network Rail signal box may be made redundant in due course and replaced with a remote system in Gateshead or York. A new use will need to be found; ideally one that retains its lever system. The signal box is a listed building. Its new use should be informed by a Statement of Significance (which could usefully be carried out at the same time as the signal box at Heighington). Elsewhere, signal boxes have been successfully converted into income generating holiday accommodation.

-  The two adjacent buildings have the potential to make rental income as small holiday lets – rental could include access to the signal box (if it is not converted). On that basis the NRM could consider acquiring them as potential income earners.
-  Part of Hackworth's house and the adjacent cottages are also potential income earners via holiday rentals (for part of Hackworth's House) or conventional short term lets (the cottages). This would also help to keep people on site and reduce vandalism. Part of the house should be used to celebrate Hackworth and his family and provide information on his life and achievements.
-  The use of the chapel Sunday School as a welcome centre should be reviewed. Can a better use be made of it that could generate income e.g. for the sale of refreshments, railway memorabilia? Could it be used for a rolling programme of local history displays?
-  Thickley Bridge is in poor condition. It appears to belong to Network Rail but they are only maintaining that part that is over the live line. The earlier north section which is not over live line is listed. It could be used to improve access between the modern engine shed at Locomotion and the new cycle/footpath to Aycliffe.
-  There are ample opportunities for community excavation as an additional live attraction on the site. Basic levels of knowledge for many of the historic buildings have never been obtained and offer opportunities to fill in gaps in our knowledge.
  - Excavation at the back of the plate layers' cabin or inside the buildings could help establish their function and possibly locate the site of the stables.
  - Excavation of the gardens and yards at Hackworth's house might find everyday items of rubbish from the Hackworth household
  - Excavation of some of the landscaped areas might uncover the foundations from the Soho Works
  - Excavation in the back garden of Daniel Adamson's Coach House might help to establish more about the use of the building and how Adamson's coach service was run.
-  There is a strong team of volunteers at the NRM and they are a resource to cherish. However, some additional volunteer input is also required to maintain the outdoors such as the interpretation panels which need cleaning.
-  There is a large amount of litter on the path that runs along the Shildon Tunnel branch; it appears to collect behind the fence beyond which is cricket pitch. Volunteers could help clear this.
-  The town of Shildon requires its own conservation, management and interpretation strategy on the lead up to 2025.

## **2.4 Access**

-  The site has good access and easy to use paths and already incorporates some cycle routes. The links to the cycle path to Aycliffe are poor however with no adequate access direct from the modern museum engine shed where most of the locomotive displays are held. Users have to walk to the modern railway station westwards and

then return on the opposite side of the line again which necessitates crossing Spout Lane.

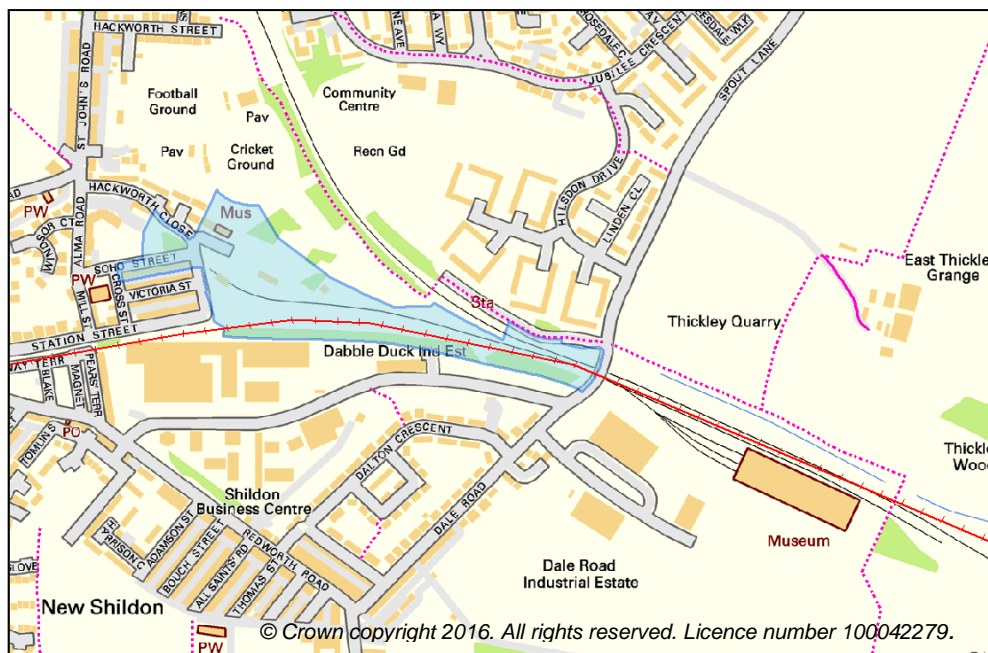


Figure 10. Existing public rights of way.



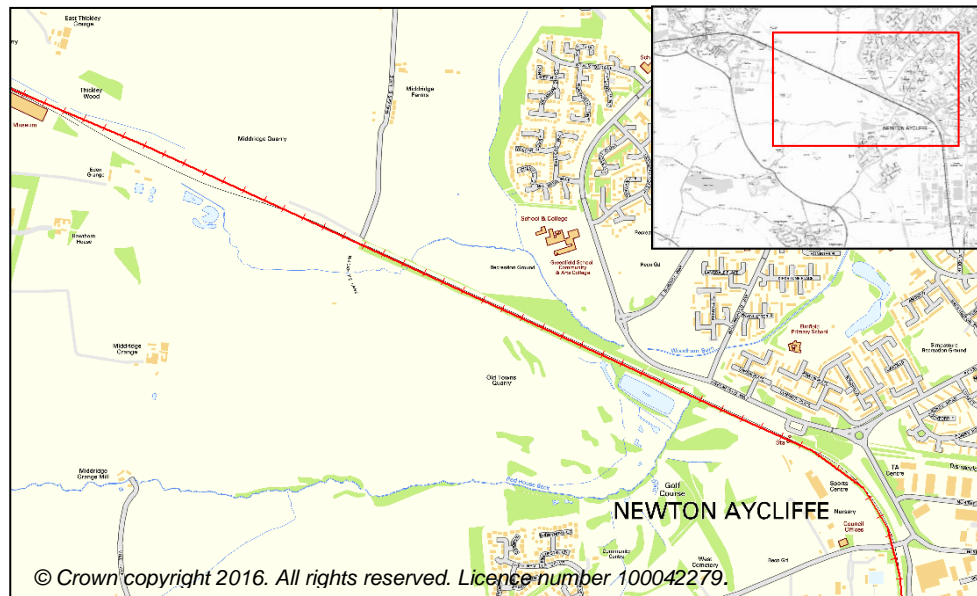
- 🐜 A direct access should be made from the modern museum engine shed to the cycle path between Shildon and Aycliffe. This could use the Thickley Bridge which has a footpath running over it, although cycle access or DDA compliant access would be difficult here. There are two possible approaches on the south side – from the car park where the approach would be on level ground or from the museum building which would require steps. The presence of broken fencing and desire lines show that a link from the bridge to the cycle path is wanted.
- 🐜 The site also offers rail links to other parts of the S&DR including Aycliffe, Heighington, North Road in Darlington, Dinsdale (within walking distance of Fighting Cocks), Eaglescliffe (within walking distance of Preston Park) and Thornaby (within walking distance of the end of the S&DR line in Stockton).
- 🐜 There are good footpath links to the town centre and so there are opportunities to do more linking work with the town and help to bring in economic benefits to the town and the museum



### 3.0 SHILDON TO AYCLIFFE

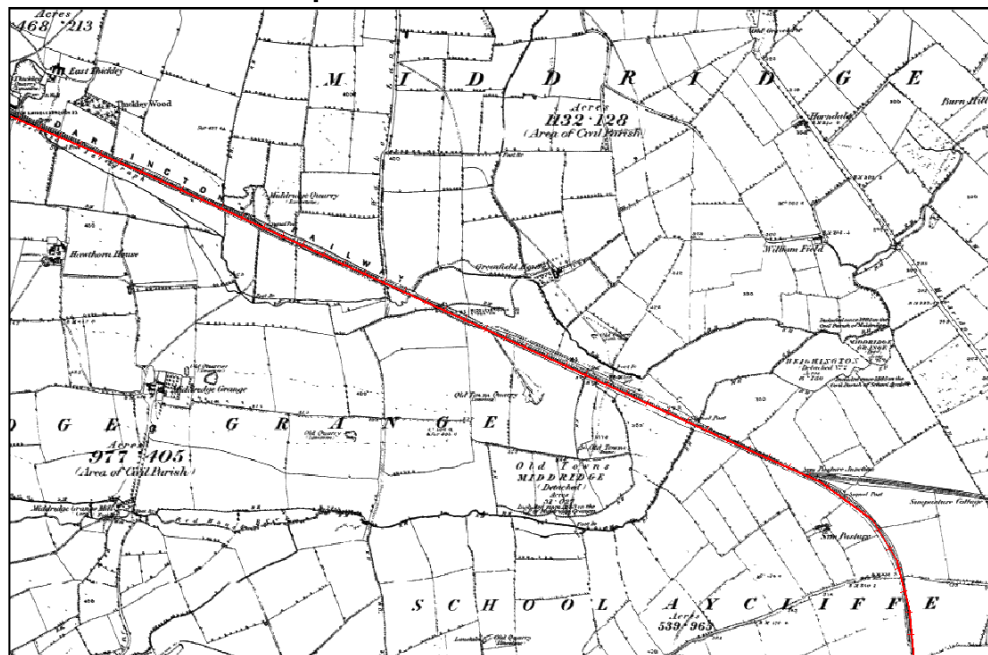
A recently opened, popular and well used cycle path that links Shildon to Aycliffe and runs alongside the live line. The 1825 route is for parts, under the cycle path, but it also drifts under the live line in places. This area formed the Shildon sidings which was at one stage the largest marshalling yard in the world. The route is dotted with disused limestone quarries, mines and the sites of former mining villages, now destroyed. Prior to 1825 there was only one quarry but the presence of the railway created more opportunities to move limestone further afield and so large quarries grew up with their own sidings on to the S&DR line. The quarries survive in places as undulating grassy fields and at Middridge the geological exposures are of significance. As the line is live at this point, fieldwork has been restricted to what can be seen from the cycle path.

Figure 11. Shildon to Aycliffe.



### 3.1 What survives and how do we protect it?

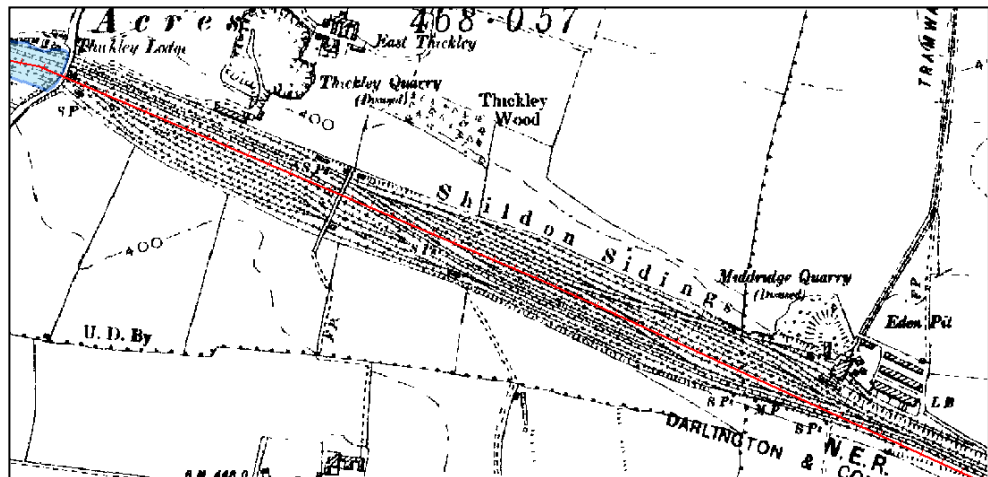
Figure 12. The same area in 1856 as shown on the OS 6" to 1 mile mapping series.



### The Shildon Sidings and Electrification (SDR 175)

The area next to Locomotion eastwards forms only part of what was at one time reputedly the largest marshalling yard in the world before the construction of the Chicago marshalling yard in the USA in 1927. It consisted of 27 miles of sidings consisting of full and empty coal wagons. The area is now largely scrub/grass but is recognised as an important habitat for Dinghy Skipper butterflies in particular.

Figure 13. The Shildon Sidings in 1897, once the largest railway sidings in the world.



The line also follows the route of the pioneering NER Shildon to Newport overhead 1500 DC electric railway devised by Sir Vincent Raven, the NER's Chief Mechanical Engineer. The route ran from Shildon to the coast along the Clarence Railway whose branch left the route of the S&DR at Simpasture Junction near the site of the newest station on the line – Newton Aycliffe built in 1978. The electric railway ran from 1915 to 1935 using a fleet of 12 powerful electric engines shedded at Shildon (Charlie Walton, Chairman of the Bishop Line Community Rail Partnership).

### Quarry wall and stone sleepers (SDR 173 & 176-179)

A high stone wall with triangular copes separated the railway line from Middridge Quarry and may have supported sidings which extended out from the quarry to join the main line. The quarry was disused by the end of the 19th century. At the foot of this wall are a number of early stone sleepers. These are four hole sleepers which were introduced about 1830 to improve the stability of the rails.



Plate 17. The stone wall between the sidings and the quarry and left above: one of the stone sleepers at its base



*“Suddenly one of the waggons – that containing the surveyors and engineers – began to jolt violently, and the jolting increasing instead of diminishing, word was passed up to the engine, and the train was brought to a standstill. On examination it was found that the waggon had slipped off the rails through some defect in one of the wheels. It was replaced on the line and the train proceeded on the way. It had not run many minutes before the jolting recommenced, the wheel had again left the rails, and it was determined to uncouple a faulty wagon, to shunt it on to a siding, and proceed without it.” (An account of the journey on the 27<sup>th</sup> September 1825 after the procession left Shildon by M. Heavisides 1912, 63-4)*

*Middridge Quarry, Eden Pit, Riseburn, Old Town Quarry and Walker’s Lane Bridge.*

Middridge Quarry (SDR 144) supplied limestone and it can now be accessed from the 1825 line via a flight of steps. Between the quarry and Walker’s Lane was a coal mine, called Eden Pit (SDR 147-9) and rows of terraced houses and a tramway running north joined another pit – Charles Pit. Both belonged to the Weardale Iron and Coal Company and operated from the 1870s. There are many photographs of this settlement and local private collections of mine tokens and other memorabilia.



*Plate 18. Demolished houses from Eden Pit at Middridge (photo courtesy of Chris Sowerby)*

There are some fragmentary remains of buildings clinging on to the sides of the disused quarry. On the south side of the railway line there was another village called Riseburn (SDR 150). All of these villages have been demolished and the pits and quarries closed. The bridge (SDR 181) across the S&DR line which carries Walker’s Lane is not an 1825 structure, but was

built later to serve the adjacent quarries on both sides of the line. At Old Town Quarry on the south side of the line there is a retaining wall on the opposite side of the live line – this is where sidings from the quarry met the line.



*Plate 19. Middridge Quarry*

The verges along the cycle path are scattered with the occasional wooden sleeper. Given the survival of stone sleepers near Middridge Quarry, it is possible that there are stone sleepers here too, but if there are any, they are obscured by vegetation.

### *Simpasture junction*

At the end of this stretch of line as it swings to the south was Simpasture junction where the S&DR line met the Clarence Railway of 1830. It took its name from Sim Pasture Farm (S&DR 168) which was located to the south of the line where the sports centre at Aycliffe is located now. This was where Locomotion No.1 had to stop for a while during the opening ceremony because oakum had got into the feed pump (Heavisides 1912, 64).

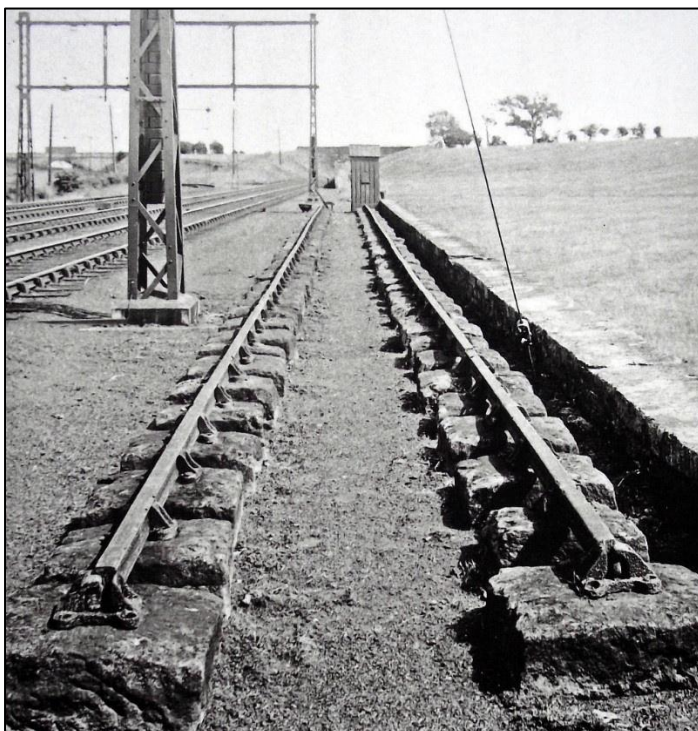


There are photographs in a number of collections showing the Simpasture plate layers' cabin. This was a crenellated structure very similar to the plate layers' cabin at Shildon and reflected in the architecture of the Tallyman's Cabin at Westbrook in Darlington. As very little is known about these structures, any research into any of them could help throw light on all of them.

*Plate 20. Simpasture Platelayers' Hut c.1966, since demolished. (courtesy John Proud collection)*

### *Sleepers (SDR224)*

At Aycliffe station, there are a set of stone sleepers with rails which have been reset into the ground on the south side of the line. They were allegedly set in place as part of the 1975 celebrations, but a photograph showing them in position, with a modern rail, also shows the NER electrified line built between July 1915 and January 1916 and removed in 1935 between 7 January and 8 July. The sleepers and rails may have therefore been put in to mark the centenary celebrations in 1925. The low stone retaining wall seen in the photograph below still survives and can be seen along much of the line between Shildon and Darlington.



*Plate 21. Simpasture Junction, looking east, in the distance ahead is the bridge over the S&DR line, to the left the bridge over the Clarence Railway. The overhead electric wires were installed by the NER in 1915/16 and removed by the LNER in 1935. The stone sleeper blocks (with modern rails), may have been put in place here as part of the S&DR centenary celebrations in 1925. The low stone wall to the right is a common feature of the S&DR at the base of cuttings along this stretch and is still in place along much of its length today.*

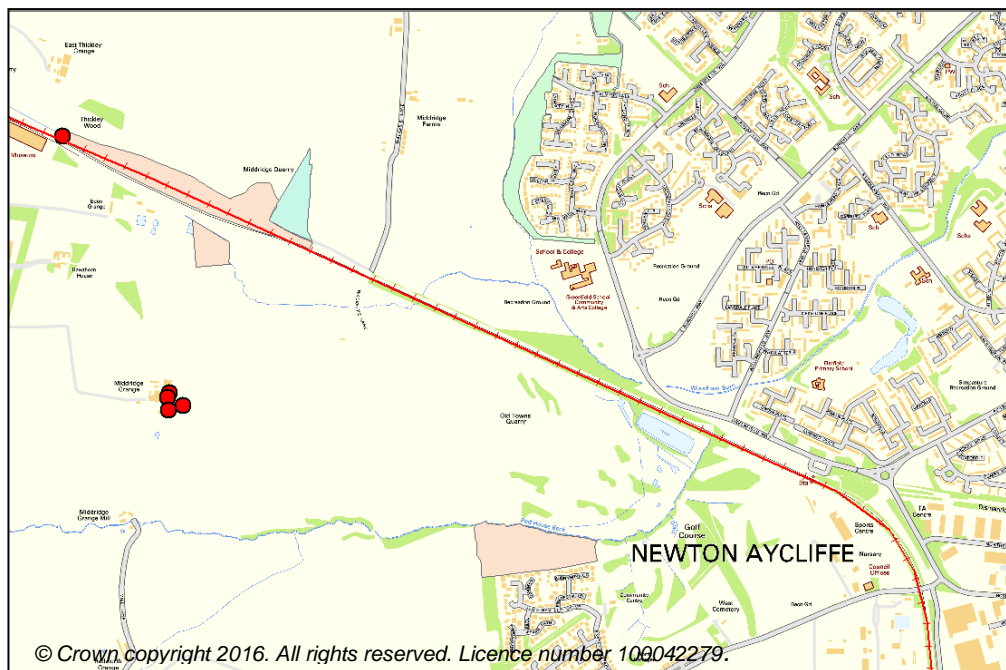
### Simpasture Bridge (SDR227)

A stone bridge just south of Aycliffe Station has recently been replaced with new decking but prior to that the bridge was supported by a steel girder. This was a result of an accident in 1949.

This was the location of a collision on 16<sup>th</sup> November 1949 at 5.43am. A passenger train travelling from Crook to Darlington ran into a brake van and fourteen waggons. The passenger train was carrying about 120 passengers, but none received serious injury. Four complained of shock and were taken away in an ambulance and the remainder continued on foot to Heighington where they caught another train. Five railway staff were slightly injured. The goods waggons were thrown on top of each other and hit the underside of the stone accommodation bridge ahead which collapsed and blocked the line. The passenger train tender was derailed and hit the bridge abutment causing damage. The inquiry which followed found that two sets of signalman failed to notice that the freight train had no brake van or tail light (source official report by Col. D. McMullen).

## 3.2 Existing Designations

Figure 104.  
Existing  
designations



## 3.3 Management and Protection






Stone sleepers that are lying by the side of the line are vulnerable to theft. While hidden amongst the bushes they can lie un-noticed, but as 2025 approaches, their monetary value might increase. Therefore, where sleepers are not in their original positions they should be recorded, numbered and stored until a use for them can be found near their original location that will display them and contribute towards the early railway character of the area.



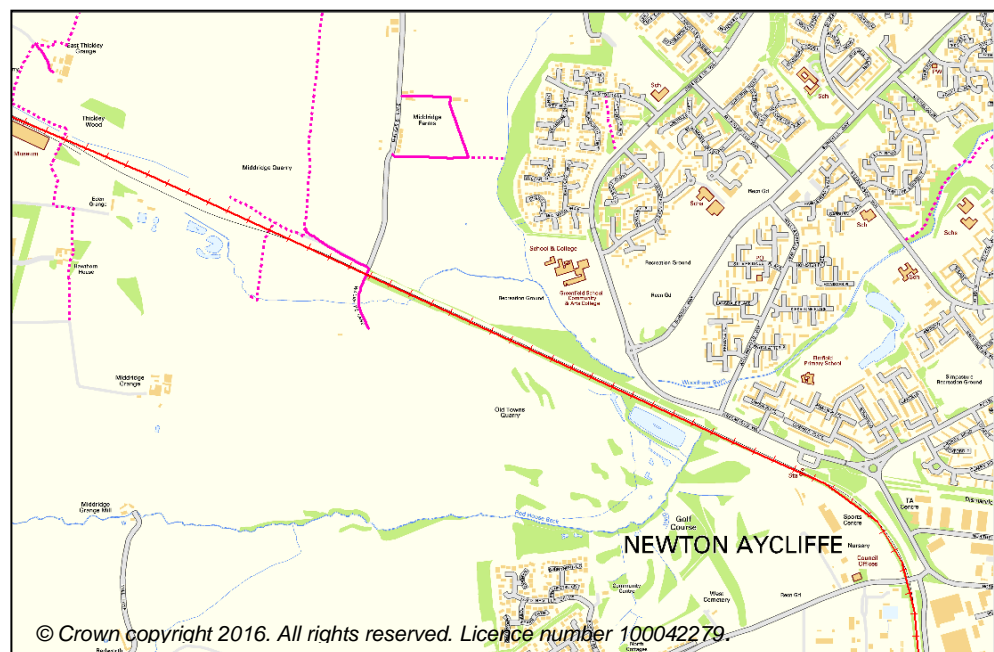
The line is managed by Network Rail. They have many factors to consider when making management decisions, but they also need to be made aware of the surviving




heritage interest along the line so that this can be included in their management systems.

-  Some limited conservation is required on the quarry wall (S&DR 172) but few other walls appear to survive.
-  The wealth of historic images and artefacts relating to the lost communities of Riseburn and Eden Pit merit some local heritage activities including local displays, possibly at Locomotion.
-  No litter bins have been provided along the route and so there is a reliance on volunteers to clear up. In order to avoid taking a few individuals for granted, there needs to be a more formal volunteer adoption scheme to keep the line clean.

### 3.4 Access

*Figure 15. Existing public rights of way. The information provided by DCC does not include the path/cycleway running from Shildon to Heighington on the immediate north side of the line and which is not shown here.*

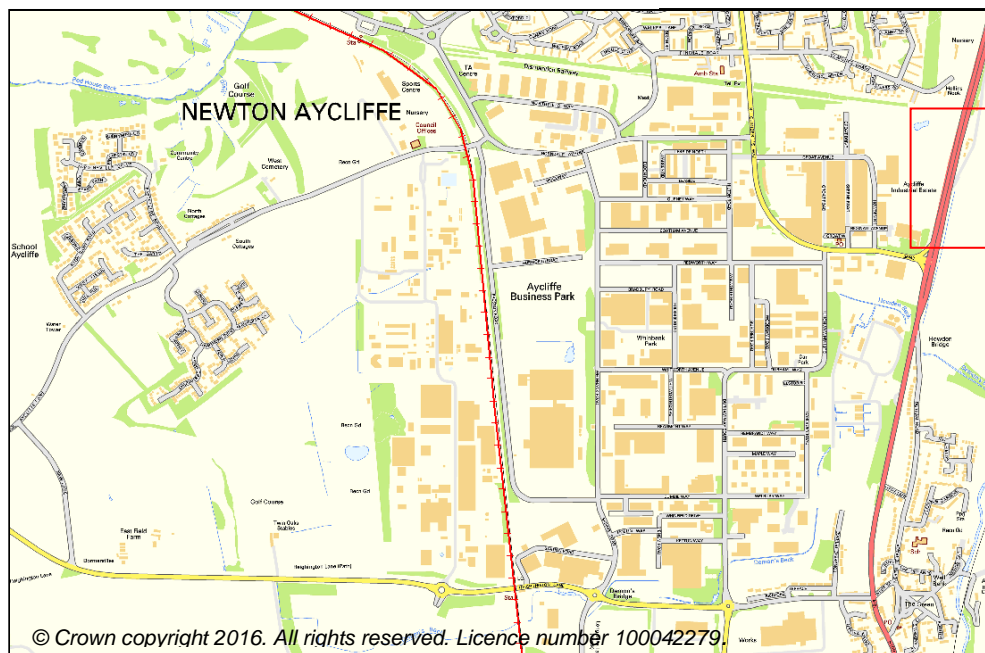


-  The link to Midridge Quarry is a flight of steps from the 1825 line which has access restrictions for people with restricted mobility. The quarry is also linked to the line via a footpath but this has poor access points across a lane and a field, it is narrow and muddy. If the quarry was to be accessible for everyone, the linking paths would need to be upgraded. However, the entire length of line is fully accessible for all users.
-  Subject to permissions and accessibility, Midridge Quarry offers a chance to learn about limestone geology for a wide range of users.
-  Aycliffe Station also offers rail links to other parts of the S&DR including Shildon, Heighington, North Road in Darlington, Dinsdale (within walking distance of Fighting Cocks), Eaglescliffe (within walking distance of Preston Park and Thornaby (within walking distance of the end of the S&DR line in Stockton).

#### 4.0 AYCLIFFE TO HEIGHINGTON STATION

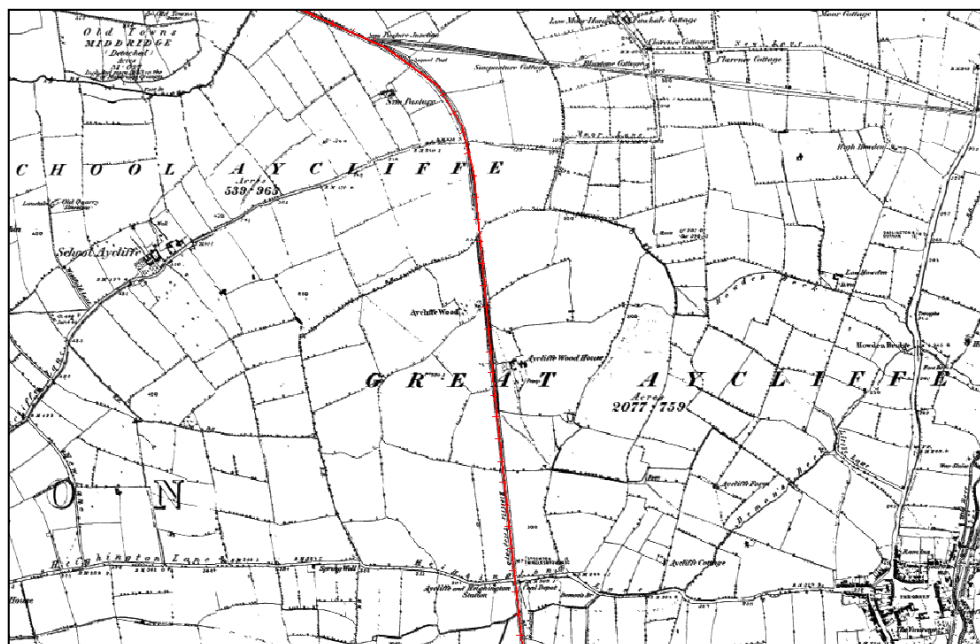
This is a stretch of live line, mostly in a cutting until it levels out nearer Heighington. It includes a distinctive wide curve as the line heads south towards Darlington. The area is now very urban with new busy roads, some of which run parallel to the S&DR route. No access was available on the live line, so fieldwork was restricted to views from adjacent roads where possible. A map dating to 1828 shows where there were passing places and sidings on this stretch. This stretch concludes at Heighington Station where the Inn and associated coal depot formed one of a series of such groups of buildings built along the line by the S&DR to offer facilities for goods and passenger traffic. At Heighington a low cobbled platform survives between Inn and track, possibly the oldest railway platform in the world.

Figure 16.  
Aycliffe to  
Heighington  
Station



#### 4.1 What survives and how do we protect it?

Figure 117. The  
same area in  
1856 as shown  
on the OS 6" to  
1 mile mapping  
series.



*The Clarence Line and accommodation bridge (SDR216)*

The Clarence Line which is now a cycle path, joined the S&DR line and the remains of a bridge can be seen where users exit Aycliffe Station. Parliamentary approval was given for a rival railway company in May 1828 to create a direct route between the South Durham coal-field and the banks of the river Tees at Stockton. The first coals for land sale passed from Sim Pasture to Stockton in August 1833; the Clarence Railway joined the S&DR at Sim Pasture between the 17 ¼ and 17 ½ mileposts from Stockton and terminated below Stockton at Haverton Hill. This route bypassed Darlington and so was shorter and the new company expected therefore to attract coal companies away from the S&DR. Its Act also made provision to carry passengers. The S&DR fought back by placing difficulties in its way; the Clarence could not reach the coalfield without using part of the S&DR for the first part of its journey. By levying a duty of 2 ¼ d per ton per mile the S&DR was able to impose a crippling 2s 6d surcharge on each Newcastle chaldron waggon of 53 cwt sent over the Clarence Railway, even though the distance was five miles shorter. Consequently, the financial position of the Clarence was never healthy (Hoole 1986, 131).



*Plate 22. The disused and backfilled bridge serving the Clarence Railway*

*School Aycliffe Lane Railway Bridge (SDR230)*



*Plate 23. School Aycliffe Lane bridge, the south side of which is built in a style congruent with 1825.*

On School Aycliffe Lane there is a railway bridge over the live line, managed by Network Rail (NR ref: DAE 1/10). The lane is of some antiquity and existed in 1825 and so would have needed bridging. The date of this bridge is unknown but it appears to have been widened (on its north side) to carry two

lanes of road traffic. The south side may be an original structure of 1825, the stone arch carries



a distinctive rolled sting course just above the voussoirs as seen on many S&DR 1825 bridge and culvert structures.

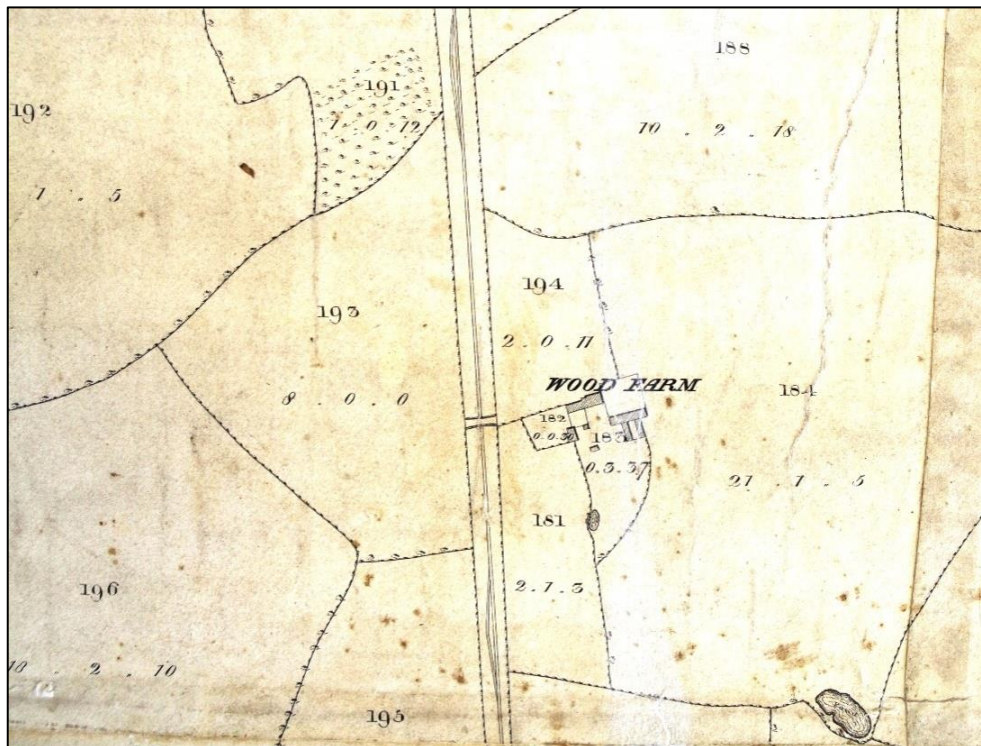
*Aycliffe Wood House Bridge (SDR219)*

About 758m south of School Aycliffe Lane on Preston Road there is a substantial accommodation bridge. However, because it is positioned at the top of high grass verges it is effectively hidden from view. The bridge is an attractive and well-constructed structure of dressed sandstone which passes over the live line and is therefore managed by Network Rail.



*Plate 23 Aycliffe Wood House Bridge.*

*Figure 18. The Great Aycliffe Township map of 1828 showing Aycliffe Wood Farm Bridge. Note that the line has passing places to the north and south.*



The scale of the bridge suggests that it served a major crossing point, but it appears to have simply been constructed to permit access to fields on both sides of the line for Aycliffe Wood House. The style of the bridge suggests that it was mid-19<sup>th</sup> century, but a bridge is shown on the 1828 map of Great Aycliffe Township which suggests that it is original or a later replacement of an earlier bridge. This requires further research for specifications for its

construction. Its ends have been severed on the east side by the construction of the cutting for the new road and so it is vulnerable, damaged and without a clear function.

This stretch of line can only be seen by walking on the top of a wide roadside sloping verge. The line has a wooden rail to prevent people from wandering on to the line. Under this fence and amongst the vegetation, there are various railway objects such as cast iron British Rail chairs and a stone gatepost. On the other side of the line there are stone objects that look like sleepers from 1825-30 scattered by the side of the line. The 1825 line cut through a small wood here visible on old maps, although the wood is now long since gone, woodland flora such as English Bluebells, Cowslips, Violets and Wood Anemones can still be found growing around NZ 270 234.<sup>20</sup> The mapping of the township dating to 1828 (see fig 18 above) makes it clear that the railway line was constructed to be wide enough to carry two lines of rails, although only one line with passing places (some quite long) were put in place due to financial restrictions.

### *Industrial Estate*

Just north of Heighington Station is an industrial estate which includes a number of wartime buildings. This industrial estate was built on the site of a Second World War munitions manufacturing base, much of which consisted of huge grass covered buildings serviced by the nearby railway lines. The factories were largely staffed by women who were dubbed the "Aycliffe Angels". The regular layout and massive scale of the Munitions Factory lent itself to post war use as an industrial estate and new industries and businesses moved in with the encouragement of the English Industrial Estates Corporation; some to use the existing buildings and others demolishing the wartime buildings and building their own. It was also chosen as the location to exemplify Beveridge's vision for a post war Britain with a massive new town on the site of the munitions factory where workers for the industrial estate could live in the mostly social housing. Beveridge himself, often referred to as the founder of the country's Welfare State, chose to live in Newton Aycliffe for a short time.



*Plate 24. 1945 Aerial photograph showing the military use of the area and the growing industry*

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<sup>20</sup> Ian Gray pers comm



Plate 25. Former military buildings dating to the Second World War

*Locomotion One Pub (Grade II listed building, HER35829) and Coal and Lime Depot (SDR201)<sup>21</sup>*

The Locomotion No. 1 pub, is the former Heighington Station and was built by the S&DR in 1826 as a public house. As a Public House it was named the *King's Arms* (at least by the 1830s) and as a station it was named *Aycliffe Lane*, being subsequently renamed three times: first to *Aycliffe and Heighington*, later, on 1 July 1871, it became *Aycliffe*, then just over three years, on 1 September 1874 it gained the present name of *Heighington*.<sup>22</sup>

*Plate 26. The railside of Heighington Station, now the Locomotion One pub. The low paved and cobbled area between the building and the rails is generally considered to be the oldest passenger railway platform in the world. Under refurbishment in early 2016 the owners were reassuring they were aware of its importance, but clearly much could be done to improve*



This now-elongated and extended building started its existence in when the S&DR Company began building three public houses along the line: Railway Taverns at Stockton and Darlington and a more modest, slightly later inn here, which was referred to in the Company minutes as ‘...a Cottage and other conveniences to be built at Aycliffe Lane.’ It was to be designed by

<sup>21</sup> This section has benefitted from research by Brendan Doyle on the inn

<sup>22</sup> [http://en.wikipedia.org/wiki/Heighington\\_railway\\_station](http://en.wikipedia.org/wiki/Heighington_railway_station) [accessed 220415]

John Carter who also designed the S&DR inns at Darlington and Stockton, the masonry work by Storey & Sons and the joinery by Michael Windale.<sup>23</sup> The three inns (all of which still stand, in one form or another) are the earliest S&DR buildings surviving on the line (only some bridges are older). The original part of the building is the highest part, closest to the tracks, but the Township map of 1828 also shows where the later 1840s extensions would be proposed. It is T-shaped in plan, with the bar of the 'T' parallel with the road. It was completed by May 1827.<sup>24</sup>

Alongside the track is a small cobbled area situated at rail level; by tradition this is referred to as the original Stockton & Darlington Railway platform (Semmens 1975, 17).

The S&DR Stockton inn opened in late 1826 but this, and the one at Darlington, were continually refused licences by the local magistrates (Darlington's magistrates covered both locations). It wasn't until October 1829 that a change in the law allowed the Company to appeal to the Durham Quarter Sessions: they won both cases conclusively (Durham County Advertiser 24.10.1829, p3).



*Figure 19. Aycliffe Township Map of 1828 showing the Inn and the sidings to the coal depot to the rear. The building to the east of the inn was probably a weigh house for checking coal or lime in and out. Note also the extension that was to take place in the 1840s. The building on the left (west), of the track could be a waiting room, and on the 1<sup>st</sup> ed OS map of 1855 there is a platform marked here. Part of this 'waiting room' may survive in the current boundary wall and should be investigated (inset). It is clear from this map that any proposed cycle path running along either side the line would potentially have archaeological implications.*

The S&DR's intention was that the landlord of the Aycliffe Lane inn, a Matthew Turnbull, would not only provide shelter and refreshments to coach passengers on the line, and to people

<sup>23</sup> National Archives, RAIL 667/31, Minutes of SDR Sub Committee held on 29 Sept 1826 (courtesy of Brendan Doyle)

<sup>24</sup> DCD/ E/AF/7/1-2 (John Davison plan of Great Aycliffe for Dean and Chapter of Durham Cathedral, with book of survey, 1828, plan 1.5m x 2.5m) CCD 13607 (plan)).

using the adjacent coal depot, but would help local people securely send and receive parcels. All of which would benefit the business of the railway at no running cost to the Company - with Mr Turnbull's rent paying off the cost of the building. The Company's hopes for the inn were clearly over-ambitious as Mr Turnbull had left by 1841, and it was certainly no longer in pub use by 1848. Poor trade should not have been a major surprise: one speaker at the licensing appeal had described its location, remote as it was from the villages of both Aycliffe and Heighington, as 'bleak'.

Eventually the Company used the building to house a station master and his family, and to provide a booking office (and, no doubt, somewhere to receive and distribute parcels which it had done since 1826). It is not clear when this was but it was many years after the original construction. A trade directory of 1848 referred to a 'station' here; a station master (one Thomas Wilson) was first mentioned in 1851.

The first major extension of the original building, alongside the road, took place sometime between 1841 and 1851 when two additional cottages for railway employees were built. (The wing at the eastern - Aycliffe - end is much more recent pub extension, circa 1980.)

Sometime between 1871 and 1881 a short terrace of four more houses was erected 140 yards south of the station building, at the south end of the coal depot yard. They were named as 'Railway Cottages' in the 1881 Census and 'Station Cottages' on Ordnance Survey maps. As all the households were headed by railway employees and so the Railway Company must have built and owned them.

*'I am in the habit of travelling along the railway two or three times a week. I live at Black Boy, about three miles from Mr Turnbull's house [the S&DR Railway Tavern at Heighington]. I consider him to be a respectable man in his line of life. I think it is a very unlikely place for any profligate or immoral conduct to occur in. I think the Company would not allow it. I know that any person behaving disorderly is dismissed by the Company'*

(Testimony of Archibald Knox at the appeal against the refusal of a licence to run Heighington Station as a public house. Reported in Durham Advertiser 24.10.1829, p3. This shows that regular commuting was well established on the line by 1829).



Plate 27. The Locomotion One public house today.

Each residential property was labelled by the Stockton & Darlington Railway in 1857 by the addition of a ceramic plaque with a unique identifier number. The Station House (the original building) was G2 (the original ceramic plaque is now in the Head of Steam Museum in

Darlington – it was removed before 1975 when the station buildings fell into disuse and demolition was threatened (Semmens 1975, 17)). Another larger cottage was added to the row between 1897 and 1919 (OS 3<sup>rd</sup> ed 25 inch). Each cottage had a back yard and an outside WC.

The cottages have since been demolished (they were still there in the 1970s), although the ground levels here are high and littered with demolition debris including a four panel door (a typical Victorian design), suggesting that they might at least survive as foundations. This area is vulnerable because it appears to be wasteland but contains the demolition debris from the S&DR cottages and would be disturbed if the rail trail/ cycle path was brought through here.



Figure 20. Left: Tithe map of Great Aycliffe dating to 1838 showing the railway public house and cottage next to the new railway line (DDR/EATTH/1/5). Right: the OS map dating to 1857 showing the building extended and the coal depot complete with sidings. Two additional buildings were located on the opposite side of the track and an early signal box south of the station

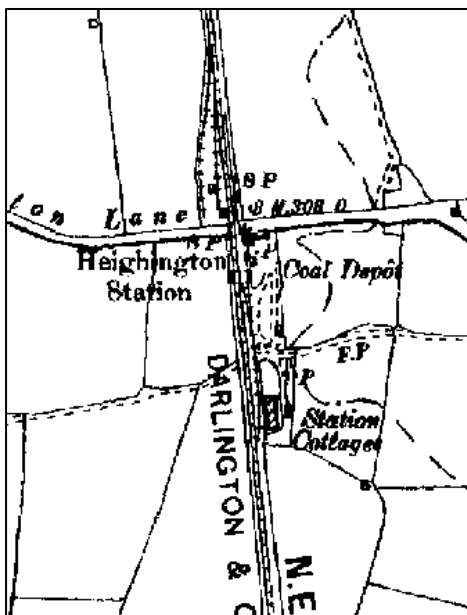


Figure 21. The 2<sup>nd</sup> ed OS map dating to 1897 shows the addition of cottages south of the depot.

Ordnance Survey maps dating to 1855 show a coal depot to the south of the station, but in the 1829 appeal hearing against the refusal of a licence to run the station as a public house, it was referred to as a coal and lime depot and this is quite common in the early days of the railway before coal and lime depots were separated. The S&DR set out to ensure that workers and merchants using the coal and lime depot had access to refreshments so we consistently see a link between taverns and coal depots along the 1825 route. The coal depot was furnished with sidings on to the main line and divided coal drops to store coal. Evidence of this coal depot can still be seen behind the

inn. The remains of the coal depot are vulnerable because it is not appreciated as being part of the very early history of railway stations; indeed along with the inn, it is the forerunner of the railway station. If this area is proposed for a cycle path, it will need to consider the conservation of the remains of the depot.

*Heighington signal box (Grade II listed building)*

This is a good surviving early example, although still much later than 1825. It follows the earliest standard design of the Central Division of the North Eastern Railway (which developed out of the Stockton and Darlington Railway), featuring a ridgeline that was parallel to the track to allow easy future extension. This approach was widely adopted nationally and Heighington, which was extended in circa 1912, is a good illustration of the merits of the design. The signal box is well preserved and retains an increasingly rare pre-First World War lever frame (listed building description).



*Plate 28.  
Heighington  
signal box of  
1872. The bricks  
are noticeably  
different where  
it was extended  
c1912.*

## 4.2 Existing Designations

*Figure 22.  
Existing  
designations*



### 4.3 Management and Protection

- 🏰 Aycliffe Wood House Bridge requires limited consolidation at the east edge to stabilise the parapets and the remains of the ramp; it also needs to be attractively and safely gated and signed. In due course some landscaping is required to draw people towards it and perhaps find a use for it to either cross the line or as a viewing point for the railway.

Plate 29. Left: the edge of the Aycliffe Wood bridge nearest the road with exposed ramp and poor quality fencing. Right: A gatepost by the side of the line.



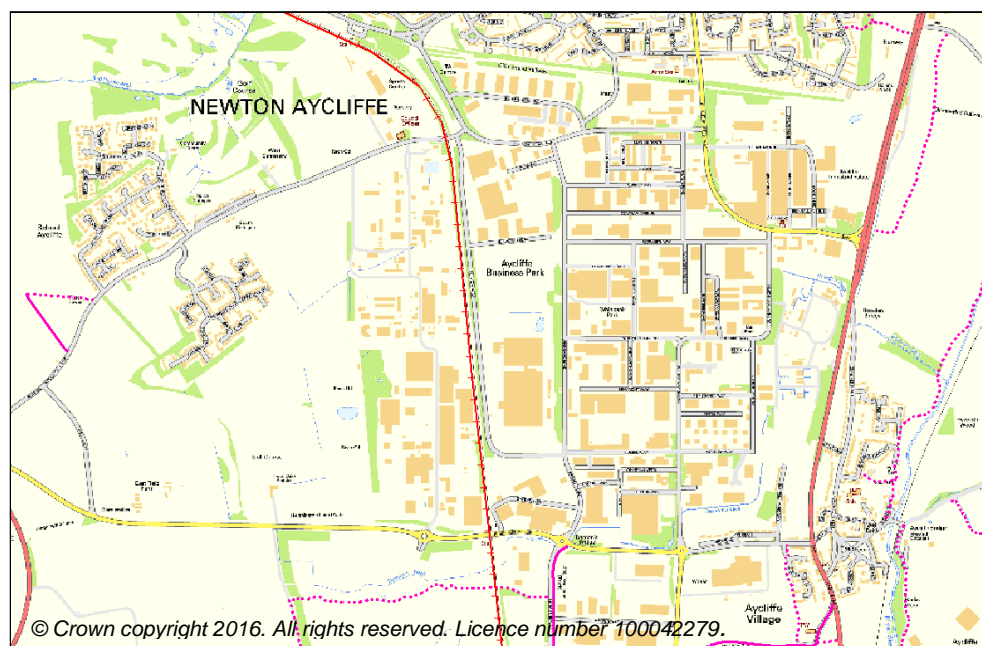
- 🏰 Stone sleepers that are lying by the side of the line are vulnerable to theft. While hidden amongst the bushes they can lie un-noticed, but as 2025 approaches, their monetary value might increase. Therefore, where sleepers are not in their original positions they should be recorded, numbered and stored until a use for them can be found near their original location that will display them and contribute towards the early railway character of the area.
- 🏰 Where fixed relic features are left behind such as gateposts, they should be left *in situ* as they are indicators of previous land uses such as level crossings.
- 🏰 The line is managed by Network Rail. They have many factors to consider when making management decisions, but they also need to be made aware of the surviving heritage interest along the line so that this can be included in their management systems.
- 🏰 The land to the rear of the Locomotion One pub is vulnerable because it is not appreciated as being an early forerunner of what was to become known as a station. It needs to be included in the listing, or some other form of statutory designation. One way to raise the profile of the site is to organise a community excavation of the coal depot and/or the site of the weigh house, but this would require the owner's consent. It would help to feed into the wider research project on the role of the early railway public houses and depot's as the formation of the modern railway station.










- 🏰 The coal depot and cottages (site of) should be considered to be an important part of the setting of the listed building and any developments at the pub considered for their impact on that setting.
- 🏰 Any alterations to the pub or its setting that require listed building consent should be informed by a Statement of Significance.
- 🏰 If the owner is willing, moves should be made to carry out conservation and interpretation of the Heighington coal depot - it could be an asset to the pub (an interesting beer garden) and can be seen from the railway platform.
- 🏰 The signal box is due to be made redundant in the future. It is listed, but a new use needs to be found for it that retains its lever system and preferably makes some modest income to help maintain it. It could be made into a small but innovative holiday let for railway enthusiasts. It is hoped that if a new sympathetic use could be found, then it would be handed over without charge by Network Rail. It could instead be used by a community group, but it would need to ensure that there were funds to properly maintain it and work in either instance would be required to ensure that users could not trespass on live line. Any alterations would be required to be informed by a Statement of Significance.
- 🏰 There is an urgent need for more research into the railway inns and depots and how they evolved from inns and cottages with refreshments and goods handling into stations as we understand them today. Some research is already underway on some of the inns by Brendan Boyle, Barry Thompson (both Friends of the S&DR) and Brian Llewellyn, but other inns need to be included and a wider overview drawing their research together and looking at the depots is also required. This requires more work in the Public Record Office and more analysis of building fabric and possibly some excavation.

#### 4.4 Access

Figure 23.  
Existing public  
rights of way.



-  This is live line, so access will always be near the line and not on it.
-  There are cycle paths outside Aycliffe Station, but they do not follow the 1825 route. A clear signed area is required across the grassy area via the Clarence Line bridge or the cycle path to Preston Road.
-  There are good links to the Clarence Line paths.
-  There are two busy roundabouts to negotiate near Aycliffe Station.
-  There is no current legally defined public access to the line between Aycliffe and Heighington Station, but there are wide public highways, wide grass verges (sloping) and some pavements alongside Horndale Avenue and Preston Road. Preston Road runs parallel to the line. Grass cutting and vegetation removal has helped considerably to make the line more accessible even where there are no paths.
-  The industrial estate currently blocks the continuation of a path that keeps to the line side, however there is room between the live line and the buildings on the industrial estate for a path/cycle path. If an access down the side of the industrial estate cannot be negotiated, then the diversion around the industrial estate and through Station Road is not too far and the estate roads are quiet.
-  Heighington Station also offers rail links to other parts of the S&DR including Aycliffe, Shildon, North Road in Darlington, Dinsdale (within walking distance of Fighting Cocks), Eaglescliffe (within walking distance of Preston Park and Thornaby (within walking distance of the end of the S&DR line in Stockton.

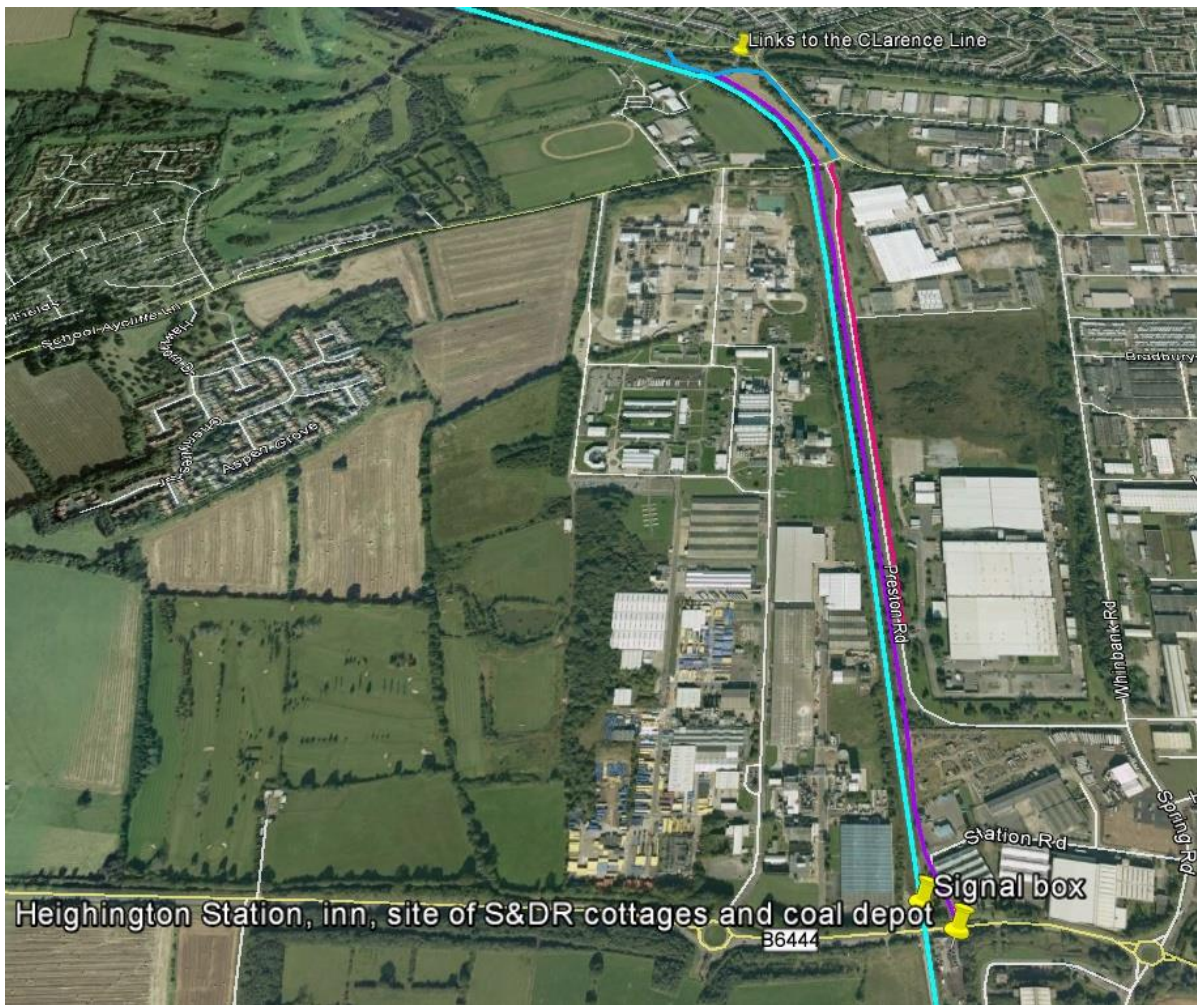
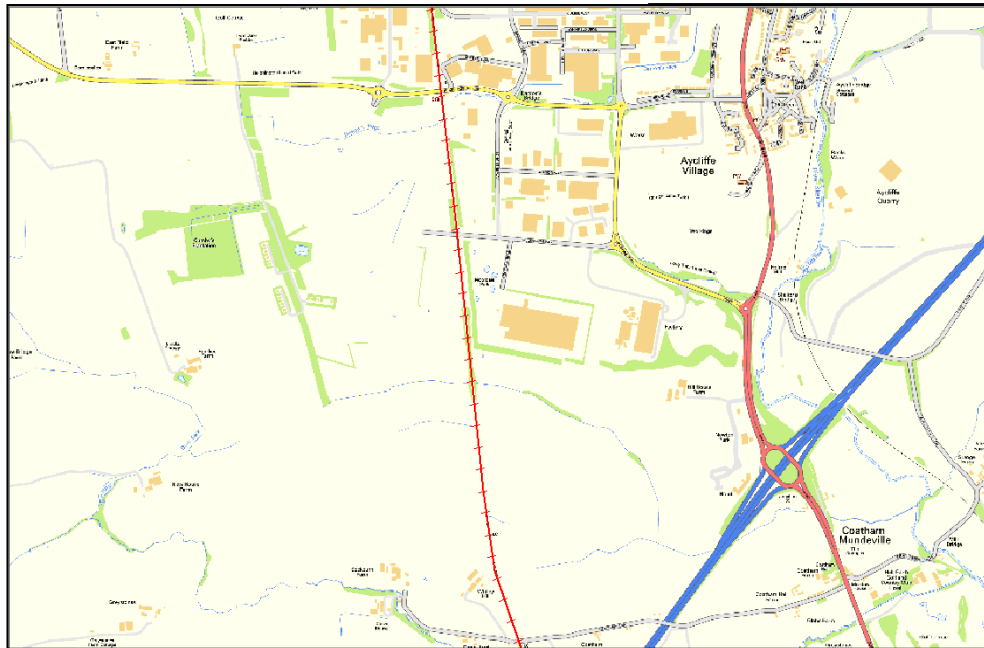


Figure 24. Turquoise blue – live railway line; blue – existing cycle path; red – existing pavement; purple – proposed alternative access.

## 5.0 HEIGHINGTON TO DARLINGTON BOROUGH COUNCIL BOUNDARY

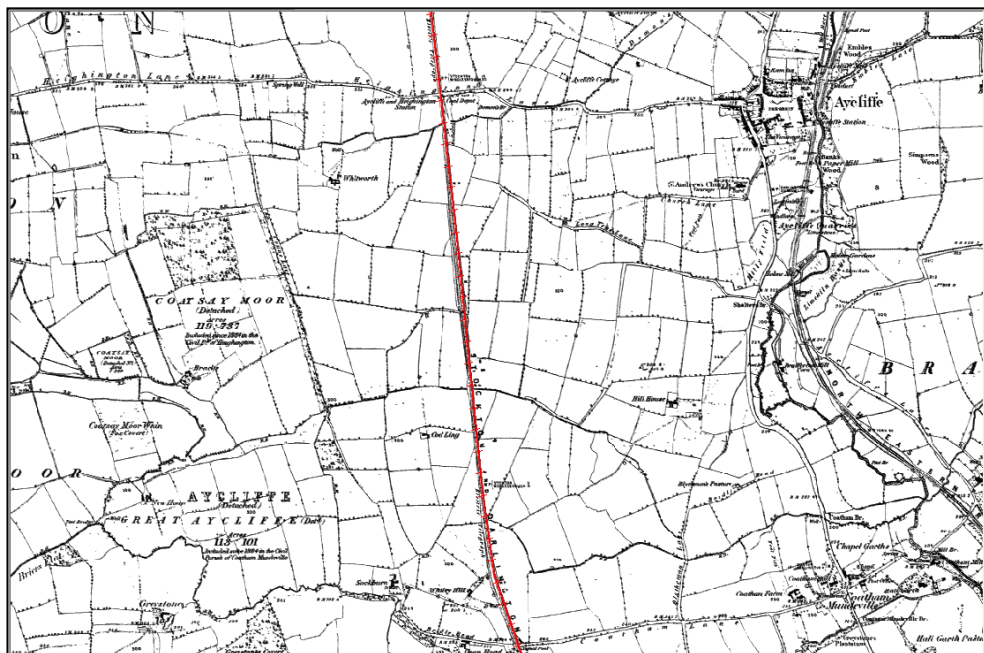
An area of substantial new development on both sides of the S&DR line, but where a cycle path has been negotiated alongside the line, funded by development. However, this cycle path is not open yet, although the path is open for about 450m south of Millennium Way. Fly tipping is a major problem here. South of the new industrial estates, the landscape consists of hedge lined enclosed field patterns with evidence of ridge and furrow. Rights of way tend to run east west, while the S&DR runs north south. The new Hitachi train factory on the west side of the line provides an interesting continuity in railway engineering excellence with the S&DR. Development of the factory has however already caused some damage to 1825 structures and further extension and widening of electrified track southwards needs careful design alongside the existing live line.

Figure 25.  
Heighington Station to the county boundary.



### 5.1 What survives and how do we protect it?

Figure 26. The same area in 1856 as shown on the OS 6" to 1 mile mapping series.



The original S&DR route consisted of two lines of track for approximately 200m south of Heighington station. This arrangement (the line was not doubled throughout until the 1830s) seems to have been triggered by the presence of the coal depot south of the inn. At least one passing place was set out on the line before the present day administrative boundary. On the west side of the line a short distance south of Millennium Way is a rare survival of an S&DR stone boundary post (SDR 222), still in its original location. There was one accommodation bridge on this stretch, over the line and, marked on the 1828 map, to the south of what is now Millennium Way at NZ 27209 21671 (SDR 220). This survived until recently when it was removed to widen and improve the track for the Hitachi development. The remains of the bridge, which include some reused sleeper stones, lie in a heap of rubble on the east side of the track. South of the Aycliffe industrial estates the line emerges into open countryside providing more of its original setting. Here it goes over a large embankment which spans a small stream. This passes under the embankment through a small culvert which while it has a modern cast concrete outflow, can be seen to be original stone construction beneath the embankment. The embankment continues until crossing the boundary into Darlington it reaches a small footpath level crossing and the cutting at Whiley Hill in Darlington Borough.



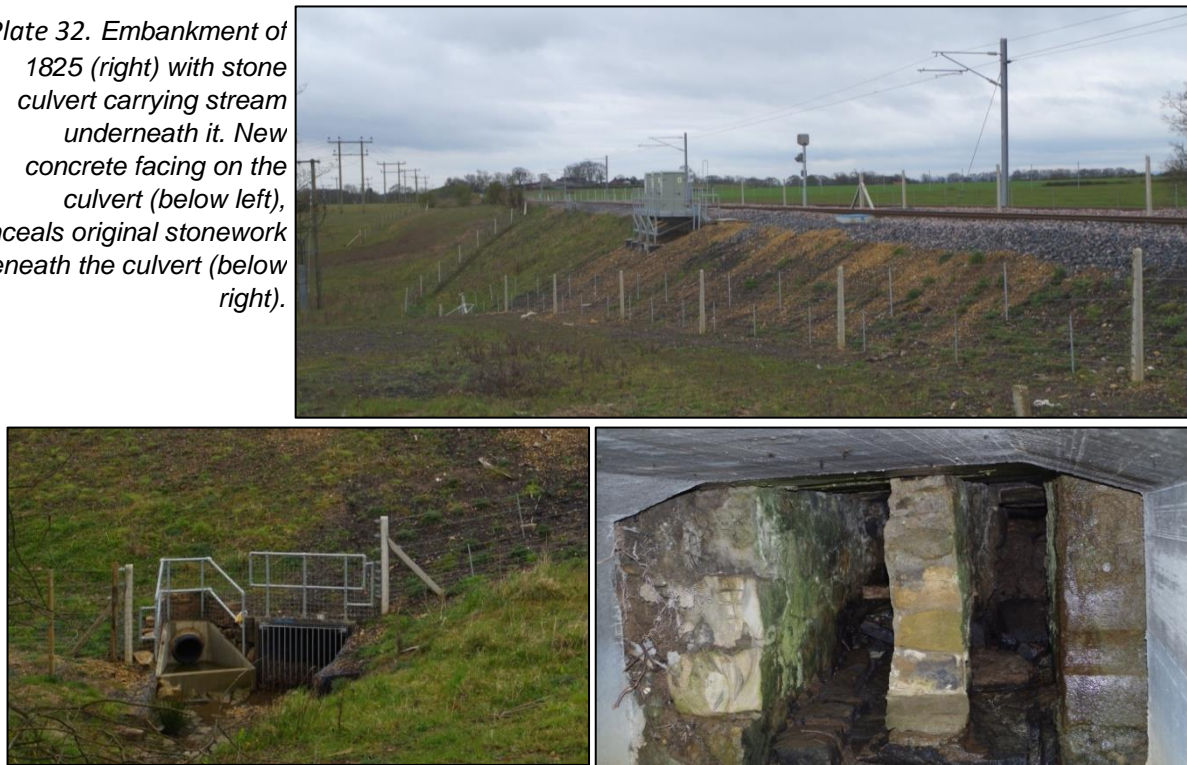
*Plate 30. S&DR boundary stone, a rare in-situ survival*



*Plate 31. Site of 1825 accommodation bridge recently demolished for Hitachi track improvements (above). Rubble from demolished bridge with re-used 1825 sleeper stones (inset). Line south from Millennium Way, note the small stone retaining wall at base of cutting an original 1825 design feature (above right).*

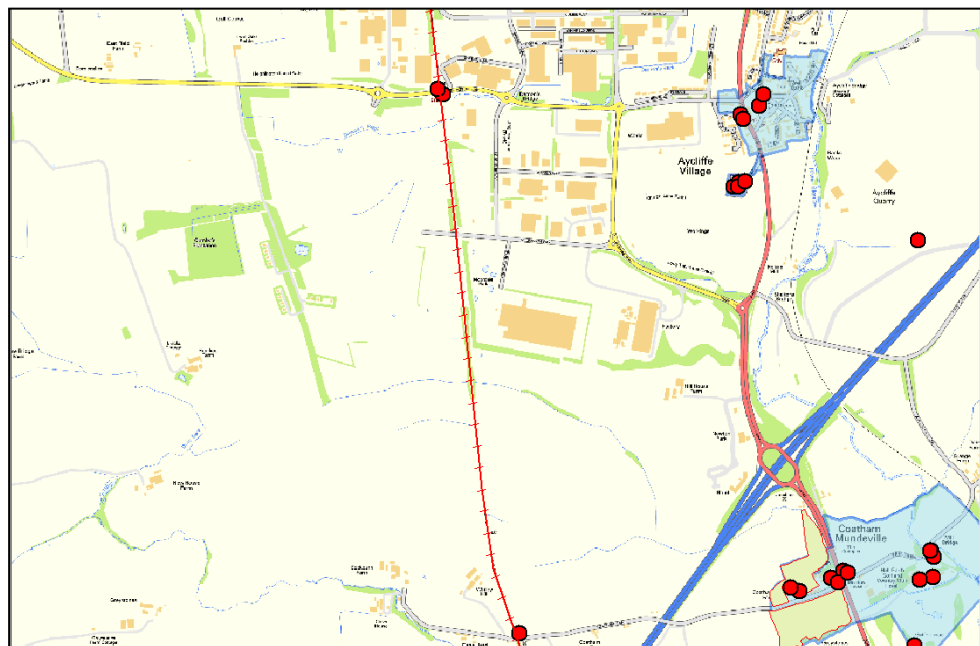


Plate 32. Embankment of 1825 (right) with stone culvert carrying stream underneath it. New concrete facing on the culvert (below left), conceals original stonework beneath the culvert (below right).



## 5.2 Existing Designations

Figure 27. Existing designations



## 5.3 Management and Protection



Depending on what has survived the subsequent use of the line there are sensitive places where features are shown on the 1828 map. These need further investigation and protection (see figure 28).



The line is managed by Network Rail. They have many factors to consider when making management decisions, but they also need to be made aware of the surviving

heritage interest along the line so that this can be included in their management systems.



The pile of stone rubble from the demolished 1825 accommodation bridge should be recorded and architectural fragments retained for display or use in future conservation or landscaping work along the 1825 line. However it is in the ownership of the farmer.



The surviving S&DR boundary post should be protected through designation and physical measures.

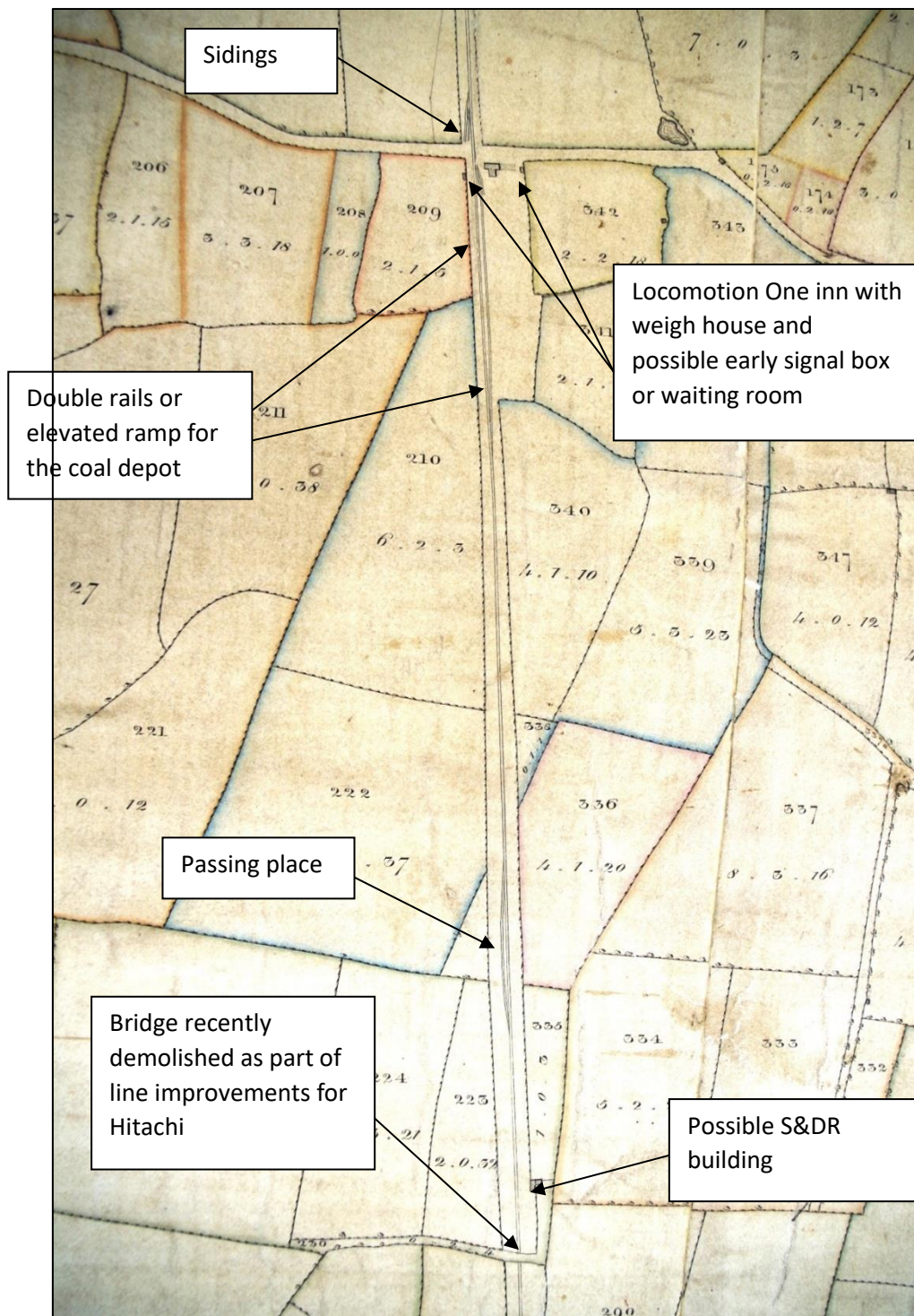
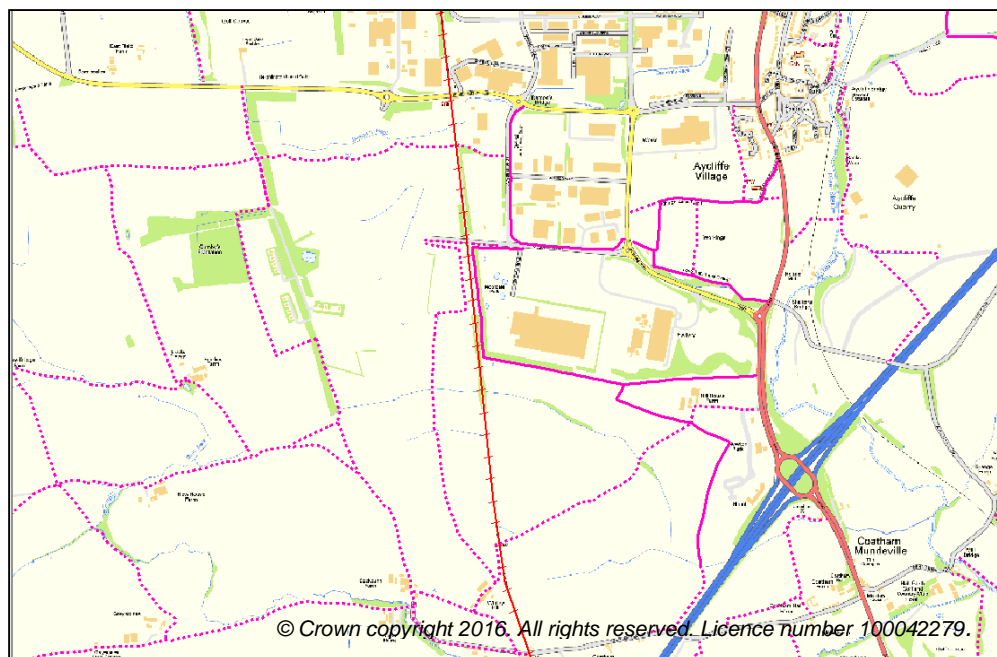









Figure 28. The Great Aycliffe Township map of 1828 showing passing places and S&DR buildings (Courtesy of Archives and Special Collections, Durham University)

## 5.4 Access.

Figure 29.  
Existing public  
rights of way.



-  Care has to be taken when designing the best approach to the proposed cycle paths from the inn (former Heighington Station) as this land consisted of the S&DR coal depot and later S&DR cottages (now demolished) and so is archaeologically sensitive.
-  541m of cycle path is already proposed.
-  The bridleway from the A167 (Great Aycliffe PROW 10), offers a direct link to the line as the bridleway then runs north to south along the east side of the line for 436m south of the new bridge carrying Millennium Way over the line. However, it is currently impassable eastwards from NZ 27587 21441 due to heavy machinery churning the ground and flooding.
-  At the point where the bridleway approaches Millennium Way from the south (and the proposed cycleway from the north), the road is on an embankment meaning a 200m detour to the east to cross the road and then back again. This will undoubtedly lead to a desire line up and down the embankment. If possible a direct path should be constructed here for bikes and walkers, if not then steps for walkers and clear signage for cyclists should be provided.
-  Litter lines the bridleway from the A167 flown in from the nearby take away outlet (MacDonald's)
-  The access to the bridleway from the A167 is on a steep slope with uneven ground.
-  Apart from the proposed cycle paths already agreed, there is currently no access to this part of live line and no footpaths that can be used to run alongside. Access to this route will require purchase of land of about 719m and the creation of a path.



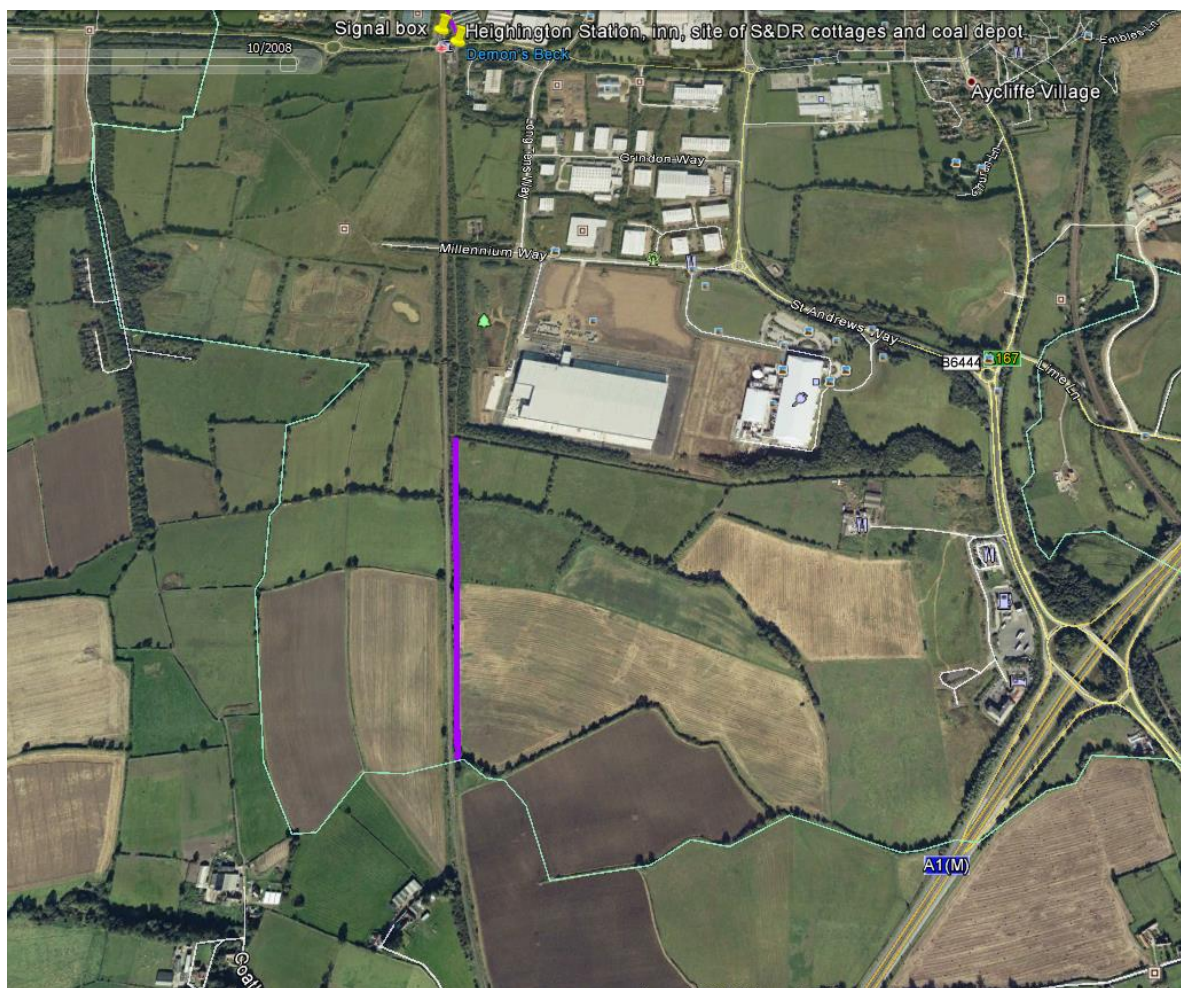


Figure 30. Suggested new access to be negotiated in purple

<b>Summary recommendations: Shildon to County Boundary south of Heighington (see separate table for Locomotion)</b>		
<b>Opportunities to find out more gaps in knowledge</b>		
<b>Task</b>	<b>Where</b>	<b>Priority</b>
Statements of Significances are required at the following buildings:	The Mason's Arms, Shildon	High
	Dan Adamson's Coach House (including as far as possible the adjacent building and assessment of where the inn was, the current Grey Horse Inn and curtilage of both)	High
	Locomotion No. One pub, Heighington and coal depot Heighington Signal Box (to inform new uses after redundancy)	High Low
Excavation in the back garden of Daniel Adamson's Coach House might help to establish more about the use of the building and how Adamson's coach service was run.	Daniel Adamson's Coach House, Byerley Road, Shildon	High
Community excavation of the coal depot and/or the site of the weigh house (owners' consent required)	Locomotion No. One pub, Heighington and coal depot	High
<b>Next steps in interpretation (see also main report).</b>		
<b>Task</b>	<b>Where</b>	<b>Priority</b>
Publish and sell Friends of the 1825 S&DR self-guided walks booklets	West Auckland to Shildon	Medium
Develop smart phone applications as alternative off-site interpretation	Brusseton village/ incline	Medium
If the owner is willing, moves should be made to carry out conservation and interpretation of the Heighington coal depot - it could be an asset to the pub (an interesting beer garden) and can be seen from the railway platform.	Locomotion No. 1 Pub, Heighington	Low
<b>Next steps in management.</b>		
<b>Task</b>	<b>Where</b>	<b>Priority</b>
The Hackworth Industrial Estate is the site of the world's first railway works and the site of Hackworth's first house. Developments which take place within the 1855 extent of the Works should be the subject of pre-determination archaeological investigation which will inform the nature of development and the extent to which it should incorporate exposed remains or open spaces.	Hackworth Industrial Estate. Extent of works shown in appendix 1-3 above	High and ongoing
The Hydraulic Pump House should be preserved (outside the S&DR area). Future development of this area should consider re-exposing at least some of the three currently hidden elevations. Also future proposals should retain historic railway features surviving from the late 19 <sup>th</sup> c such as rails	Hackworth Industrial Estate.	N/A
Where sleepers are not in their original positions they should be recorded, numbered and stored until a use for them can be found near their original location that will display them and contribute	Whole line	High

towards the early railway character of the area.		
Where fixed relic features are left behind such as gateposts, they should be left in situ as they are indicators of previous land uses such as level crossings.	Whole line	High
Network Rail need to be made aware of the surviving heritage interest along the line so that this can be included in their management systems (this process has started with an agreement with NR to pass on the GIS data from this project).	All live line from Shildon to County Boundary	High
Limited conservation required on quarry wall on Shildon sidings	Near Middridge Quarry	Low
The town of Shildon requires its own conservation, management and interpretation strategy on the lead up to 2025.	Old and New Shildon outside Locomotion	Low
No litter bins have been provided along the route and so there is a reliance on volunteers to clear up. In order to avoid taking a few individuals for granted, there needs to be a more formal volunteer adoption scheme to keep the line clean.	Locomotion to Aycliffe and near MacDonald's on A167	Medium
Aycliffe Wood House Bridge requires limited consolidation at the east edge to stabilise the parapets and the remains of the ramp; it also needs to be attractively and safely blocked off to prevent visitors trying to cross it. Some landscaping is required to draw people towards it.	Preston Road, Aycliffe	High
Any alterations to the pub or its setting that require listed building consent should be informed by a Statement of Significance.	Locomotion No. One pub, Heighington	High
The pile of stone rubble from the demolished 1825 accommodation bridge south of Aycliffe should be recorded and architectural fragments retrained for display or use in future conservation or landscaping work along the 1825 line.	South of Millennium Way	High
<b>Next steps in preservation.</b>		
<b>Task</b>	<b>Where</b>	<b>Priority</b>
The Goods Shed and Coal Depot at Locomotion should be listed.	Station St, Shildon	High
The land to the rear of the Locomotion One pub is vulnerable because it is not appreciated as being an early fore runner of what was to become known as a station. It needs to be included in the listing, or some other form of statutory designation. The coal depot and cottages (site of) should be considered to be an important part of the setting of the listed building and any developments at the pub considered for their impact on that setting.	Locomotion No. One pub, Heighington Station	High
The signal box at Heighington is due to be made redundant in the future. It is listed, but a new use needs to be found for it that retains its lever system and preferably makes some modest income to help maintain it.	Heighington signal box	Low
Depending on what has survived the subsequent use of the line there are	Formation shown on 1828 Township map of Great Aycliffe	High

sensitive places where features are shown on the 1828 map. These need further investigation and protection. Any alterations to line side needs assessing. Look to extend designation to include such areas if not already developed.		
The surviving S&DR boundary post should be protected through designation and physical measures.	South of Millennium Way	High
<b>Next steps in improving access</b>		
<b>Task</b>	<b>Where</b>	<b>Priority</b>
Access through the industrial estate to Locomotion is well established and surfaces are firm. There may be a need to look at pavement edges to allow mobility vehicles to mount and dismount pavements.	Between Mason's Arms and Locomotion	Low
The path from the industrial estate to Locomotion might need widening a little to accommodate a range of users. This is largely a question of vegetation clearance.	Crossings to Locomotion	Low
Explore making the links to Middridge Quarry more accessible for users of restricted mobility	Middridge Quarry adjacent to 1825 line	Low
Include the geological and ecological significance in any interpretation near Middridge Quarry	Middridge Quarry adjacent to 1825 line	Low
There are cycle paths outside Aycliffe Station, but they do not follow the 1825 route. A clear signed area is required across the grassy area via the Clarence Line bridge or the cycle path to Preston Road.	Aycliffe Station	Medium
How can people be helped to negotiate two busy roundabouts near Aycliffe Station?	Aycliffe Station/ Preston Road/ School Aycliffe Lane	Medium
There is no current legally defined public access to the line between Aycliffe and Heighington Station, but there are wide public highways, wide grass verges (sloping) and some pavements alongside Preston Road. Grass cutting will need to continue at Preston Road as a minimum approach to providing access	Preston Road, Newton Aycliffe	Ongoing
New paths down Preston Road and providing access down through the industrial estate to avoid a loop away from the line (a diversion through the industrial estate would be acceptable if necessary)	Preston Road and Station Road, Newton Aycliffe	High
Care has to be taken when designing the best approach to the proposed cycle paths from the inn (former Heighington Station) as this land consisted of the S&DR coal depot and later S&DR cottages (now demolished) and so is archaeologically sensitive.	Locomotion No. 1 Inn to Millennium Way	High
The access to the bridleway from the A167 is on a steep slope with uneven ground.	A167	Medium
Great Aycliffe (PROW 10), offers a direct link to the line, but it is currently impassable eastwards from NZ 27587 21441 due to heavy machinery churning the ground and flooding.	NZ 27587 21441 south of Aldi warehouse	High
A direct path should be constructed here for bikes and walkers where the bridleway approaches Millennium Way from the south	Millennium Way	Low

(and the proposed cycleway from the north), to avoid the embankment.		
Access to this route will require purchase of land of about 719m and the creation of a path from Moordale Road Estate to county boundary	Moordale Road Estate to county boundary	High

See over for Action Plan for Locomotion

Action Plan for NRM Locomotion		
Task	Location	Priority
Statements of Significance are required for each of these buildings in order to provide better information for interpretation and to inform essential conservation works	Goods Shed and Coal Depot	Low
	Hackworth's House and adjacent cottages	High
	Soho Shed	High
	Coal Drops	High
	The Black Boy Plate Layers Cabin and other outbuildings	High
	Signal box and associated buildings	Medium
	Thickley Bridge	Low
	Methodist Chapel Sunday School	Low
Hackworth's house and adjacent cottages and the coal drops should be considered 'at risk' due to their poor condition. Historic associations may warrant their elevation to Grade II* and formal inclusion on the Heritage At Risk register.	Hackworth Close, Shildon	High
New interpretation strategy is required (after S0S's completed) but which might include: New interpretation panels, new positions, maintenance plan for panels, less obtrusive, better located signage, use of smart phone apps, revisit internal interpretation at Hackworth's House, events and signage to other parts of the S&DR via train, train events on the 1825 line	Locomotion	Medium
Publish and sell Friends of the 1825 S&DR self-guided walks booklets – create signage into town along footpaths or cycle paths to go with booklets to Hackworth's grave, the Shildon Tunnel, The Black Boy Incline & Hackworth Park	Shildon Circular	High
The wealth of historic images and artefacts relating to the lost communities of Riseburn and Eden Pit merit some local heritage activities including local displays, possibly at Locomotion	Locomotion	Low
On completion of SoSs explore options for use of Hackworth's House and cottages, Goods Shed, Soho Shed, signal box and adjacent buildings and Black Boy buildings as sources to generate income	Locomotion	High to medium depending on the building
There are opportunities for community excavation as an additional live attraction on the site and to provide interpretation material and fill gaps in our knowledge.	Back of the plate layers' cabin or inside the buildings	Medium
	Excavation of the gardens at Hackworth's house might find everyday items of rubbish from the Hackworth household	High
	Excavation of some of the landscaped areas might uncover the foundations from the Soho Works	Low
Conservation work subject to guidance in the SoS and any relevant options appraisals required at:	Goods Shed and Coal Depot Hackworth's House and adjacent cottages Soho Shed Coal Drops The Black Boy Plate Layers Cabin and other outbuildings	Medium High Medium High Medium Medium

	Signal box and associated buildings Thickley Bridge Methodist Chapel Sunday School	High Medium
Renew displays in Hackworth's House and furnish cottages according to options appraisal choices (holiday lets for example)	Hackworth's House and cottages	High
Maintenance plan should be produced for all buildings and structures outside the main engine shed	Locomotion	High
Additional volunteer input is required to maintain the outdoors such as the interpretation panels which need cleaning	Various at Locomotion	High
There is a large amount of litter on the path that runs along the Shildon Tunnel branch	Cricket Club and Tunnel Branch path	Medium
A direct access should be made from the modern museum engine shed to the cycle path between Shildon and Aycliffe.	Locomotion	High
Explore bringing the Gaunless Bridge to Locomotion. A possible use would be to erect outside as a viewing platform for viewing visiting locomotives.	NRM York/ Locomotion	Medium