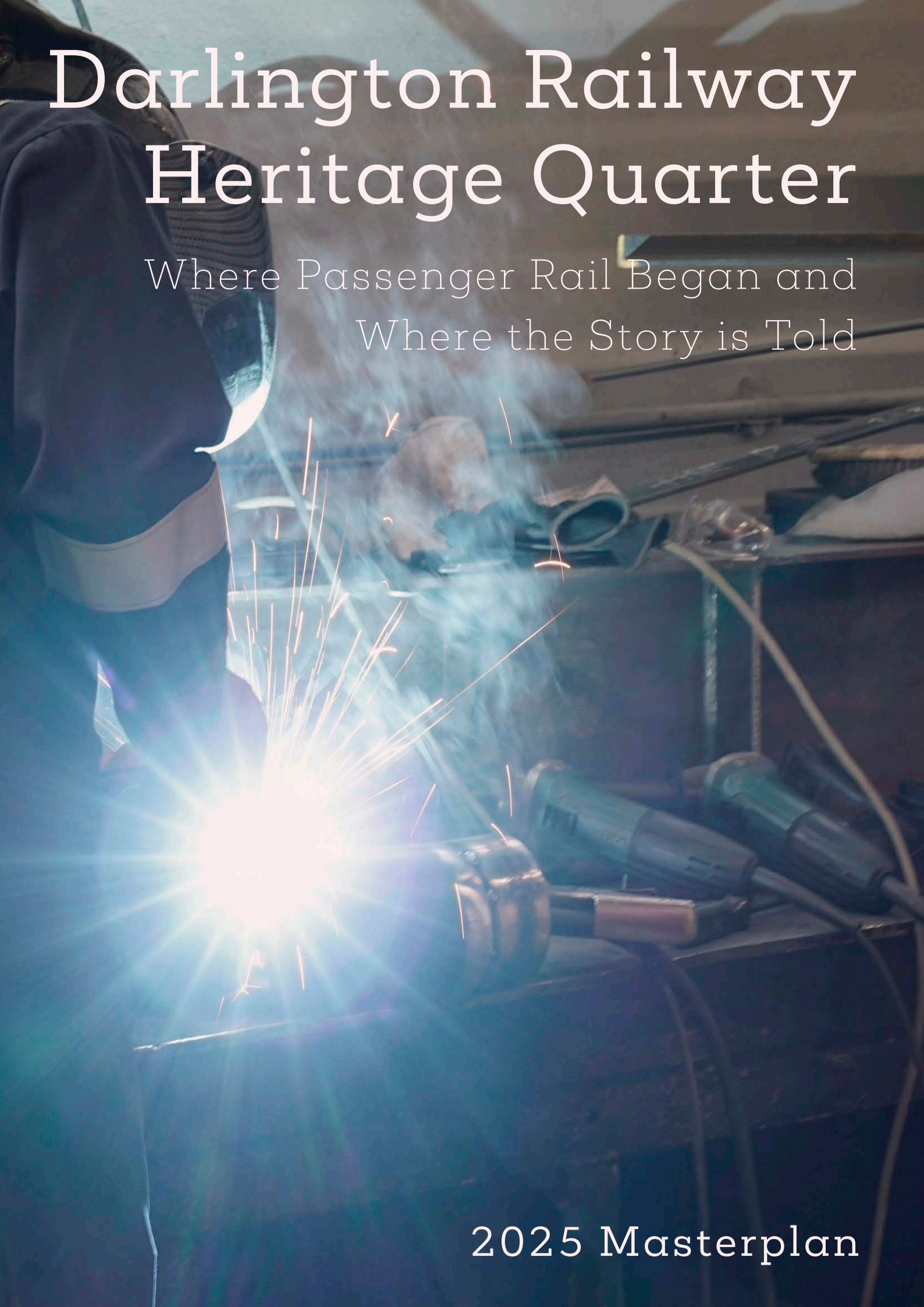


Darlington Railway Heritage Quarter

Where Passenger Rail Began and Where the Story is Told

2025 Masterplan

Photograph of Live Engineering in the Locomotive Works on site

Preface

Nearly 200 years ago, the Stockton and Darlington Railway changed the world. It was the birth of the modern railway which went on to connect places, people and communities – setting into motion the industrialisation and urbanisation of the modern world. Darlington's rich rail heritage is a real jewel in our crown. Throughout Darlington there are buildings, bridges, parks, libraries and even graveyards which all help tell the story of our unique place in world history.

The Stockton and Darlington Railway is heritage of local, regional, national and international importance and attracts people from around the globe. Its appeal and future potential should not be underestimated. With the Darlington Railway Heritage Quarter we have an amazing opportunity to protect, celebrate and enhance this unique and powerful story for the benefit of our communities, businesses and visitors.

We have a once in a generation opportunity in 2025 to ensure Darlington is prepared for the 200th anniversary of the opening day of the railway. We need to ensure that our communities and businesses are central to these plans for an international celebration, so that they can benefit from the additional visitors and economic boost this will bring to our area.

The real legacy for this project is not only to tap into the economic potential of our heritage, but also the social potential. The Stockton and Darlington Railway is not just a story about railways and engineering. It is a story about people -innovators and pioneers, people with vision, skills and determination. It is a story about ordinary people that saw opportunities and seized them. We have a real opportunity to reignite our communities connections with this heritage and through doing so instil pride and ownership which will inspire, enthuse and engage the next generation to ensure they are part of the next transformational change.

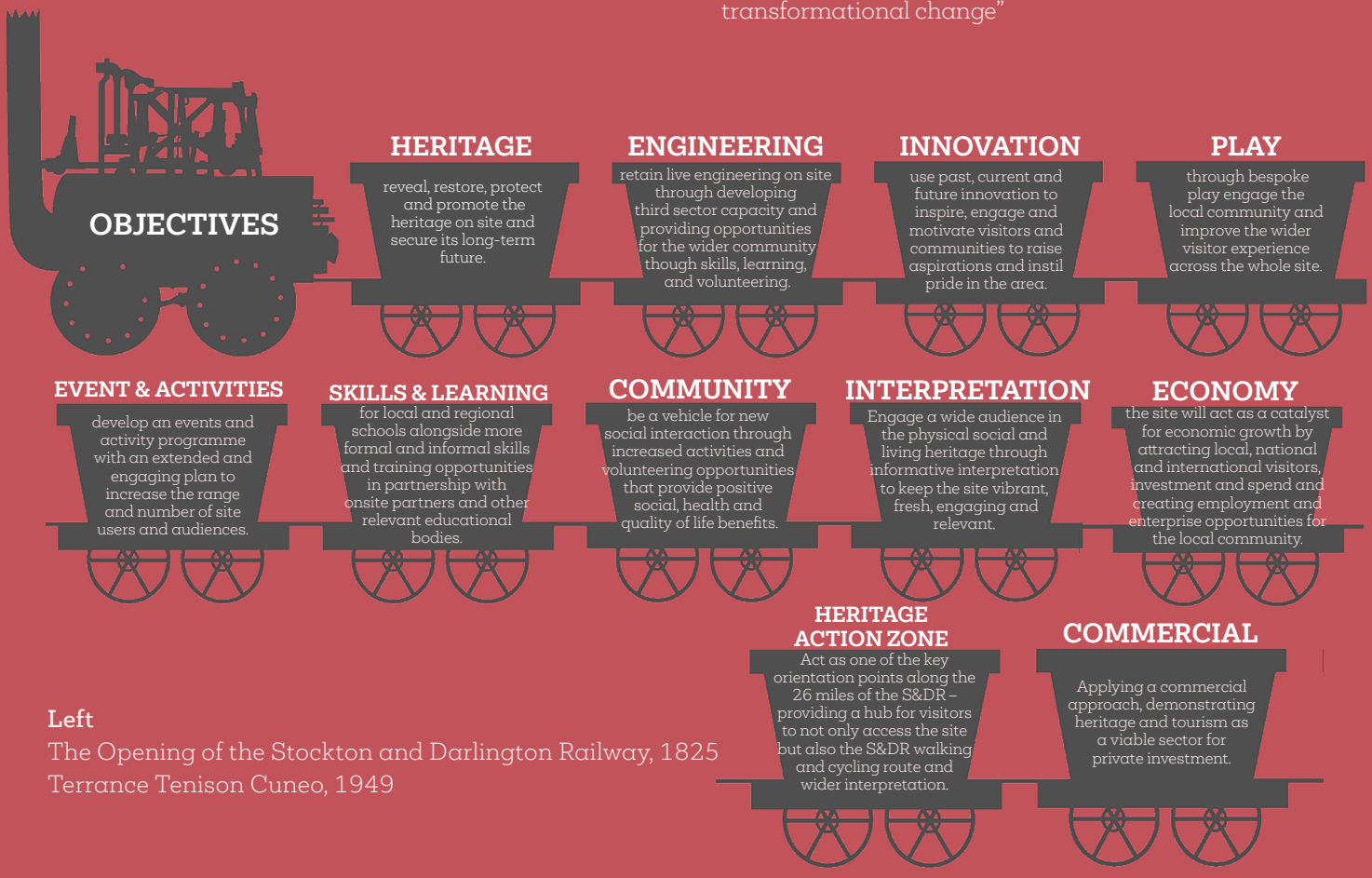
This is not just a backwards looking story. We are still an ingenious town with a wealth of innovative businesses across a range of sectors such as engineering, sub-sea and biomedical science. We have a wealth of independent shops and a rich and diverse cultural landscape with a newly refurbished Hippodrome Theatre and award winning Children's Theatre Hullabaloo . Through investing in the Darlington Railway Heritage Quarter, we will be using heritage as a springboard to our future - cementing Darlington as the place to work, live and visit for years to come.

Historical Ordnance Survey Town Plan, 1856
Historic England

Contents

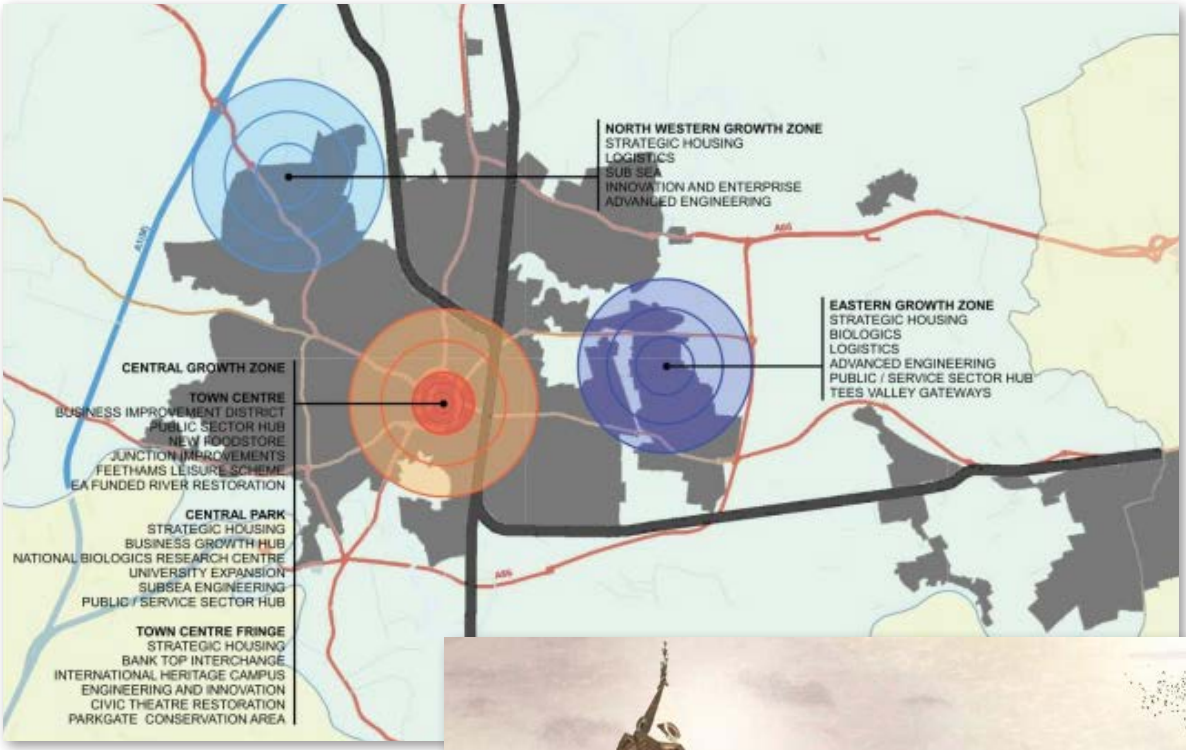
1.0 Vision 2025

By 2024, Darlington is recognised as the world's most historic railway town with the Railway Heritage Quarter becoming an internationally significant major visitor attraction in the Tees Valley, which will be central to the Stockton and Darlington Railways bi-centenary celebrations. This project will reveal the story of Darlington and its communities that saw an opportunity and seized it, connecting and transforming the world in the process. Our unique and authentic heritage will be reimagined with a strong narrative, varied interpretation, reimagined spaces and new experiences to engage a wider audience including local residents, businesses and visitors from around the globe. This site will act as a catalyst for heritage led regeneration and social cohesion, empowering our communities and businesses to be part of the next transformational change"

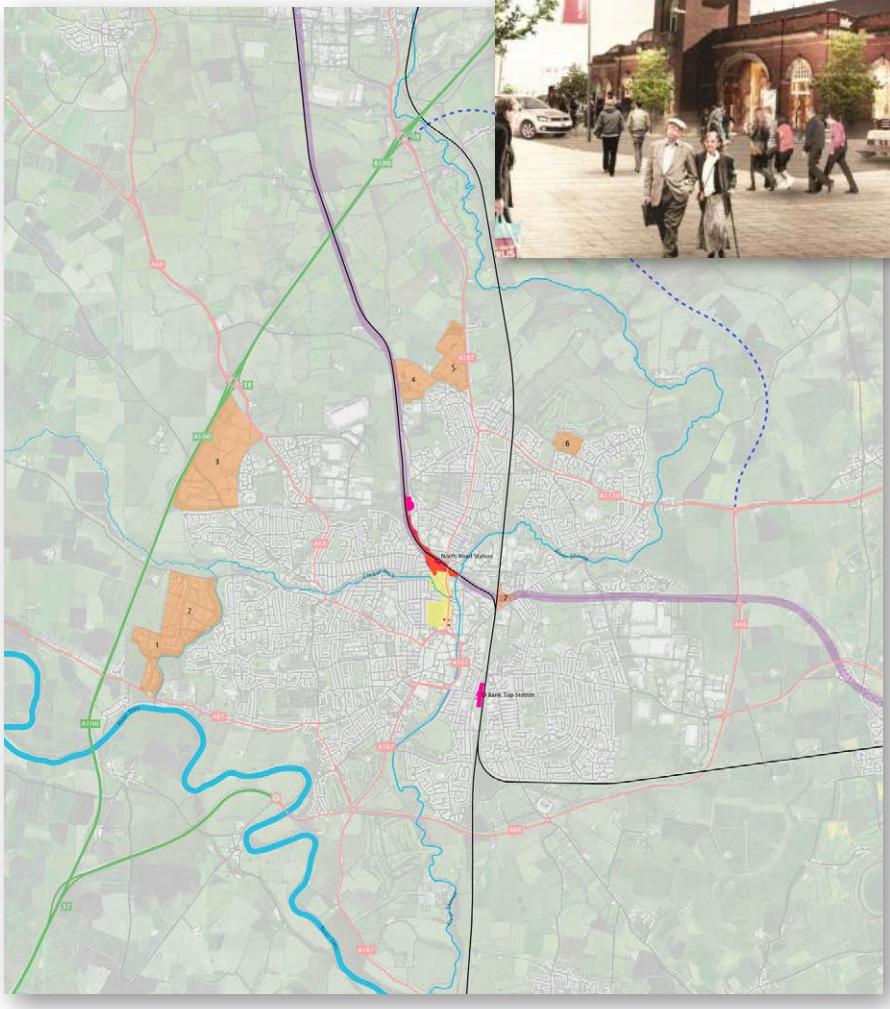


Left
The Opening of the Stockton and Darlington Railway, 1825
Terrance Tenison Cuneo, 1949

Darlington Borough Council Local Plan



Darlington 2025- Refurbished Train Station



Proposed New A66 East West Connection

1.1 Policy Context

The Stockton and Darlington Railway Heritage Programme is a key priority for the Tees Valley Combined Authority (TVCA) under their Culture and Tourism Strategic priority within the Strategic Economic Plan (SEP) 2016-2026. TVCA has committed up to £20m through its Tees Valley Investment Plan 2019-29 to the Stockton and Darlington Railway Heritage programme.

The Darlington Borough Council(DBC) Visitor Strategy identifies as a key priority the opportunity to build on the railway heritage of the town to develop the visitor numbers and economy in Darlington.

Historic England designated the 26-mile route of the Stockton and Darlington Railway a Heritage Action Zone (HAZ), which will run from 2018-23. The aim of this is to 'help rejuvenate and restore the 26 mile stretch of historic railway, and to help realise its potential to become a major heritage attraction and visitor destination in the build up to its 2025 bicentenary.' The DRHQ is one of the key sites along the HAZ and will benefit from research and support to tackle heritage at risk and urgent repairs. A Conservation Management Plan for the site will also be developed to ensure better long-term conservation and management.

In addition to heritage and the visitor economy, the DRHQ also aligns with the ambitions for the emerging Tees Valley Local Industrial Strategy (LIS) aligned to the TVCA SEP and Investment Plan:

- Leading the way as an exemplar region for industrial decarbonisation and clean growth
- Developing pioneering capabilities in industrial digitalisation and ensuring the implementation of digital applications at scale
- Leveraging the full potential of our innovation ecosystem in support of building R&D capability, commercialisation and business growth
- Growing and widening the pipeline of talent to support our competitive advantages and help more local people into jobs with good long-term prospects
- Positioning the Tees Valley as a leading place to live, invest and grow a business

As part of this, it is the intention that the LIS addresses the challenges of inclusive growth, as the Tees Valley currently ranks as 37th out of 39 LEP areas against metrics identified by the Joseph Rowntree Foundation for inclusive growth. It does, however, rank 3rd out of 39 for Recent Change. The plans set out in this Masterplan will help in addressing this challenge through skills development and innovation.

The Darlington Local Plan Draft 2016-2036 is due to be approved in 2020. The key themes include Built Heritage, Climate Change and Energy, Community Infrastructure and Education. Many aspects of DRHQ will contribute to achieving these goals.

The goal to become energy self-sufficient from renewable energy sources is also in line with the aspirations set out in the Tees Valley Climate Change Strategy 2010-20 and Climate Emergency Declaration in July 2019. This also fits with DBC's stated goals - the council is a signatory to the Covenant of Mayors, which commits the council to reduce emissions by 20% by 2020 and a model was produced using Vantage Point software showing how these emission reductions could be achieved. It is expected that future plans will further increase commitments to reduce carbon emissions. Since the UK Government has a legally binding target set out in the Climate Change Act (2008) to reduce carbon emissions by 80% of 1990 levels by 2050 and has recently announced intentions to achieve zero carbon emissions by 2050.

The following policy documents have been reviewed to inform the masterplan connectivity proposals: National Planning Policy Framework (2019); Tees Valley SEP (2016) and Investment Plan (2019); Tees Valley Strategic Transport Plan' Tees Valley Design Guide & Specification Darlington Local Transport Plan.

Together these documents have set the framework for the connectivity proposals and have highlighted the need to focus on access by sustainable modes, build on opportunities from strategic projects such as redevelopment of Darlington Bank Top Station and make the most of existing transport provision.

S&DR Heritage Board and Stockton and Darlington Railway Heritage Action Zone (HAZ) are planning for there to be a major celebration in 2025 of the bicentenary of the S&DR. The Tees Valley Combined Authority is planning to submit a bid in 2021 to become the UK City of Culture 2025. This offers an opportunity for the DRHQ and S&DR. HAZ and the 2025 bicentenary celebrations of the S&DR to play a key role in the Tees Valley City of Culture 2025 events programme.

1.2 Vision 2025

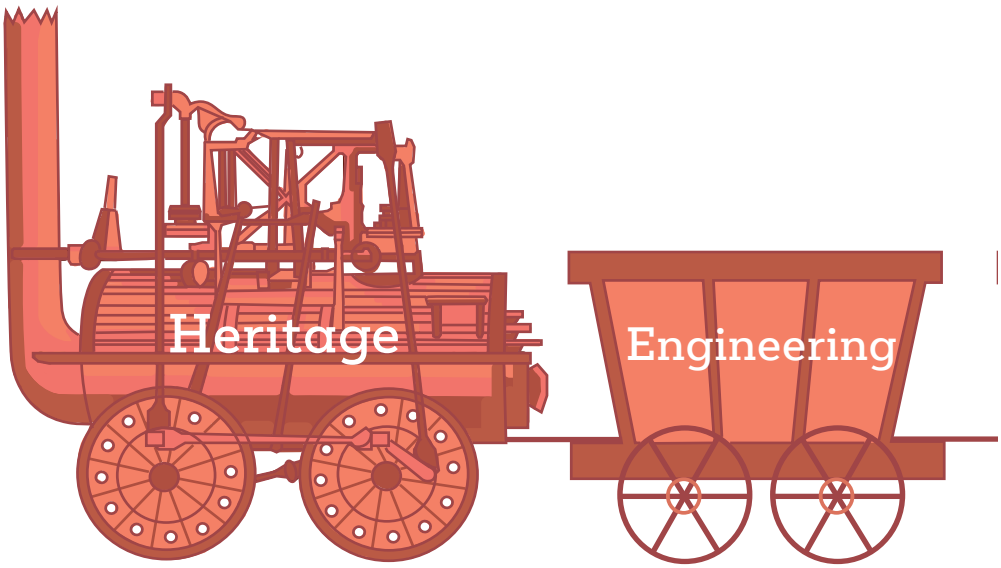
TVCA and DBC intend to develop Darlington Railway Heritage Quarter into a new world class visitor attraction and museum by 2024 so that it can be a central part of the bi-centenary celebrations of the Stockton and Darlington Railway in 2025.

The Darlington Railway Heritage Quarter will be a unique and authentic visitor attraction that reveals the story of Darlington and of the communities that saw an opportunity and seized it, connecting and transforming the world in the process.

It will be a place where local heritage is being activated in ways that will lead to sustainable regional regeneration, investment and the transfer of new knowledge and skills to local communities. It will engage audiences with the inspiring story of innovation, invention, connectivity and transformation represented by the physical remains of the Stockton & Darlington Railway and its emergent narrative.

With a strong narrative, varied interpretation, reimagined spaces and the creation of new experiences, it will explore the Stockton & Darlington Railway's enduring influence on the people, development and identity of Darlington and the region – past, present and future.

It will tell the story of a place, a time and range of people that brought together unique



Interpretation

Skills and Learning

combinations of existing ideas and technologies and new solutions that combined the ingenuity and determination of engineers, entrepreneurs, financiers, surveyors, builders, navies and countless unnamed individuals who gave their knowledge, expertise and faith to a great, world-changing endeavours.

Alongside all of this, the Darlington Railway Heritage Quarter will showcase and celebrate the innovation and invention currently going on in the region – in industry, universities, entrepreneurial start-ups and established companies – and build connections with knowledge, technology and heritage communities around the world through the interpretation of the collection and the site..

It will use this interpretation of the past and shared history, reimagined and revealed through a suite of new spaces and experiences, as a catalyst for community building, problem-solving and placemaking, as well as attracting attention of repeat local visitors and visitors from across the world.

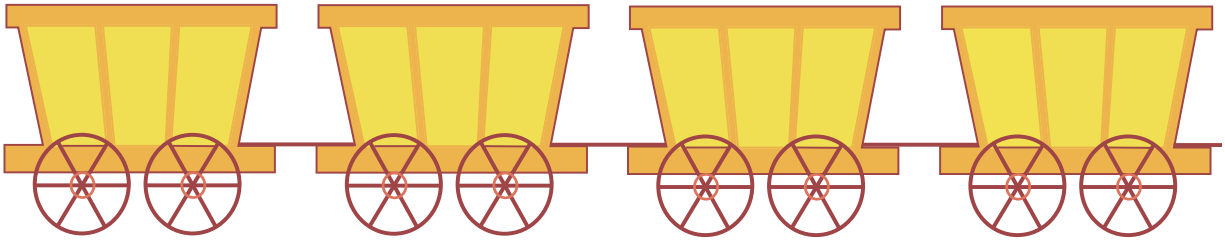
Five key themes have been identifying in The Vision:

- Heritage
- Skills
- Play
- Programme of Events.

Learning and Skills, Innovation and Historic

Interpretation are proposed as the cross-cutting activity across all four key themes.

1.3 Key Themes



1 Heritage

Enhance Heritage Site and Visitor Experience

This exceptional site suffered from years of decline due to changing nature of railway industry.

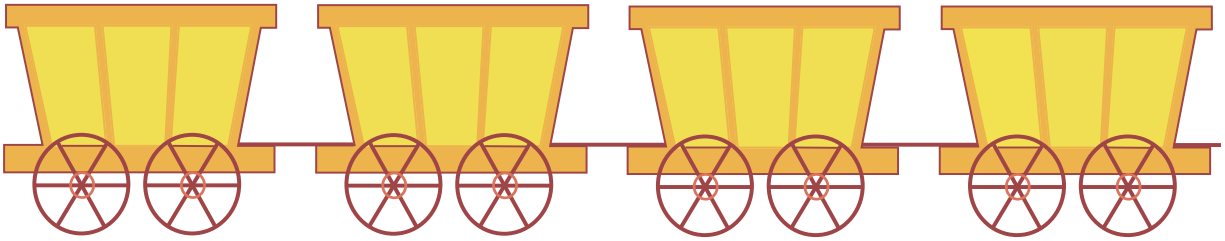
The current vision is to reveal, restore and disseminate all aspects of the heritage including the archaeology, restoration of the building and the relationship between them, refreshing and modernising the interpretation, and telling the social history of the people who made it all happen.

2 Engineering

Celebrate, Protect, Retain and Develop Local Engineering

Stockton & Darlington Railway was engineered, promoted and financed by local people and their innovations had an impact globally. Strong design and engineering skills and a deep knowledge and a love for railway engineering are still available in the town and the region.

One of the aims of Darlington Railway Heritage Quarter is to recognise and celebrate engineering and associated skills to actively promote intergenerational learning to retain and grow these unique abilities.



3 Play

Provide Opportunities for Bespoke Play throughout the Musuem

Play is a vital provision for visitors and local communities. Play opportunities will be explored throughout the site.

A bespoke outdoor provision will aim at a broader range of play than those available at existing visitor attractions in the region.

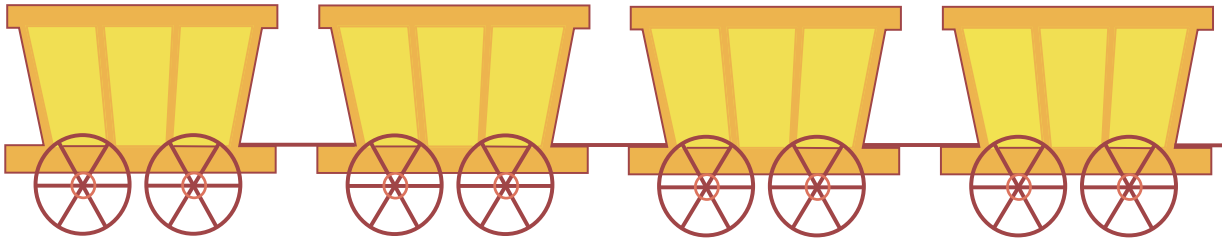
There is an intention to deliver multi-layered environments which facilitate children to play in a non-prescribed manner: Inspired by their context to explore, take risks and experiment.

4 Events & Activities

Programme of Events and Engagement Activities

In addition to the Museum collection the interpretation will extend to a programme of events to engage and re-engage visitors and local communities in a variety of ways.

Temporary exhibitions, annual local, regional and national events, half term and school events targeted at various age groups and STE(A)M. This will be supported by engaging activity plan delivered by a team of engagement officer, youth engagement officer and volunteer coordinator. National lottery activity plan will be developed.



CC

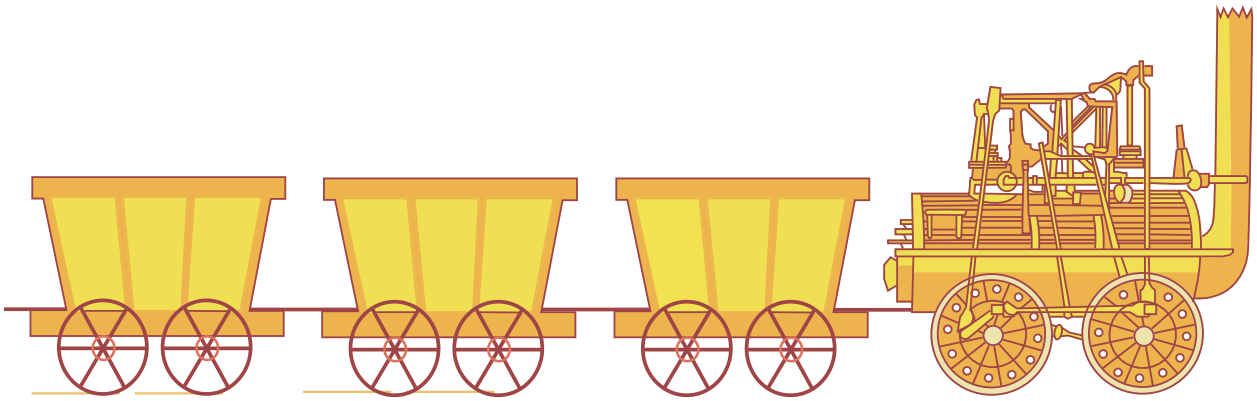
Interpretation

Cross-cutting Themes

Heritage interpretation will be extended across all five themes to ensure that all sectors of society can engage with the Darlington Railway Heritage Quarter.

Opportunities for interpretation of physical heritage, the social heritage and the living heritage will be explored in each of the themes to help keep the site vibrant, fresh, engaging and relevant.

Through interpretation the DHRQ will sustain the connection between the past and the future.



CC

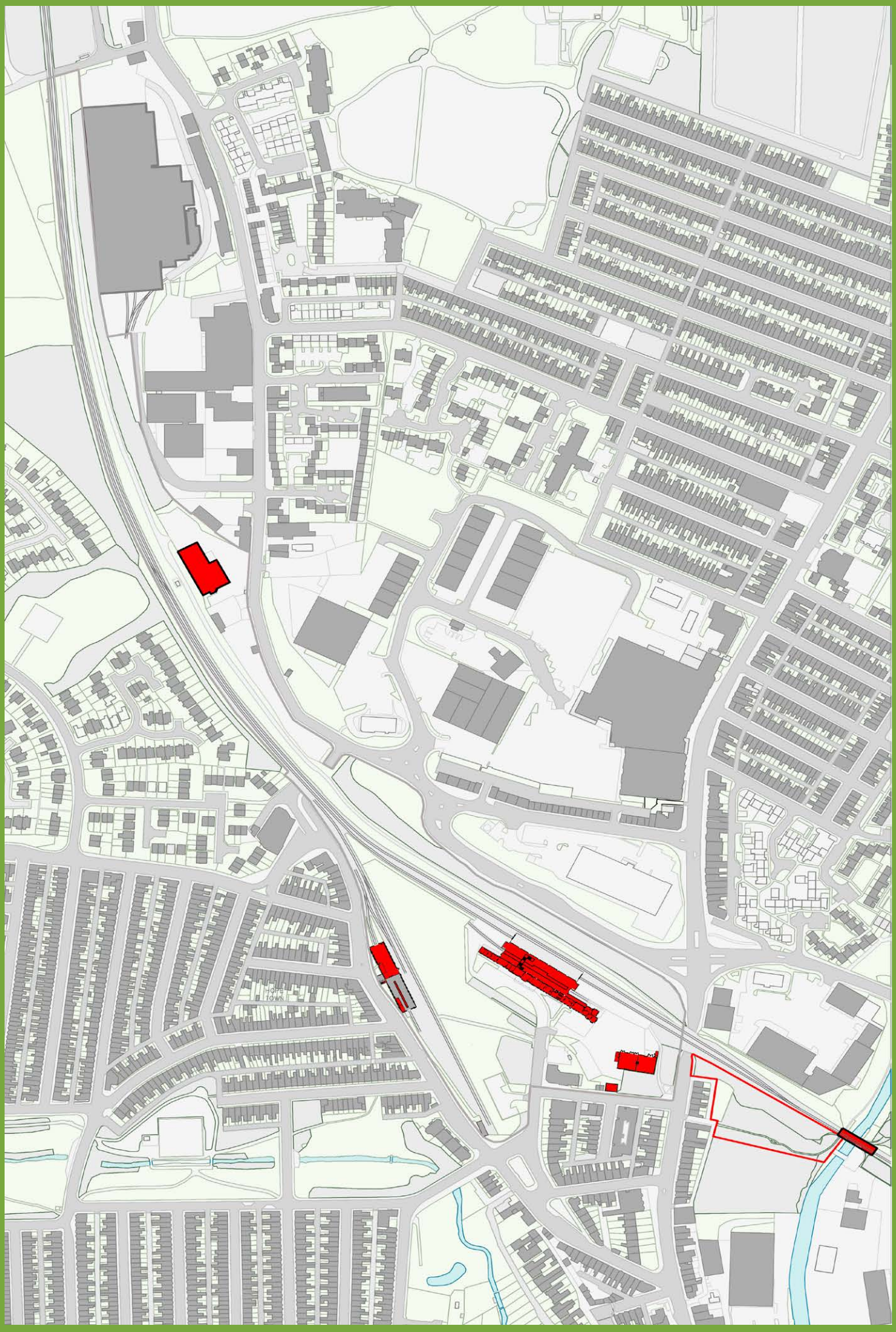
Skills and Learning

Cross-cutting Theme

Skills and learning opportunities will also be sought across all five themes.

It is intended that a programme of skills and training will be delivered to various age groups with wide choice of subjects ranging from heritage, curation, design, engineering and model making, to technology and digital media.

Partnerships will need to be formed with Industry, public sector, education and training providers, civic organization and schools to make use of the extensive heritage assets across the Heritage Action Zone.



2.0 The Site

The site, known since the 1830s as “North Road”, was developed by the S&DR.

A large proportion of the site and its 5 listed buildings is a part of Darlington Borough Council’s Northgate Conservation Area and the location is part of a Historic England designated Heritage Action Zone because of its relationship to the Stockton and Darlington Railway.

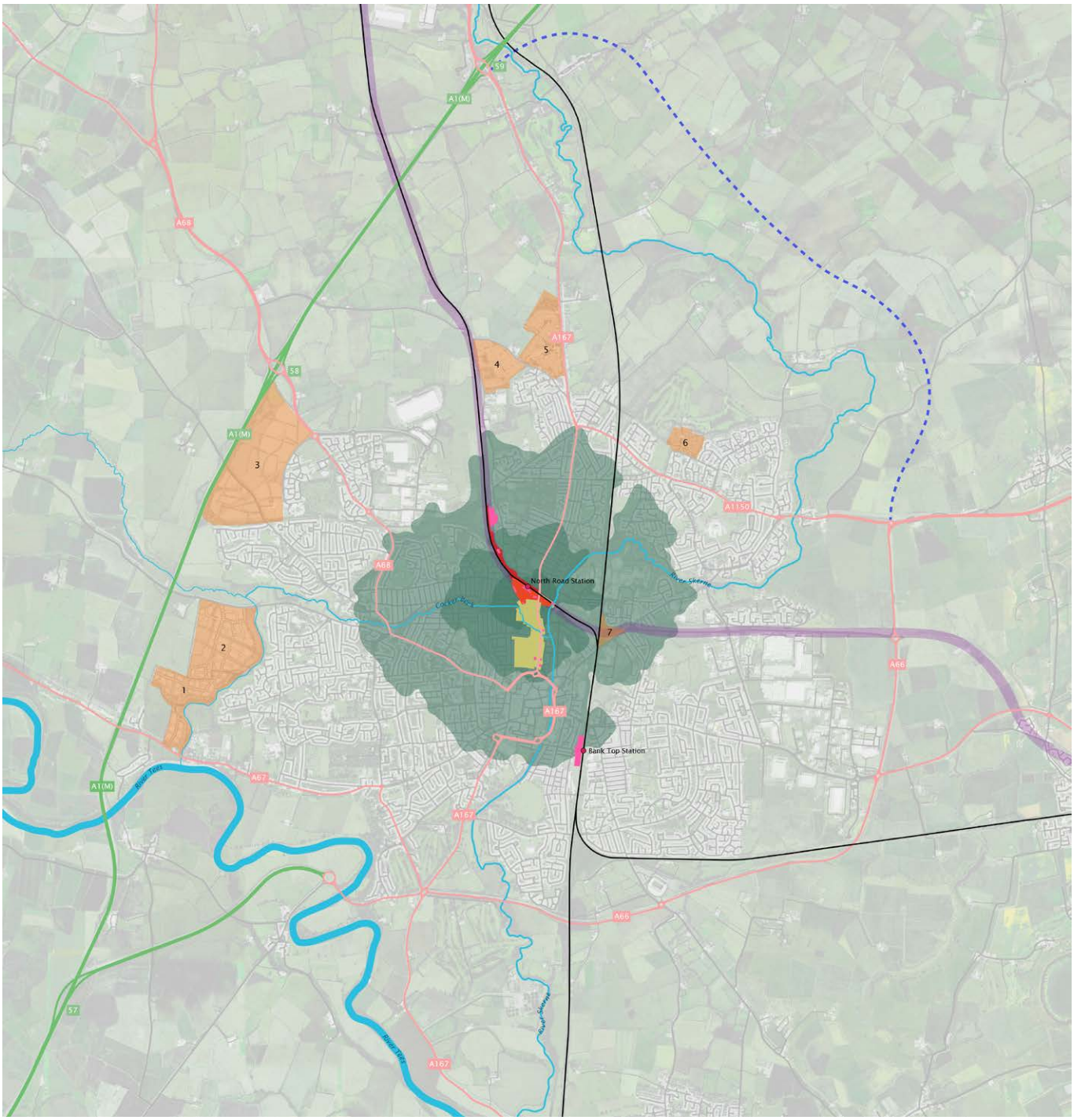
Darlington Railway Heritage Quarter contains what has been described in the 2004 Conservation Plan as the world’s most important group of surviving early railway buildings.

All of the key buildings on the site were from the first generation of the railway age, when the form and function of railway buildings was still being developed by trial and error. Development of the track bed began in 1825 and construction of buildings ended in 1853, although minor structures came and went thereafter under later owners.

After 1853, the S&DR replaced two elements of the site with larger facilities, located elsewhere because there was insufficient space at North Road. In 1863, the S&DR merged with the North Eastern Railway, and North Road became a minor satellite site for a large railway company rather than the hub of a small railway company. Development thus ceased.

The Station, the Goods Station and the Goods Agent’s Offices were listed in 1977, and the Carriage Works in 1986. The listing for the Station concludes by saying that it is listed because of its “association with the first public railway in England”, with those for the others also noting group value and historical associations. Historic Significance of the site and the buildings is fully assessed in the Conservation and management Plan 2004.

2.1 Location


A1(M)
A68
A167
A1150
A66
A67
S9
S8
S7
North Road Station
Bank Top Station
River Skerne
Cocker Beck
River Tees
1
2
3
4
5
6
7

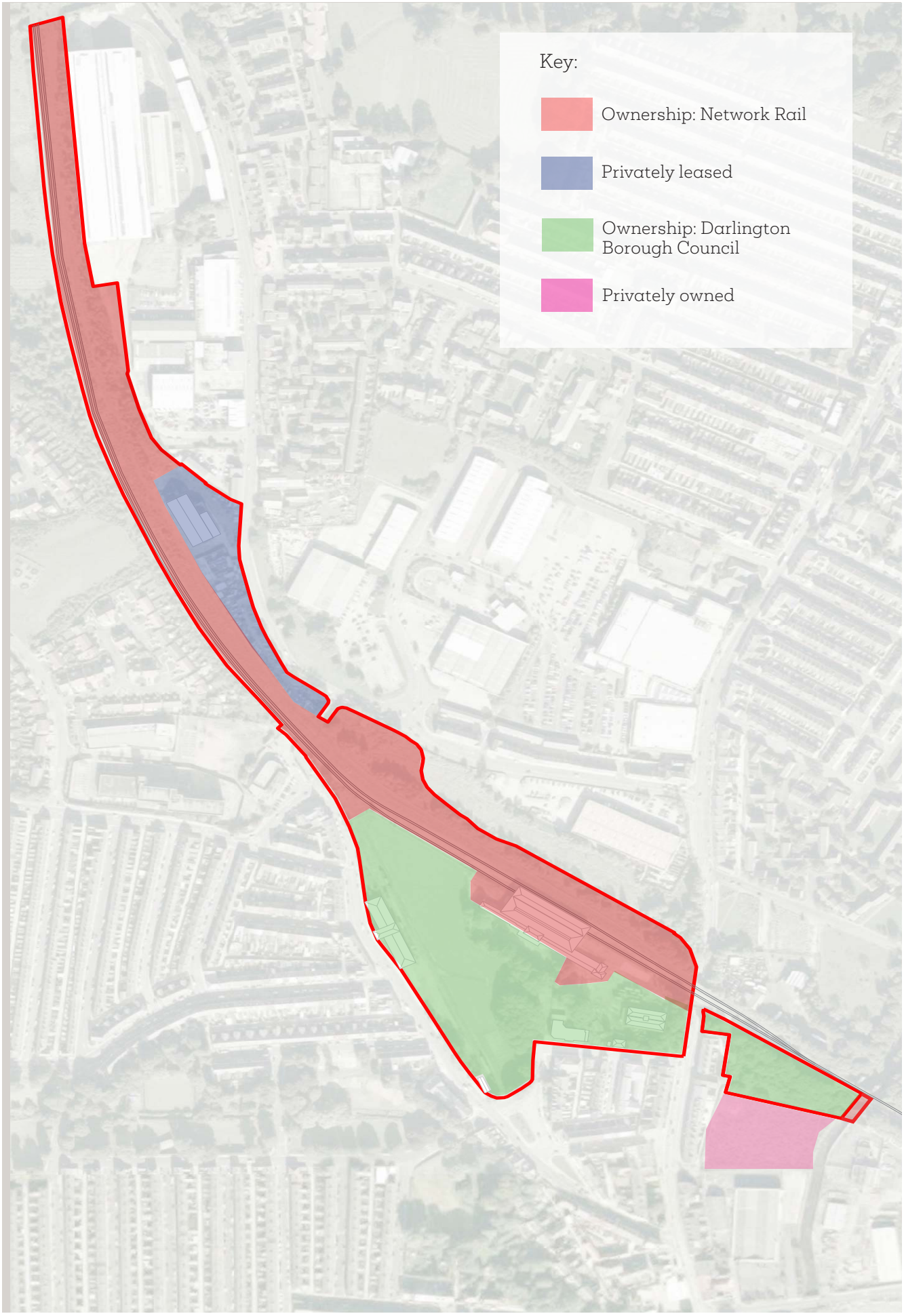
The main part of site is located some 1.5 km north of the town centre. It consists of a triangle of land between what was the S&DR main line, now the railway from Bishop Auckland to Saltburn, Hopetown Lane to the south, and A167 the main road north from Darlington to Durham to the east. To the south west of the site are residential neighbourhoods and to the north a large-scale retail area.

Two additional areas were available for the masterplan. Whessoe Road site, a stretch of Network Rail land to the north of the main sites which contains the 1861 Shed, and the triangular embankment site south of A167 contained by the Bishop Line to Darlington Line and the recently improved walking and cycling route between A167 and Skerne Bridge.

The Skerne Railway Bridge, a Scheduled Monument, is the oldest structure on the North Road site and was part of the original railway line from the from its inception. Built in 1825 by Ignatius Bonomi it was an integral and recognisable aspect of the S&DR's first line in the same year on. On 27 September 1825, it carried Loco No 1 on its first journey. Its importance as the oldest railway bridge still in use has been reflected in its depiction on the £5 note through the 1990s.

There are several other historically significant buildings and structures outside of conservation area but within walking distance of the site: Rise Carr Rolling Mills on Whessoe Road was built by Theodore Fry, newly married into the Pease family and Charles I'Anson, founder of the Whessoe foundry in 1864. For their workers to live in they built terraces, the first ones called Fry Street and I'Anson Street.

Nos 1A to 27 Whessoe Road are three terraces of small houses that were located on the south side of the Darlington Railway Works. The works were developed by the Stockton & Darlington Railway from 1863 and then by the North Eastern Railway after it took over the S&DR in 1863. The cottages were possibly built around 1863 by S&DR. They are interesting survivals of late 19th century industrial housing with workshops at the back of the rear yards.


Key:
Ownership: Network Rail
Privately leased
Ownership: Darlington Borough Council
Privately owned

The Railway Institute Club 93 North Road Built in the late 19th century on the corner of Whessoe Road and North Road on the south east corner of the railway works site, the Institute was built for railway workers for education and leisure. It is a tall two storey building of red brick with extensive gault brick banding over the window heads and a low-pitched slate roof. It is the sole surviving building of the railway works complex and still operating as a club.

Along High Northgate, there are many other historic assets most notably the Railway Tavern and Edward Pease's house.

Visibility of the site entrance for pedestrians from either from McNay Street or from Station Road is currently poor, with the site obscured from view by trees, bushes and buildings. The route to the station platform is also via a path that is not suitable for use by people with mobility impairments given its gradient and steps.
Poor visibility and lack of signage from main roads contribute to the lack of visible presence. Furthermore, fencing between the different areas impairs appreciation of the site as a unified whole, and prevents access.

The Site is scattered, with disparate uses not connected to each other and the poor condition of the Goods Shed contributes to the air of neglect.

Currently there is no strong identity for the site being communicated to outsiders, unlike attraction such as Swindon Railway Village, or Ironbridge World Heritage Site which has marketed itself as a pioneer site of the Industrial Revolution with international significance embodied in a few historic structures, Head of Steam Museum does not currently project a strong identity. But, with all the assets of the site it has potential to do so in the future.

2.2 Site Analysis

Heritage Significance

Archaeology

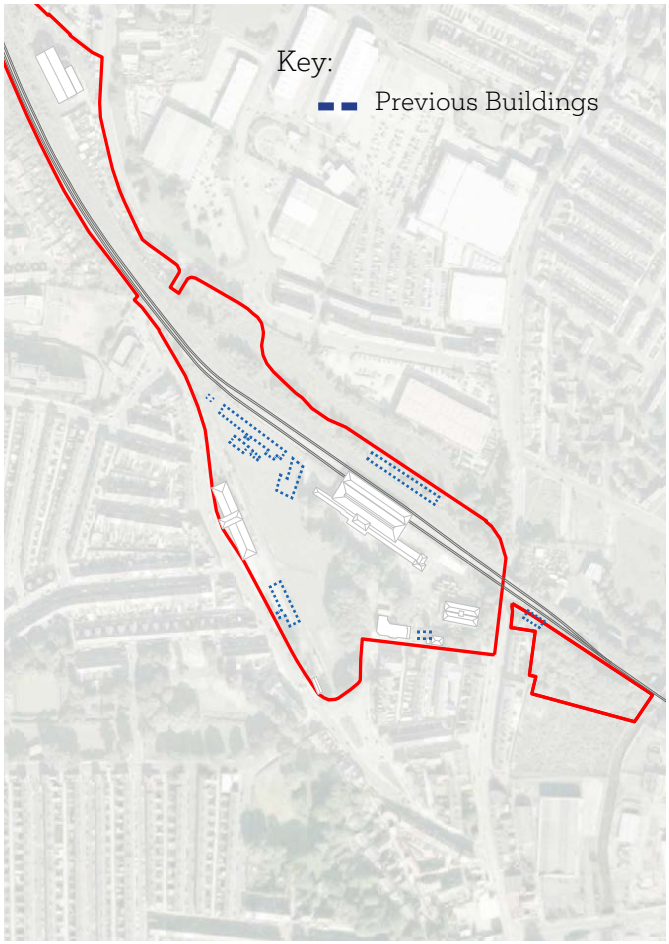
There are no constructions of note on the site that indicate a post railway story, the most significant buildings have uses that reflect in one way or another their railway heritage. This means that there is no competing 'story' or heritage interest in the site.

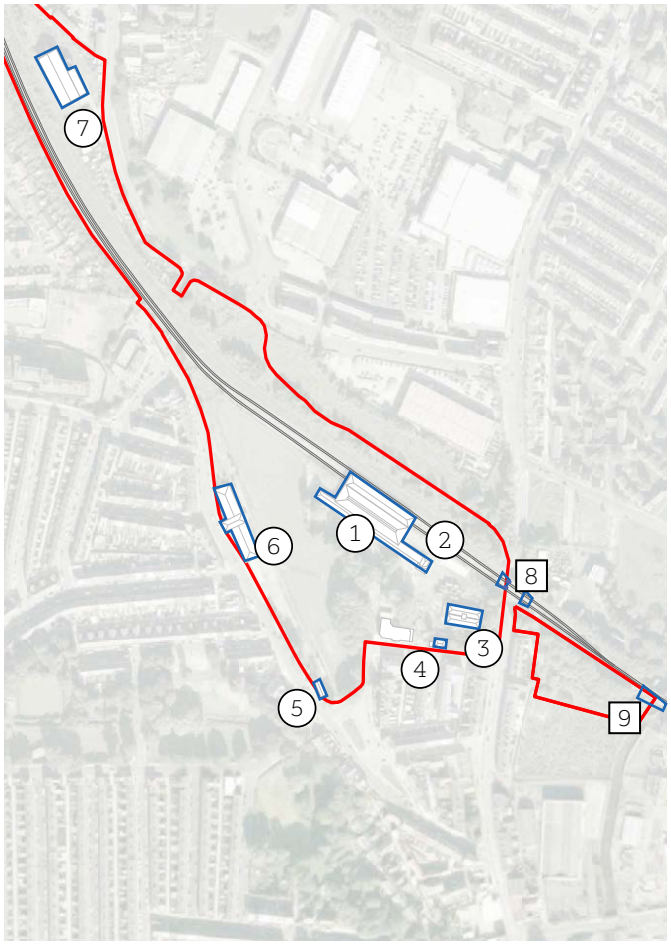
The site of Kitching's Foundry on the triangle of land to the west of North Road Station and north and north west of the Carriage Works established in 1831 and demolished in 1970's offers potential for an archaeological dig and then the possibility that buildings could be re-erected around a triangular yard to restore a sense of enclosure to the space at the north and west end of the North Road Station site.

Designated Heritage Assets

1 Head of Steam Museum Grade II*
2 North Road Station Grade II*
3 Goods Shed Grade II* (on National Risk Register)
4 Good's Agent's Offices 1 and 2, McNay Street, Grade II
5 The Lime Cells Grade II
6 Stockton & Darlington Railway Carriage Works Grade II
7 1861 Shed
8 Railway Viaduct (over A167 Northgate), Grade II *Scheduled Monument*
9 Skerne Railway Bridge 320m South East of Head of Steam Museum, *Scheduled Monument.*

The collection of buildings is unique, forming an important part of the heritage and story of the Stockton and Darlington Railway. In addition, the site also includes the 1861 Shed which is not listed.



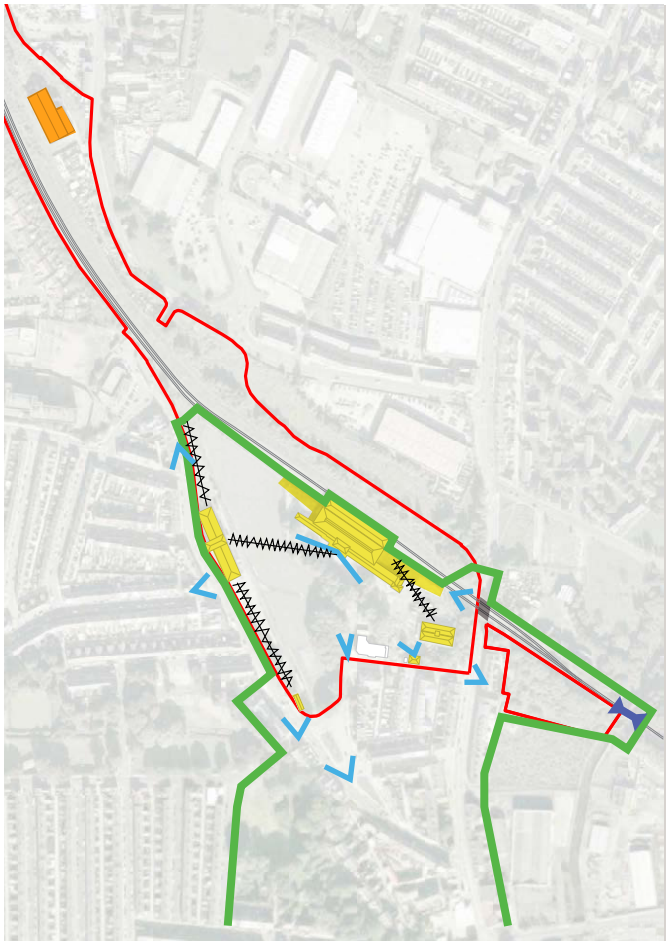


Views and Visual Links

Yellow – listed buildings and attached curtilage walls
Purple – scheduled monument
Green – Northgate Conservation Area boundary
Blue – important viewpoint
Black zigzag line – important visual links between buildings or uses
Orange – 1861 Shed

View from the train:

This diagram shows the designated heritage on the site, where there are important viewpoints from which the heritage is seen and where there are links between buildings that need to be prioritised. It shows the importance of bringing the live railway function of the station into consideration, and how the site is seen from Hopetown Lane, Station Road and Northgate.



Constraints

Yellow - listed buildings
Blue – scheduled monument
Light blue shading - area of archaeological potential
Red shading – more sensitive spaces on the site
Green shading – less sensitive spaces on the site

This diagram shows the areas that form immediate settings of the Darlington North Road Station, the Good Shed, the site of the original station, the Skerne Bridge, and the Carriage Works and the Lime Cells, plus the site of Kitching's Foundry are of greater sensitivity and therefore would require careful consideration of any proposals to build structures on these spaces.

2.3 Site Analysis

Key Buildings

Head of Steam Museum and North Road Station - Grade II* Listed

Owned by Network Rail and on a 200-year lease to DBC the North Road Railway Station that houses the Head of Steam Museum is the most complex building on site.

The station dates from 1842, but there had been a previous station built on the site about five years earlier to replace temporary passenger arrangements where the railway crossed the North Road. In 1840 the directors of the S&DR agreed that John Harris, the S&D resident engineer, should plan a station. The contracts for the station were not let until 3 September 1841 and the new station opened in around April 1842.

The building and track underwent many significant alterations until in 1969 the station building was made unmanned without any passenger facilities, then in 1972 the line to Bishop Line was reduced to a single track. Shortly after DBC acquired the building and it was refurbished by Bishop, Lee & Braddock and in 1975 the Darlington Railway Centre & Museum opened. In 2008 it received a refurbishment funded by HLF and was rebranded as the Head of Steam: Darlington Railway Museum.

Visually the greatest change to the building has been the loss of chimneys and roof vents, removed during the 20th century.

In terms of its setting, the station had a formal forecourt for carriages and cars, and latterly cars to collect passengers and a winding approach along Station Road. The conservation area appraisal notes the importance of the view up Station Road to the frontage.

Carriage Works - Grade II Listed

Owned by Darlington Borough Council and currently let to A1 Steam Locomotive Trust and North East Locomotion Preservation Group.

Joseph Sparkes was contracted for the design of a carriage repair shop in March 1853 by the Stockton & Darlington Railway Company.

The drawings depict an Italianate building with rusticated stonework features. A two-storey central pavilion with large double gateway housed a turntable which, combined with the turntable in front of the main pavilion, was used to direct carriages in and out of the building. The southern wing (left wing) housed a paint shop while the north wing (right wing) was home to a joiners' shop and smithy. Each wing had two tracks down the centre. Both ranges have Queen post roofs. The later removal of some internal features means that much of the upper wall is now supported with large cast iron beams.

The building has subsequently been re-roofed and many of the internal walls were removed to make the space more flexible. This then allowed the two current lease holders, the A1 Steam Locomotive Trust and the North East Locomotive Preservation Group to move into the South wing in 1995 and the North wing in 2002 respectively. Various alterations have been made internally and most are in use while the upstairs loft area of the central pavilion is unused and in poor condition. The exterior has recently received a full envelop refurbrishment external.

The setting of this building is hardly changed to its south with Hopetown Lane and the terraced housing on the far side of it.

Goods Shed - Grade II* Listed on National Risk Register

Owned by Darlington Borough Council and currently let out to Darlington Railway Preservation Society The Goods Shed, originally the Merchandise Station, is one of the oldest buildings on the site and oldest surviving building to be erected by the S&DR, as opposed to "structure". Thomas Storey, engineer to the S&DR, designed the original building. Construction finished in June 1833. The Goods Shed was significantly expanded from 1839-40 and a prominent clock-tower was added featuring triglyphs in the frieze with two gaps on each face suggesting there may have been a bell accompanying the clock. The Merchandise Station is the earliest surviving single-storey goods shed in the world and unlike later good sheds rail traffic entered through a series of sidings into the main façade rather than via a track through the shed laterally.

The Merchandise Station was converted into a fire station between 1870 and 1898 and many alterations took place. The fire station was converted into a road vehicle repair shop for British Railways in 1951. After the DBC acquired the site in 1983 it became a repair shop for locomotives and rolling stock run by the Darlington Railway Preservation Society who have occupied the western half from 1984 and then both halves a few years later.

The building has continued to decay. The overhanging, timber-cantilevered base of the clocktower is sagging, and is at present supported by resting on the cab roof of one of the locomotives in the repair shop. The clocktower interior cannot be seen at present.

The Goods Shed and 1&2 McNay Street are inextricably linked. Whereas the office faces onto the street, the shed is set back, now hidden from the street by trees and bushes. This relationship between the buildings should be restored.

Goods Agent's Office, McNay Street - Grade II Listed

Owned by Darlington Borough Council and currently let to Darlington Model Railway Club and the North Eastern Railway Association.
Purpose built to contain the S&DR goods offices, adjacent to the Goods or Merchandise Shed. The building contract was let on 3rd April 1840 and erected shortly after. In 1931 the offices were converted into flats and latterly have had use as offices.

The related functions of the Goods Shed, and office have visually diminished over time as the area between the two buildings has become cluttered. Map evidence shows that there were other offices within proximity to 2 McNay Street. The current adjacent new nursery building, 2a McNay Street, was only built in 2008 on the site of a carpark for the Railway Museum, which did have offices on it until at least 1900.

Lime Cells - Grade II Listed

In private ownership. Relatively little is known about the Lime Cells. Their date of construction most likely to be 1840s and map evidence suggests that they were no longer in use by 1900.

Wagons would enter through the north side and tip their lime through trapdoors into separate cells. Carts from the town could then collect lime from the ground floor. The Lime Cells are largely brick with a timber upper level on the side facing the street. The ground floor at street level comprises of the four, low timber double doors inside stone columns, each leading to one of the four separate lime cells. The Lime Cells have suffered badly from dereliction and graffiti.

The Lime Cells are privately owned and as such are not part of the Head of Steam site. This planning permission has now lapsed.

1861 Stockton & Darlington Engine Shed, Whessoe Road

Owned by Network Rail and partly let to a tenant. The four-track Whessoe Road engine shed was built by the Stockton & Darlington Railway in 1861.

Designed by William Peachey, it was one of the S&DR's last developments before the company was absorbed by the North Eastern Railway in 1863. The shed went on to serve as a wagon repair and paint shop, before falling into disuse after the railway works closed in 1965 and steam engines were withdrawn. British Rail, then Network Rail, leased the site around it to Whessoe Road Salvage in the late 20th Century.

It has been assessed for listing as it was thought to be an early surviving engine shed.

It is in a poor state of repair at present and it will require major roof repairs and other remedial work and new services.

Skerne Bridge - Scheduled Monument

The Skerne Railway bridge sits outside of the core DRHQ but is the oldest structure on the North Road site and was part of the original railway line from its inception. Built in 1825 by Ignatius Bonomi it was an integral and recognisable aspect of the S&DR's first line in the same year. Its importance as the oldest railway bridge still in use has been reflected in its depiction on the £5 note through the 1990s.

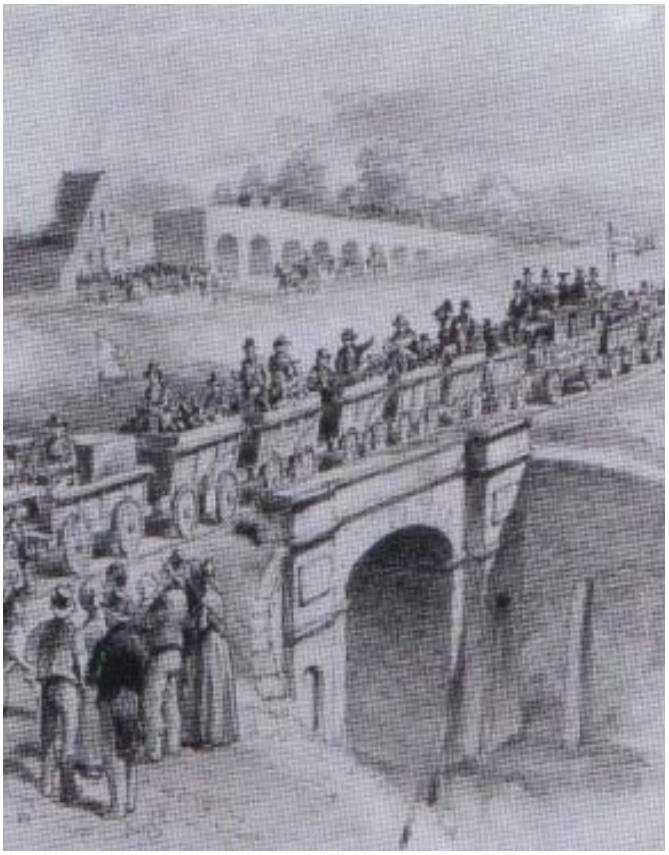
To the south is a low, flat bridge from bank to bank that allows the Skerne Bridge to be seen from close above the River Skerne but is currently gated. However, the self-seeded trees on the railway embankment mean that it is not possible at present to view the bridge from North Road Station site and vice-versa.

Viaduct over North Road - Grade II Listed

The Railway viaduct is just outside of the designated DRHQ but will be significant when designing the new access steps and ramp to the site.

It was built in 1856 for the railway to be carried over the road, where originally there was a level crossing. The original cast iron girders and decorative spandrels were replaced by the present plate girders when the line was widened to accommodate four tracks. Stone abutments with decorative piers remain, as do flank walls stretching both south and north on both sides.

The stone piers and iron sides of the girder bridge are visible from North Road Station and the Goods Shed. and the embankment above the retaining wall is a site for a feature with signage to advertise the DRHQ.



2.4 Site Analysis

Transport and Access

Car Parks and Coaches

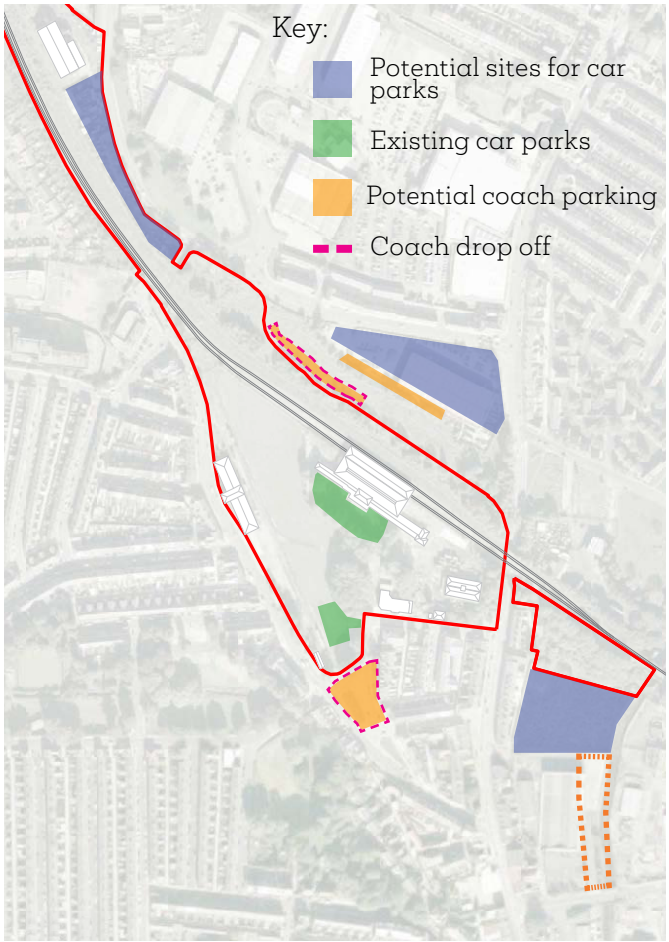
Vehicular access to the site is via the A167 North Road and the local residential street network. The museum currently offers a limited amount of off-road parking (including disabled parking) in two parking areas which will not meet the needs of a growing visitor attraction. There is also no existing formal provision for coach drop off/parking with potential safety issues for turning coaches at the junction of Station Road and North Road.

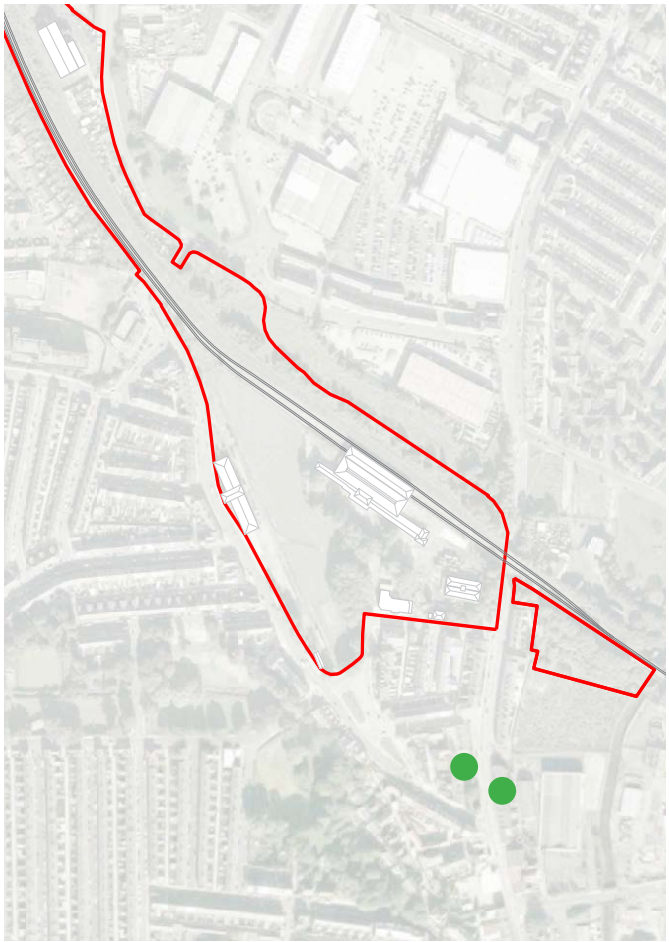
Suitable sites for new car parks away from the historic assets are limited, require land and present issues in terms of providing pedestrian access. There is a need to ensure that enough car parking is provided to support the attraction and so that access and parking for residents in the local area is not impacted upon by the growth in visitor numbers.

Buses

The North Road corridor is a high frequency bus corridor that already provides a good level of service. However, the bus stops nearest the attraction are remote from the entrance. (● Green shown below)

There are no formal pedestrian crossing facilities across North Road close to the site and station for access to/from inbound bus services and the Skerne Bridge.





Cycle and Pedestrian

Currently the main pedestrian access to the station is via the stepped walkway to the station platforms accessed from Northgate. There is no level access.

This entrance point is suggested as the new entrance to the DHRQ. Step-free access is available along McNay Street and Station Road. Visibility of this route is currently poor, with the site obscured from view by trees, bushes and buildings.

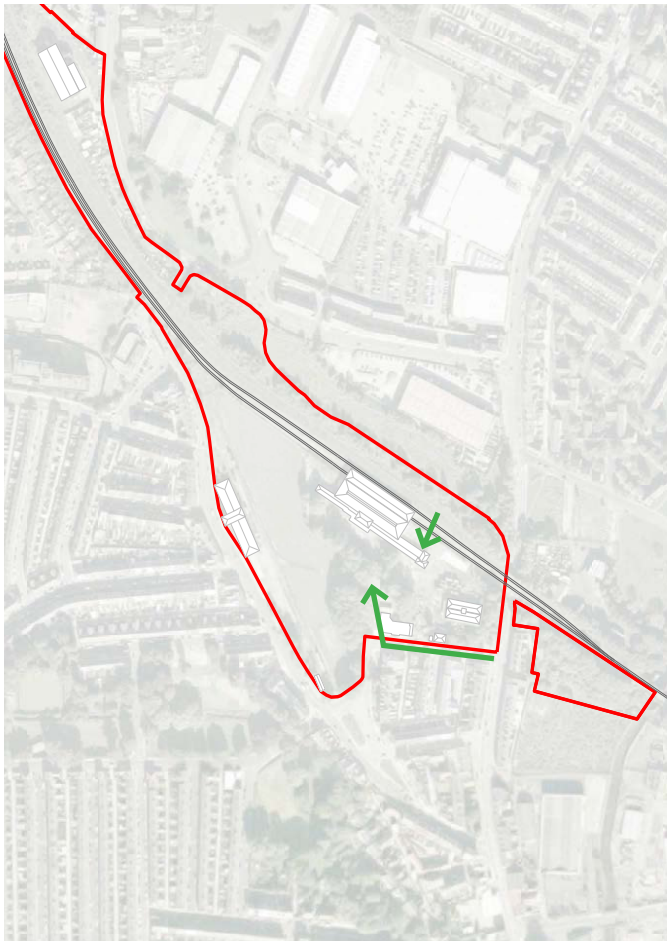
The cycle network in Darlington is reasonably extensive. However, in the area of the site the provision is relatively poor with no direct connection to the local cycle network and limited facilities for cyclists e.g. cycle parking. However, the proposed S&DR walking and cycling route offers an opportunity to develop this.

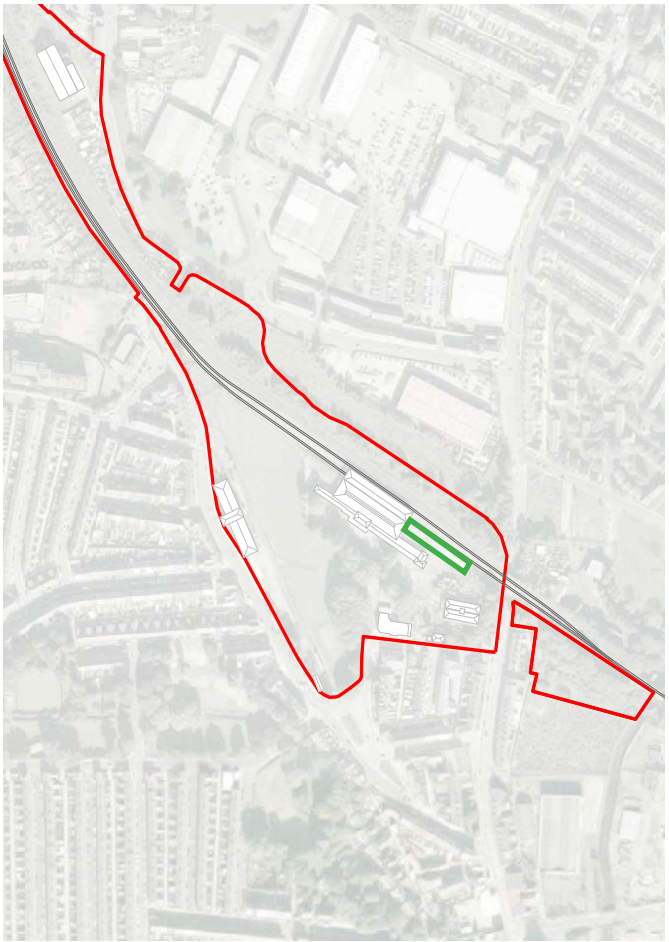
Rail

North Road Station is located on the Bishop Line and provides hourly services Monday to Saturday on a regular clock-face timetable. The number of visitors is currently constrained by the service frequency.

The passenger offer at the unstaffed station is minimal with a small passenger waiting shelter and there is a ticket machine. A Harrington hump has been installed to provide level boarding for passengers but it remains difficult for customers with mobility issues to gain access to the station as the approach is stepped.

The lack of direct access from the platform to the museum is also an issue for those wishing to access the musuem site.





3.0 The Masterplan

The masterplan strategy is informed by the aspirations and collaboration with the commissioners TVCA and DBC, the views and ideas of the many stakeholder organisations that were engaged in the masterplanning process through interviews and workshops, by the Initial Narrative & Interpretation Plan for the 26 miles of Heritage Action Zone, and by our research into all aspects of the site.

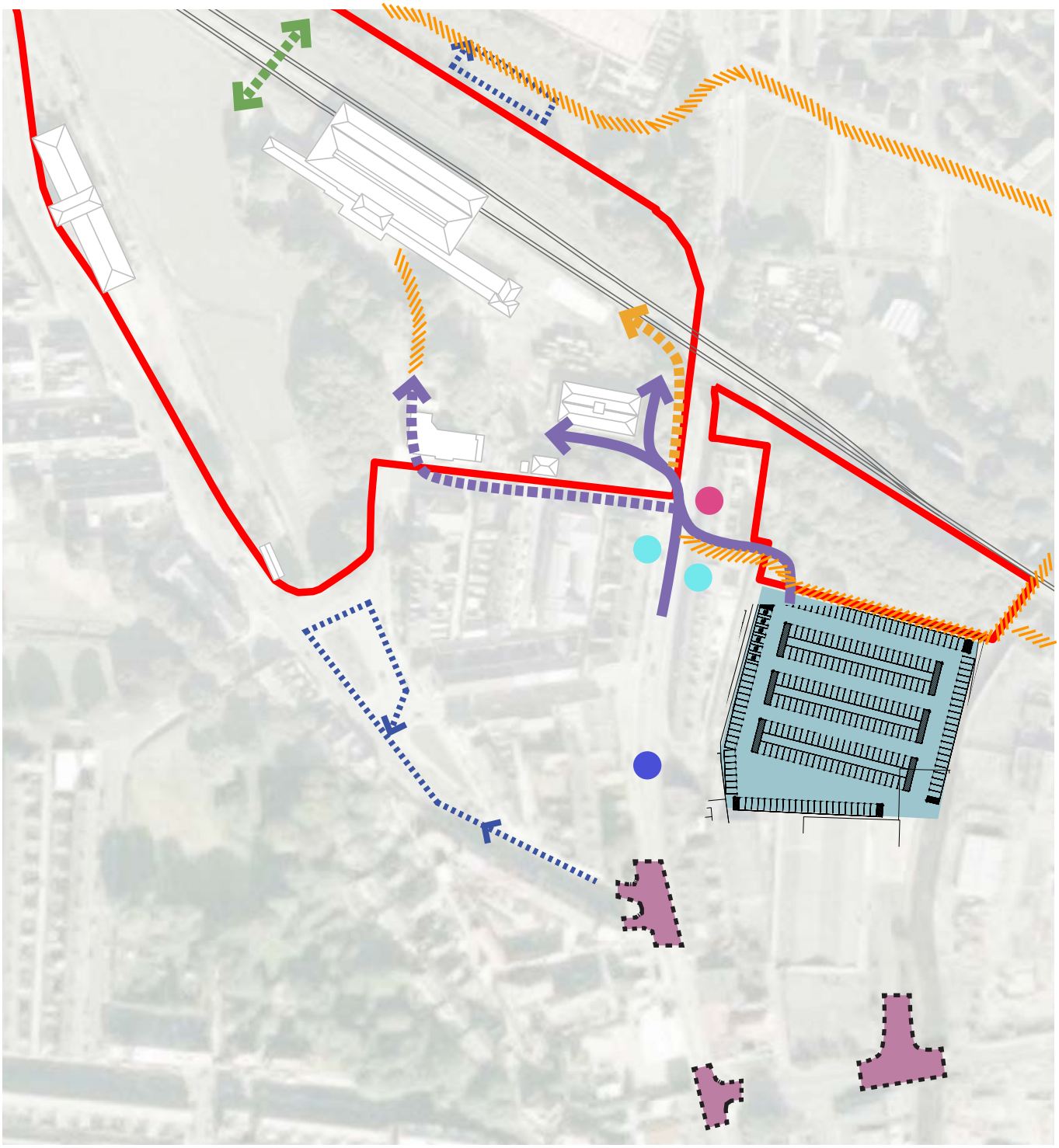
Three main options for the masterplan were considered and evaluated. All three options shared a set of physical proposals but varied in terms of approach and ambition: Head of Steam 2025 was focused on heritage assets and 2025 celebrations; Head of Steam Reimagined on celebrating, preserving and enhancing of the unique skills and knowledge available in Darlington and the region, and Darlington Reimagined embraced both heritage assets and the unique social capital and extended the ambition further to reposition Darlington as the place of innovation and demonstration for renewable energy and transport of the future.

The preferred masterplan embraces some aspects of each of these options and anticipates that the ambitions expressed by the Vision require a phased delivery.

The proposal addresses the challenges of creating better connections and views into the site, suggests new or enhanced uses for the restored heritage buildings, provides a bespoke outdoor play attraction and an outdoor events space, identifies potential sites and uses for new buildings and restores the historic views and connectivity between the buildings.

The masterplan also proposes future proofing the site by generating renewable energy on site.

3.1 Site Strategy



Key:

- Proposed bus stop
- Proposed toucan crossing
- Existing bus stop
- Preferred Routed
- Stepped pedestrian route
- Step free pedestrian route
- Improved access to North Road Station
- Proposed coach drop off
- Review junctions
- Car park

3.2 Access

Standard Days

Utilising train services to North Road Station offers the most integrated and sustainable way to handle visitors coming via Darlington Station or from origins along the Bishop Auckland line. The passenger offer at North Road Station will be addressed as part of the masterplan proposals. In addition, the regeneration scheme for Darlington Station will enable a further increase in services on the Bishop Line to 2 trains per hour from 2025, subject to the franchise renewal process. Directing visitors to use Bishop Line rail services will necessitate good quality interchange and some initial audience engagement at Darlington Station.

To improve pedestrian and cycle access it is proposed to close the junction of McNay Street/North Road to motorised traffic to provide an enhanced arrival space. This will include the provision of high-quality bus stops at the end of McNay Street, with waiting facilities and real time information as well as a toucan crossing over North Road. Several wider cycle connections have been identified and are being taken forward now, tying in with the ambitions for a multi-user path along the 26 miles of the Stockton and Darlington Rail Line.

There is also existing high ferequency bus services to town centre on North Gate.

In addition to the toucan crossing, it is proposed that the masterplan also includes a cycle hub that can serve both the attraction and the existing North Road station. As a minimum this will provide secure cycle parking and secure lockers for cycling gear. The offer could be enhanced by the provision of electric/traditional cycle hire facilities and repair facilities. The enhancements will also provide good quality access via the path to the Skerne Bridge to the preferred car park option to the east of Northgate. This car park will provide in the region of at least 250 parking spaces and be complemented by existing car parking within the town centre. Car park management strategies will be deployed to manage short and long-term use and to avoid problems with parking incursion in residential areas, traffic/parking restrictions will be required potentially extending the existing residential parking permit scheme.

Disabled parking will be accommodated within the main car park as well as close to the attraction, off Station Road in line local planning policy. EVCP will be installed. Options for photovoltaics will be investigated. Coach parking will continue to use Chestnut Street. The coach drop offs will be provided at Bonomi Way lay-bys and Station Road/Hopetown Lane
A signage strategy will be required to complement the proposals that will direct vehicular traffic to the site via main routes.

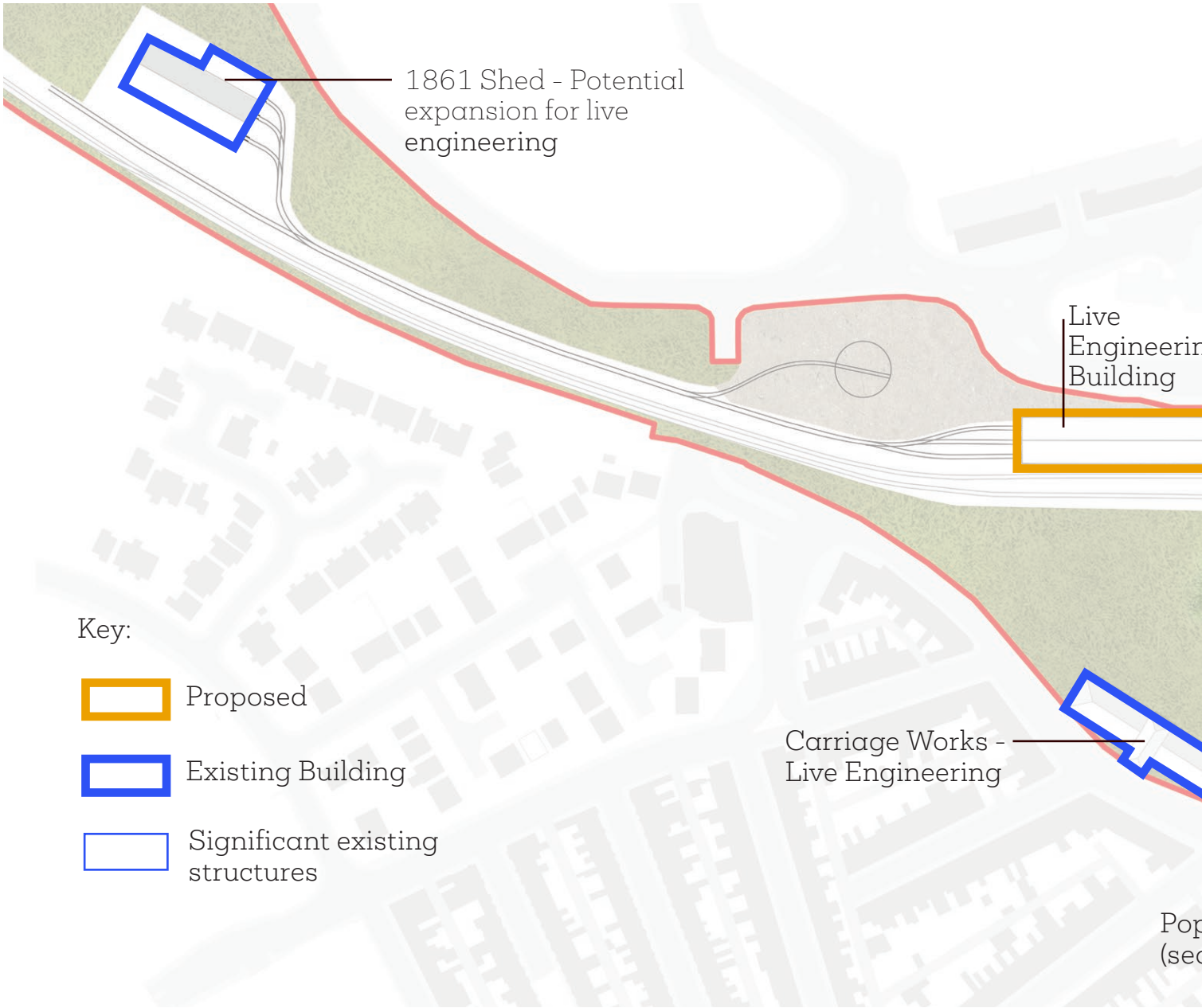
Event Days

On event days it is proposed that the potential for additional rail services or coaches or carriages on the Bishop Line to the serve the attraction is investigated.

In addition, a temporary park and ride is proposed. Potential sites include the College, Arena, Rugby Stadium and Feethams Multi Storey Car Park in the town centre. Dedicated shuttle bus services will need to be provided between the temporary car parking and the attraction. These shuttle buses will utilise coach/bus drop off/pick up lay-bys to be provided on Bonomi Way. The car park at the front of Head of Steam will be reserved for disabled users, event staff and pre-booked coaches.

Temporary strategic signing for event car parking will need to be deployed on event days drawing upon experiences from other large events in Darlington. Darlington Borough Council may also want to consider investing in several electronic/VMS signs for the town.

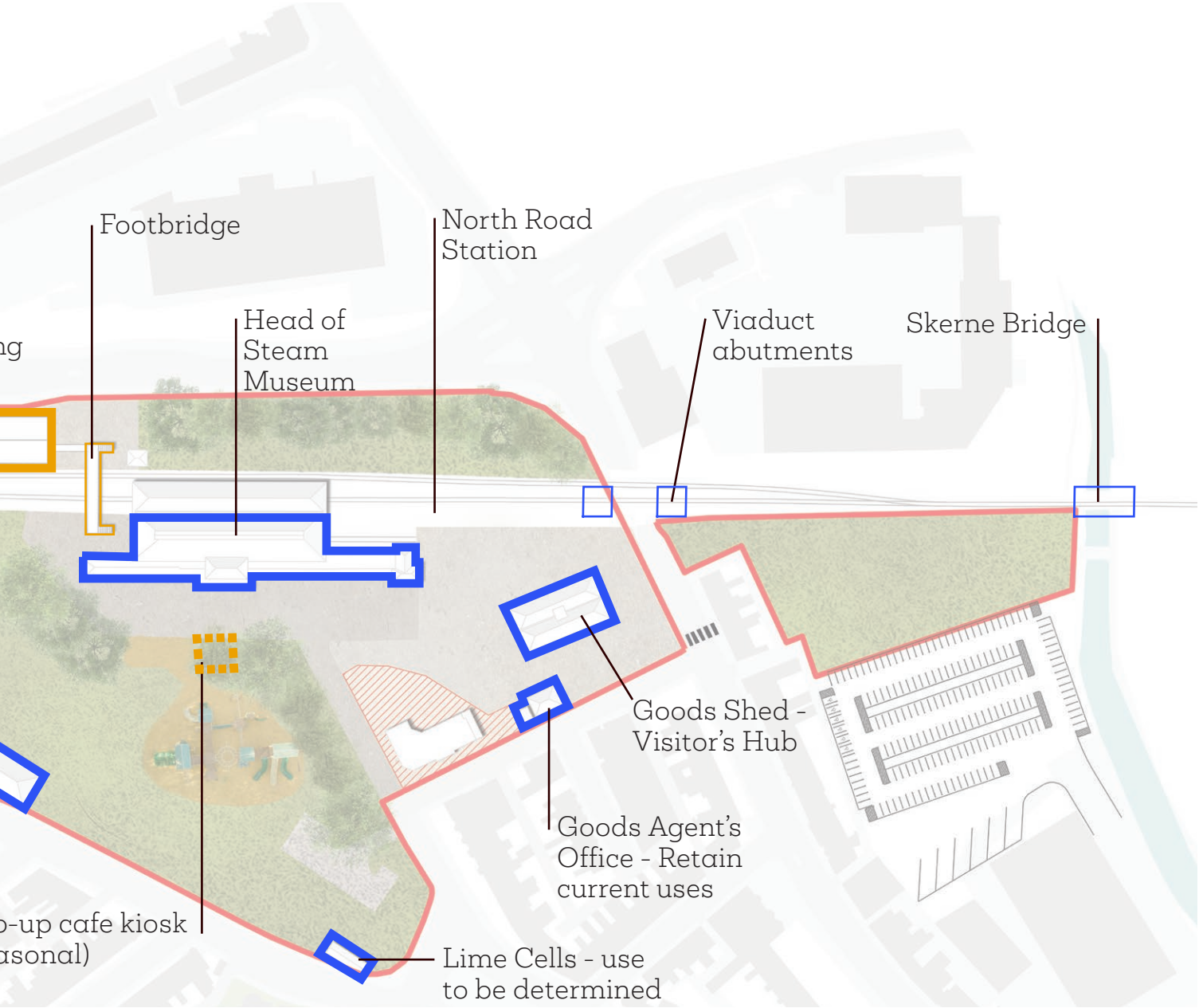
3.3 Key Buildings



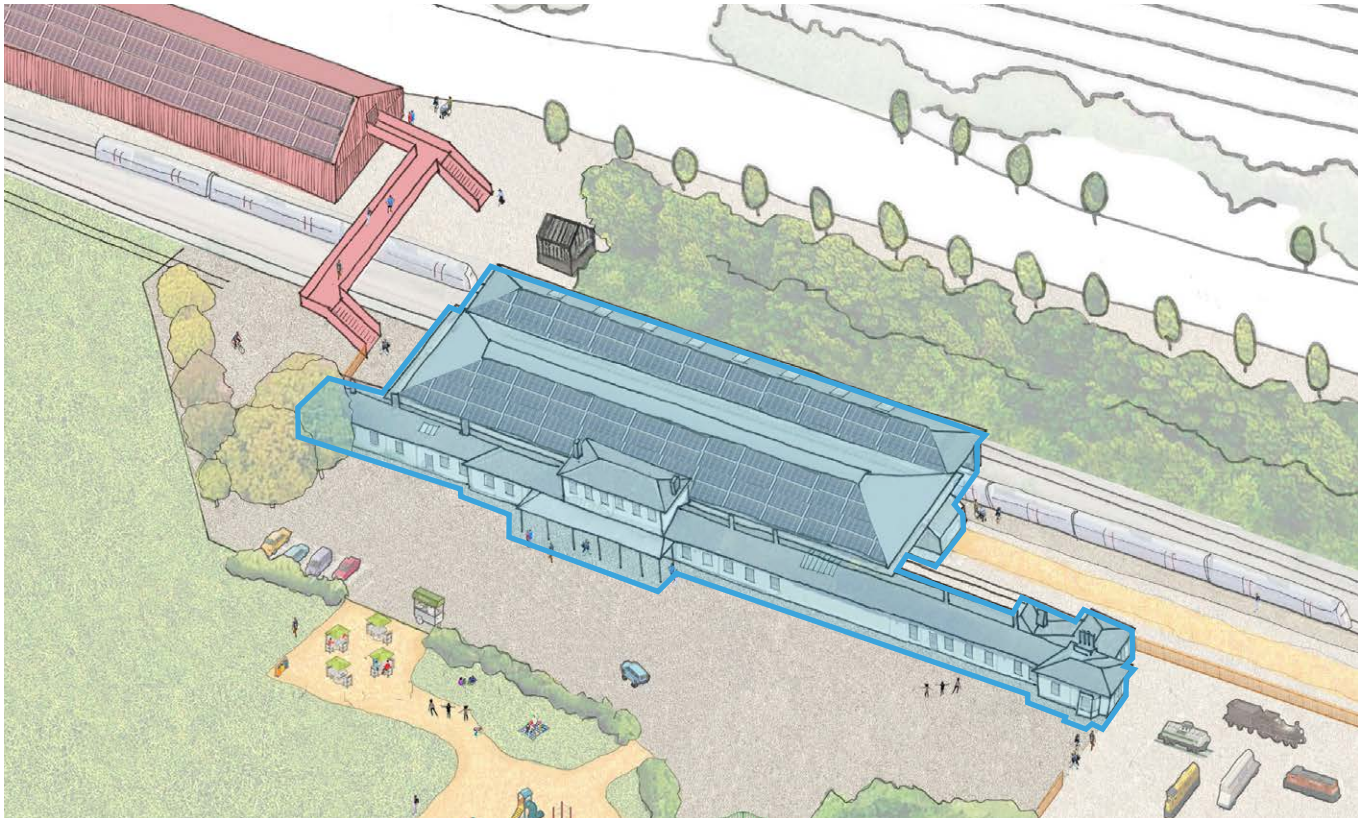
The proposals for the use, restoration and provision of additional buildings on site have been informed by the aspiration of the vision, current uses, heritage and archaeology considerations, funding implications, and above all by the Interpretation Strategy.

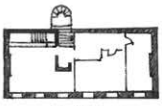
The location of the proposed new buildings, the cycle hub and the Live Engineering, have been carefully chosen to avoid impacting on significant views of heritage buildings and archaeology and to maximise convenience for the users and visitors to each facility.

The use of Carr Mills to the west of the site and of the Current Sure Start adjacent to Goods Agents office have also been considered but are not needed for DRHQ.

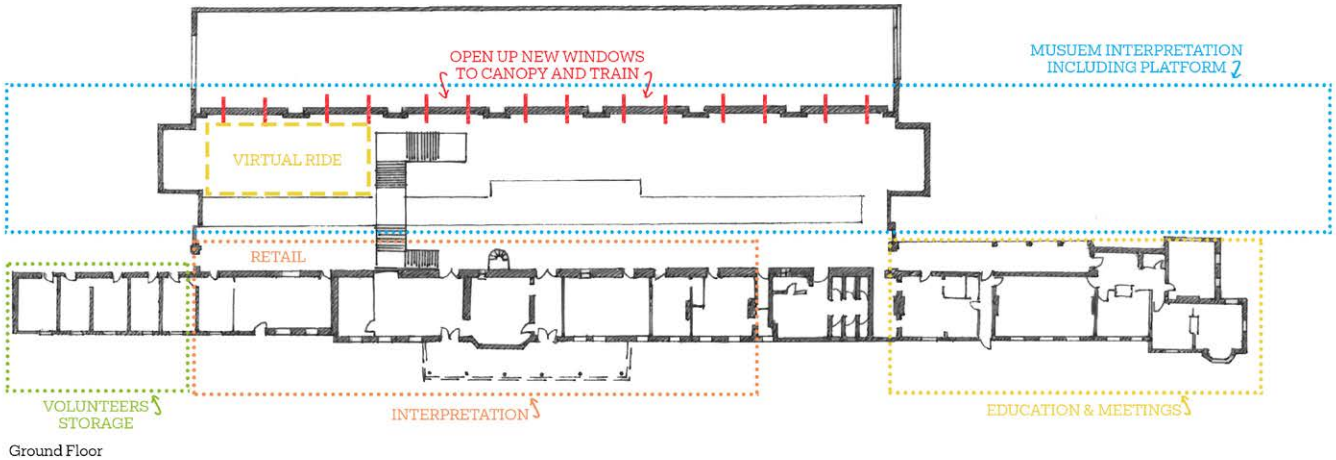


Head of Steam Museum





First Floor



Ground Floor

Gross Internal Area (excluding basement): 1988m^2

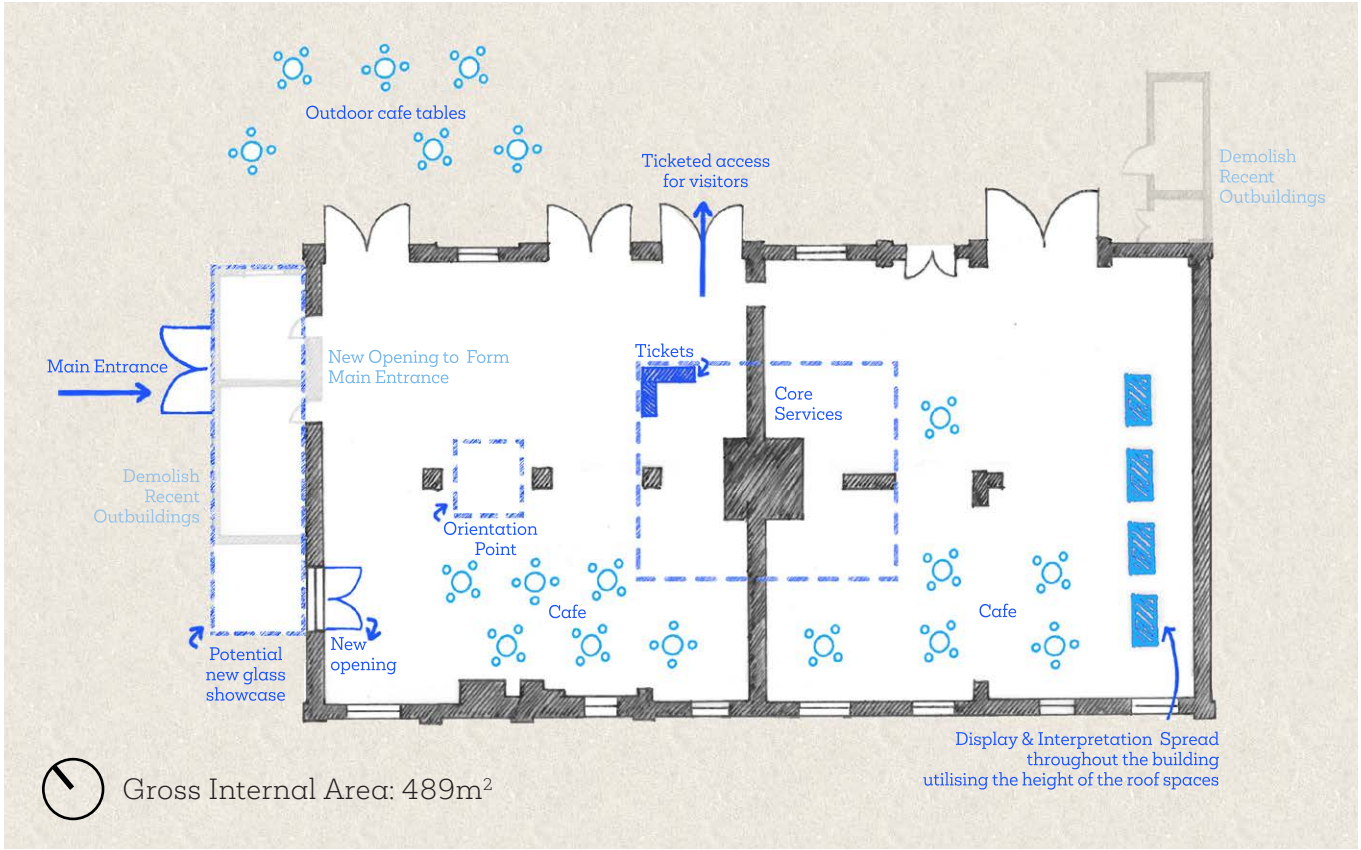
The building is owned by Network Rail and on a 200 year lease to Darlington Borough Council.
The North Road station building in which the museum is housed is probably the most complete surviving station of the time. The Italianate façade is austere and built before the High Victorian house style was established in railway architecture.

Many interior furnishings and features at North Road Station have been preserved and little needs to be recreated or reconstructed. The period atmosphere of the train shed has also been retained, and it still reads as a station interior.

The building will however require a full fabric and services upgrade and removal of remaining asbestos. Special attention needs to be paid to upgrading the appearance of the block wall separating the Museum from the listed Canopy, an all-timber first generation' station roofs in existence, on the north side to enhance the passenger experience. The possibility of opening up visual connections between the platform and the Museum should be explored.

The building will be restored and reconfigured internally to further enhance the feel and look of a station and provide the primary visitor offer through an immersive and interactive historic narrative environment.
Experience Rides also proposed envisaged as a fully immersive media environment within a 'black box' contained at the west end of the building for 30-person capacity with a separate entrance and ticket price.
The available archival material, particularly the Ken Hoole and North Eastern Railway Association collections, will be retained as the base of a centre for research scholarship and conservation in action.
The current café will be relocated to the Goods Shed offering an opportunity to improve the educational facilities especially for hosting school visits, enhanced meeting rooms and public toilets to make better use of the small rooms accessible directly from the south elevation. An option for PV installation can be considered on the internal south facing section of the roof of the building. Alternative sites should be considered to provide renewable energy.

The Goods Shed



Gross Internal Area: 489m²

The building is owned by Darlington Borough Council and currently let out to Darlington Railway Preservation Society (DRPS) who will need to be relocated on site.

Once refurbished and its clock tower restored the Goods Shed will become a landmark for the whole site visible also from North Highgate and from the train. It is proposed to lead the visitors from the car park and bus stops up new steps, past the south side of Goods Shed into the new main entrance into the building. Current level access from station road will also be retained.

The Goods Shed will be an orientation point for all visitors to the site and the HAZ 26-mile trail. It will also be a hub for visitor facilities and services such as reception desks, ticket sales, cloakrooms, wc's, shop and café.

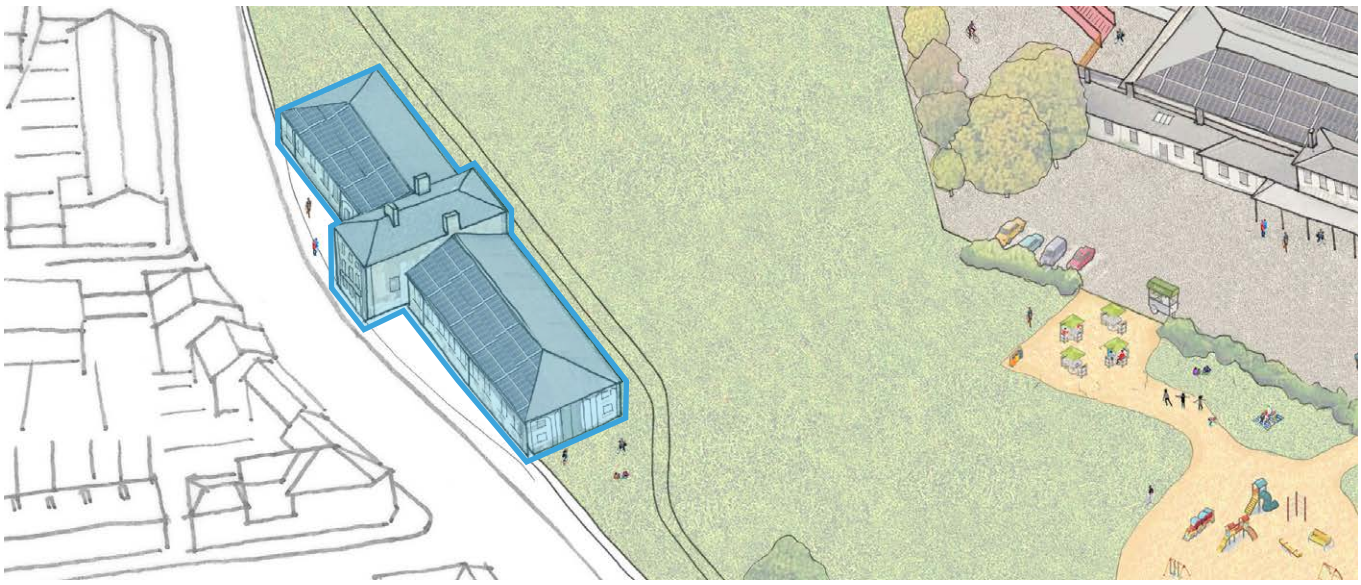
There will be room for interpretation and temporary displays. Fit out and crockery - as well as food packaging - can all be branded to tell the story.

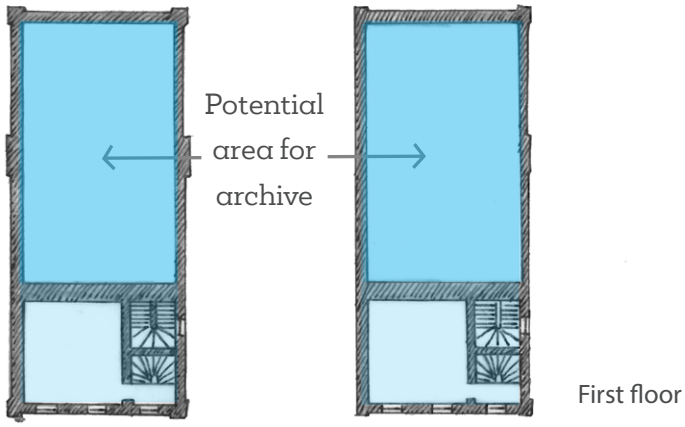
Consideration should also be given to provision of storage for buggies, and storage for seasonal outdoor furniture.

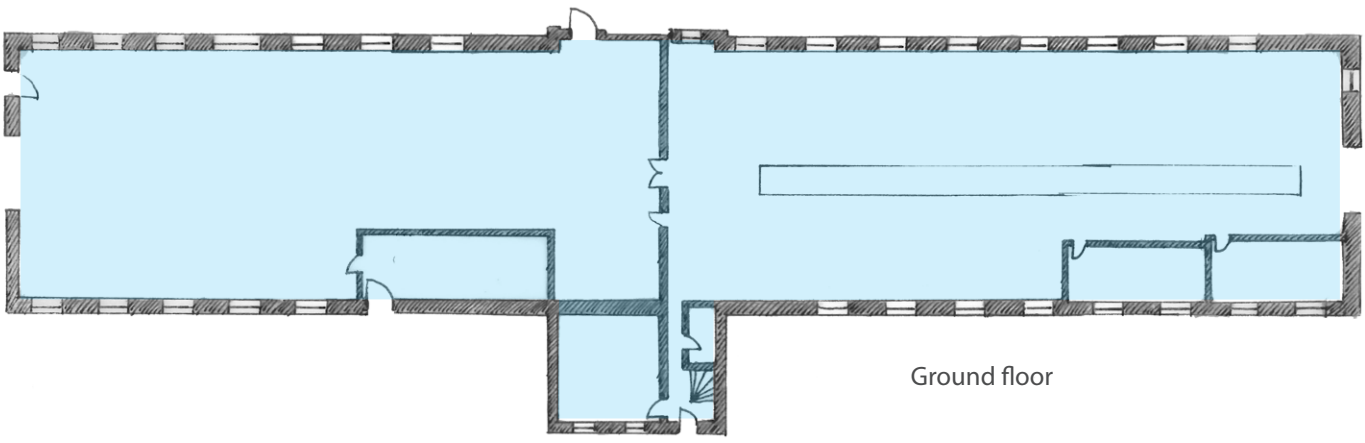
In terms of desirable interventions, it would enhance the visual connection between the building and the site if recent brick outbuildings to the west elevation were removed and replaced with a section of glazing to the gable to reinforce the visual connection with the yard. Furthermore, a small opening in the east elevation would offer a hitherto unseen visual connection to Skerne Bridge and the railway.

A PV installation icould be considered on the south facing internal roof face. Such bold interventions in the Grade II* Listed building needs to be considered in the context of the numerous alterations that have been inflicted on the building over the years and the benefits to visitor experience and contribution to carbon reduction agendas.

Carriage Works Live Engineering







Carriage Works is owned by Darlington Borough Council and was recently refurbished with works to external fabric.

Carriage Works is currently home to North Eastern Locomotive Preservation Group (NELPG) and A1 Steam Locomotive Trust (A1SLT). Both organisations are limited in their activities by the restricted headroom and lack of connection to live track to enable transfer of steam locomotives onto main line. The masterplan therefore suggests a purpose-built facility for one or both organizations.

It is proposed that through a partnership between TVCA, DBC and prominent engineering companies in the region such as Hitachi and Cleveland Bridge, the Teesside University, CPI, TVCA and DBC and others, an Ingenuity and Demonstration Hub is established in the building to demonstrate, celebrate and promote advances in engineering, technology and energy.

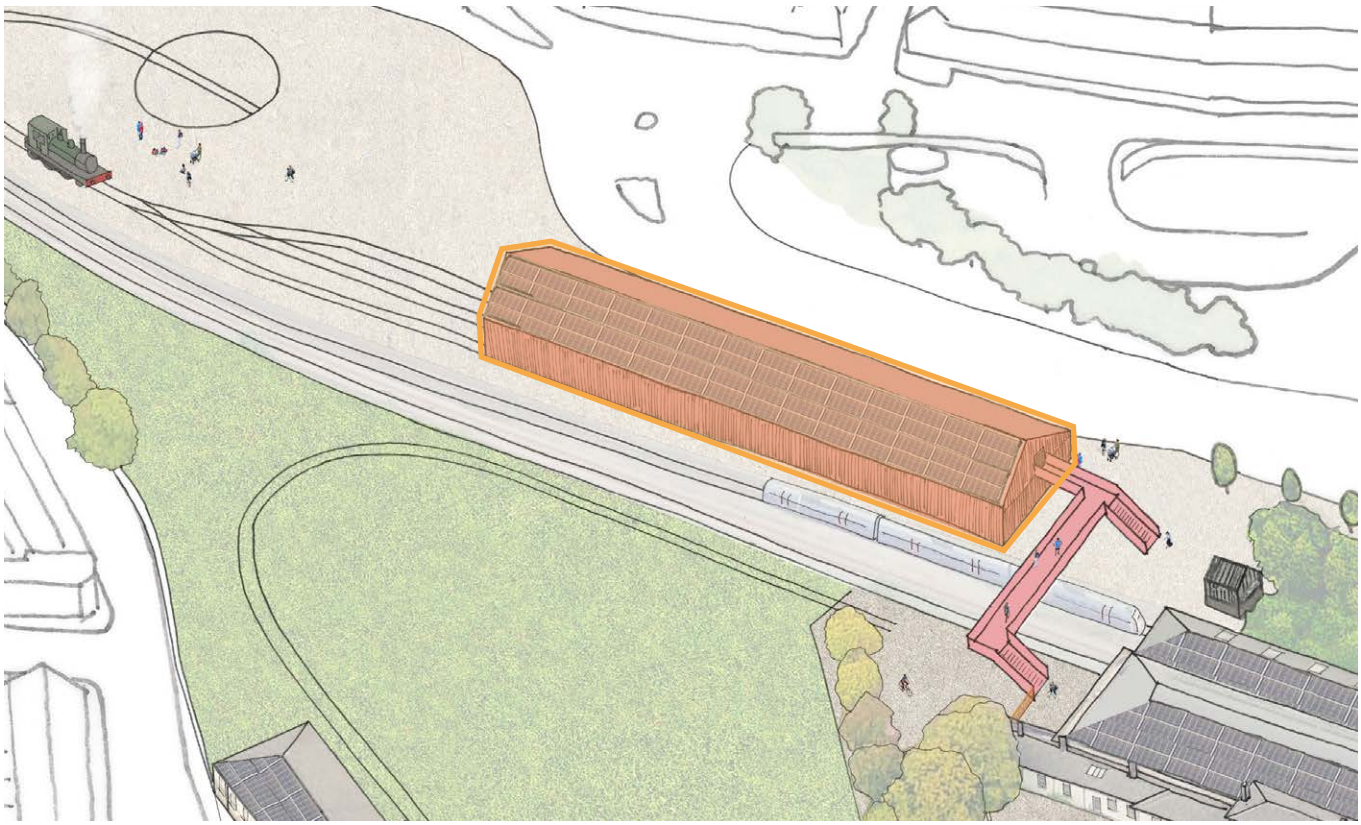
The Interpretation Plan suggests that the partners will be invited to co-curate dynamic, hands-on interactive displays on a theme that relates closely to their own activity.

The building would also be suitable as an internal theatre space to support a diverse programme of site-specific theatre, one-off events such as televised science programmes expanding and complement the outdoor play and events provision. If designed for flexibility of use this exceptional space would also be suitable for corporate hire. Ancillary facilities such as toilets and catering would also need to be considered.

Two large open spaces on upper floors could provide accommodation for all civic organisations working on various aspects of S&D Railway.

It is important in the design stage to consider improving the connection between the building and Kitching's Foundry site currently severed by rail track and changes of level.

New Shed and 1861 Shed potential expansion for Live Engineering



Example of a contemporary new-build shed in a heritage context

The A1SLT plans to build a purpose built, three-road workshop, complete with overhead cranes and educational facilities, where it can maintain and overhaul its locomotive and carriage fleet, as well as build additional locomotives. Other planned features of the new 'Darlington Locomotive Works' include a 20-metre diameter turntable and a carriage shed to house the Trust's proposed BR Mark 3 carriage charter train preferably in the 1861 Shed and the adjoining building(and are in network rail ownership. The proposed new build site is owned by DBC. The building could also accommodate NELPG that includes the 1851 Shed & New Shed and rail road in between.

The Trust believes the site can be affordably reconnected to the rail network. A key priority for the Trust is that the site is made publicly accessible on regular advertised open days. The siding if extended could be used for limited steam-hauled passenger rides, running parallel to the Bishop Auckland branch, as well as a basic test-bed for the Trusts new and overhauled locomotives. The site also has potential as an operational base should proposals to run steam hauled shuttle services between Darlington and Bishop Auckland come to fruition. The masterplan identified the best location for the new shed on the north side of the train station west of the Head of Steam Museum. This location facilitates new rail connection to the 1861 shed, advertises DRHQ with an iconic presence to Bonomi Way, avoids disrupting historic views of the station building and allows connection to the site through the proposed pedestrian bridge. Architecturally the building should be a high-quality, contemporary shed and should be considered an exemplar of an active building energy generation. A1SLT's could move to 1861 Shed only if the new build does not go ahead but activities, especially the extended training offer and events for DRHQ, will be highly restricted.

The Interpretation Plan suggests that the continued presence of A1SLT, NELPG, DRPS and other tenants offers visitors the chance to participate in real-life live heritage engineering, as well as technology and design producing contemporary steam locomotives. Live demonstrations, learning experiences and guided tours will bring audiences alongside A1's innovative rethinking of traditional skills and knowledge using cutting edge technology. This could offer learning opportunities for further education partnerships, as well as offering a unique skill sharing and employment opportunity. This in turn will be a catalyst for learning and entrepreneurship. Through a land train, footpaths, cycle track and heritage trails, it should remain fully integrated in the DRHQ offer.

Small Buildings

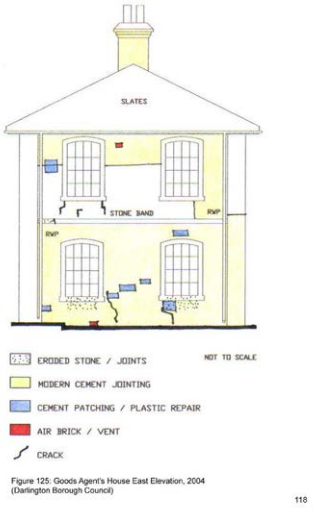


Figure 125: Goods Agent's House East Elevation, 2004 (Darlington Borough Council)

118

Figure 127: Goods Agent's House West Elevation, 2004 (Darlington Borough Council)

120

Figure 124: Goods Agent's House North Elevation, 2004 (Darlington Borough Council)

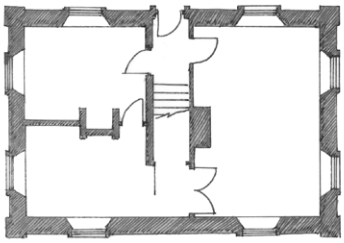
117

Goods Agents Office

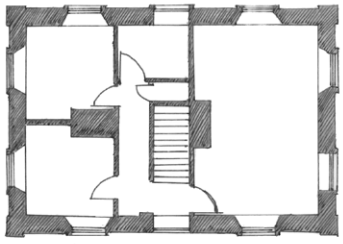
The Good's Agent's Offices are owned by Darlington Borough Council and currently let to Darlington Model Railway Club and the North Eastern Railway Association.

The building is a very good condition. The interior has lost almost all its original features and the room layout is domestic in nature making the building unsuitable for visitor uses.

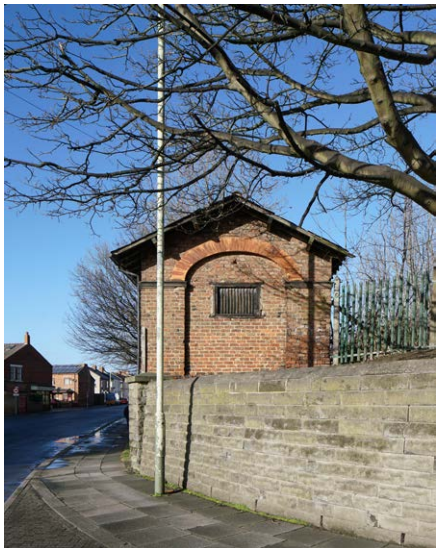
Both current tenants expressed a need for additional space. It is proposed to either retain the existing uses or facilitate alternative accommodation for one of the tenants to allow expansion for the other.



USES RETAINED



Lime Cells



The Lime Cells are currently in private ownership.

The building has suffered from vandalism and will require full refurbishment.

It is recommended that Lime Cells are purchased by DBC and used to relocate one of the existing tenants to provide them with a more public facing accommodation.

Darlington Model Railway Club would be a suitable user and would contribute to the enhancement of the visitor offer of the DRHQ.

Cycle Hub

Cycling to the site either as a destination or on a route to explore the 26-mile trail will be encouraged as part of the low carbon ethos of the project. It is therefore desirable to provide good facilities for cyclists on site and a small cycling hub is envisaged.

It is unlikely that this function can be accommodated in the existing buildings either because of other functions being prioritised or because, as is the case with Carriage Works, the space is far from other visitor facilities.

A feasibility study is required once the proposed cycling routes are agreed, to scope the provision and test available site options.

3.4 Public Spaces

Key:

1. Entrance square
2. External interpretation area and outdoor cafe space
3. Improved public realm and wheelchair car park
4. Designated play area
5. Designated events Space
6. Overspill car park (retained)

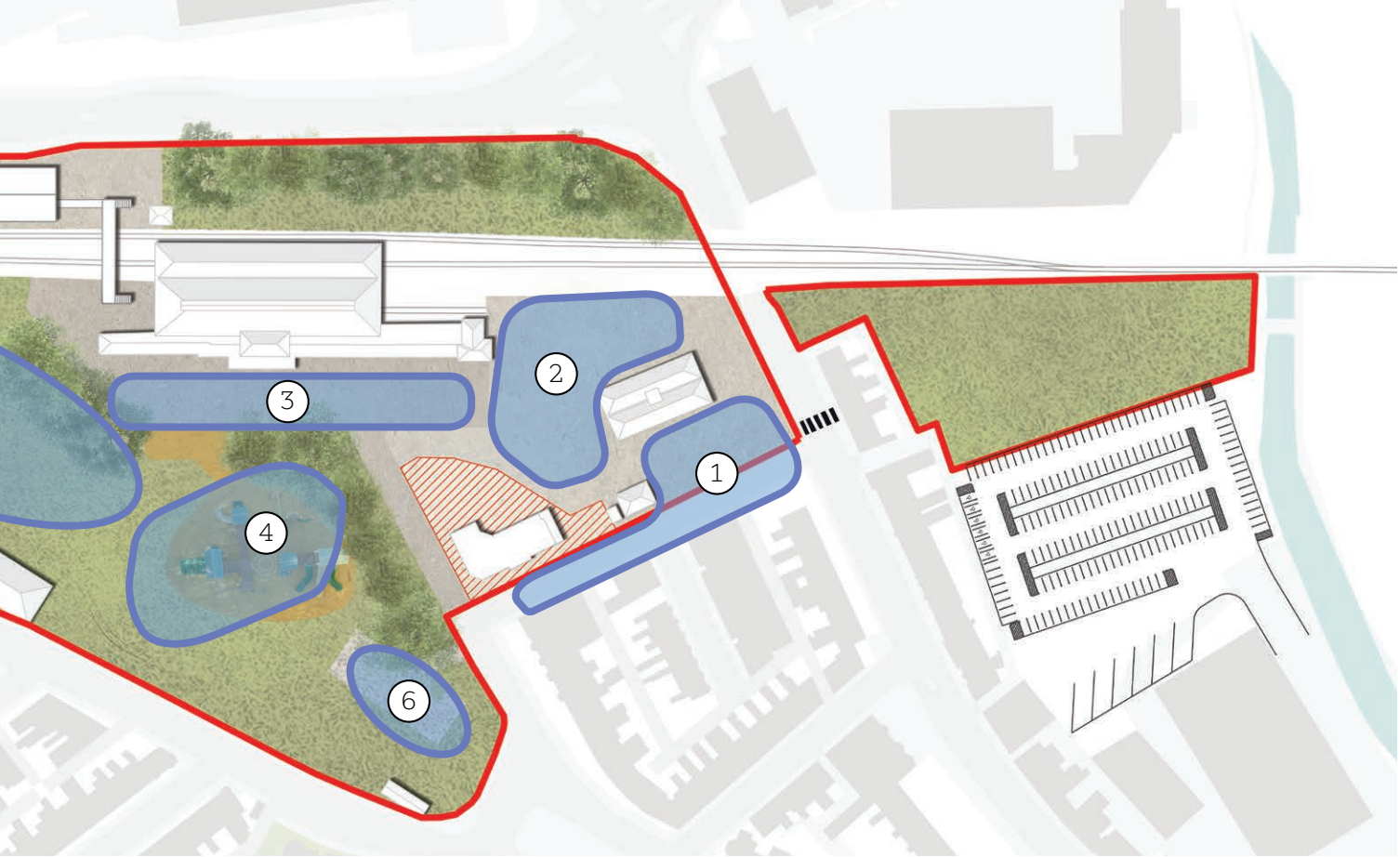
The site has a neglected appearance with many wreckages of the rail industry scattered across the Goods Shed yard and behind it and in front of the Carriage Works. Self-seeding vegetation has obstructed some of the views and visual links between the original group of buildings.
Most notably the best-preserved elevation of the Goods Shed is completely screened from view by sapling trees and shrubs. Furthermore, the views of the Station Building have been obstructed.

Equally in need of attention is the appearance of the site on arrival at the train station. The blockwork wall built to separate the platform from the Museum presents very uninviting prospect to visitors arriving by train.

The ground is likely to be contaminated throughout the site due to decades of rail engineering activities. There are also likely to be remains of archaeological interest especially in the west corner where Kitchen's Foundry used to stand.

DRHQ presents an opportunity to significantly improve all aspects of the public realm and to restore the views and the historic view links between the buildings by clearing some of the self-seeding vegetation.

There are also several focal points around existing historic elements, visual features and externally exhibited collection pieces.
During design stage attention should be paid to striking the right balance between the working, messy nature of the original site and the new, visitor-focused environment.



1 Entrance

New access point is proposed into the site off the corner High Northgate and McNay street. Generous set of steps are proposed to replace the currently overgrown bank, leading up to a new entrance square in front of the south elevation of Goods Shed. The square will provide appropriate setting for the best-preserved elevation of the Goods Shed which, with its restored clock tower, will become the signpost for the DRHQ.

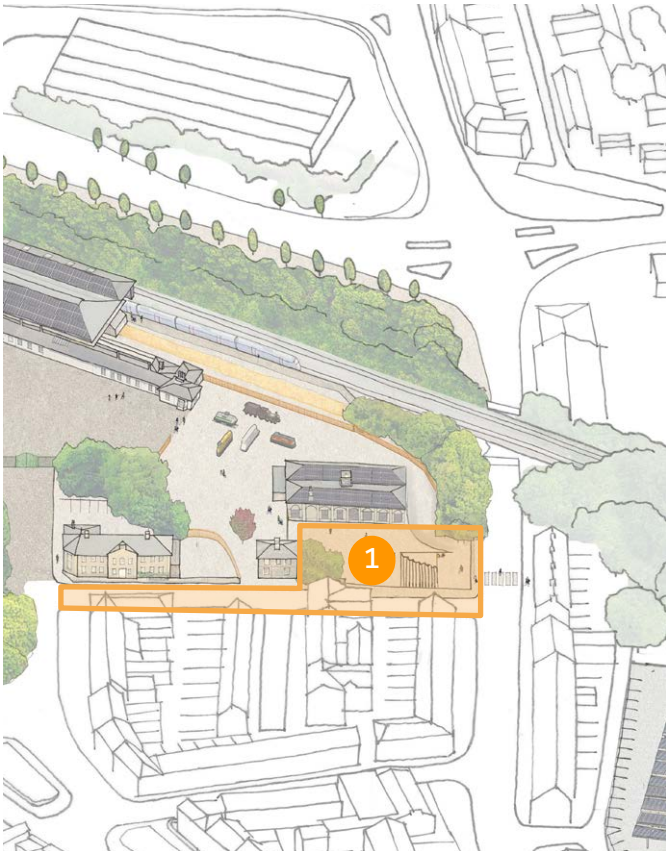
This is a natural arrival point from the proposed car park area and bus stops. The main entrance will be through the building, but gated access will be provided to the yard directly from the entrance square to facilitate servicing, ingress for large parties and potential for a turn stall exit so visitors will not need to go through Good Shed on exit.

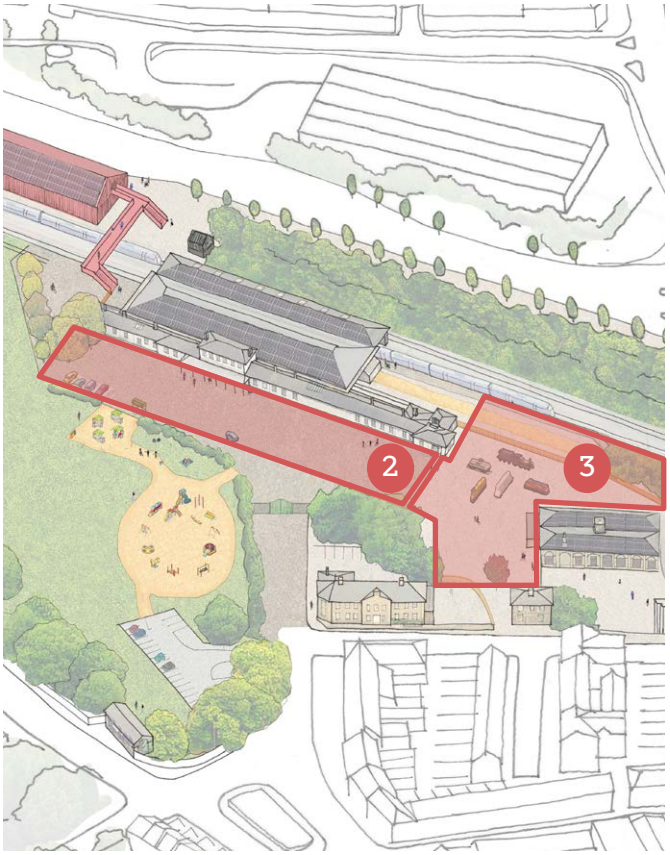
Improved ramped access will also be provided to the station as part of the works. Step free access to the site will be provided via McNay Street.

2 + 3 Yard and frontage of the Head of Steam Museum

The arrival space outside Head of Steam together with the Yard that joins the Station Building to Goods Shed will be the main external spaces for the visitors. There are great opportunities here to improve the visual impact of the site and to integrate the historic interpretation into the design. High quality material will be used throughout, and tracks should be retained. Lighting can be used to emphasize the architectural features such as chimneys on the Head of Steam Museum, the underside of the Station canopy and the clock tower on the Goods Shed. The external area of the Sure Start facility will be rationalised to provide a better demarcation with the Yard and to offer some privacy to the users of that building from the visitors.

Improved fencing and directly access from the platform should be agreed with the operator. These spaces should be traffic free, but some wheelchair parking will be retained. In good weather café tables can be provided to cater for the increased visitor numbers. The space can also be used for staging events.





4 + 5 + 6 Play and Events

The area immediate to the West of Station Road is designated for bespoke play area. The overspill car park is to be retained. The existing trees and vegetation need to be redesigned to open the view of the heritage buildings whilst providing some screening from the play area. It would be ideal for the play area to be overlooked by the café but this would conflict with safeguarding the viewing lines between the key buildings. It is suggested, therefore, that in peak times a pop-up café kiosk is provide with outside tables and chairs adjacent to the play area.

The area west of the play is designated for external events. The furthest corner of the triangle was the site of the Kitching's Foundry and is likely to contain some archaeology and plenty of contamination. Possible remediation method may include significant import of new topsoil up to a meter in height. This offers opportunity to create a shallow east facing amphitheatre from which to view the events. A small amount of infrastructure for the events is proposed in the form of electrical and data supplies.

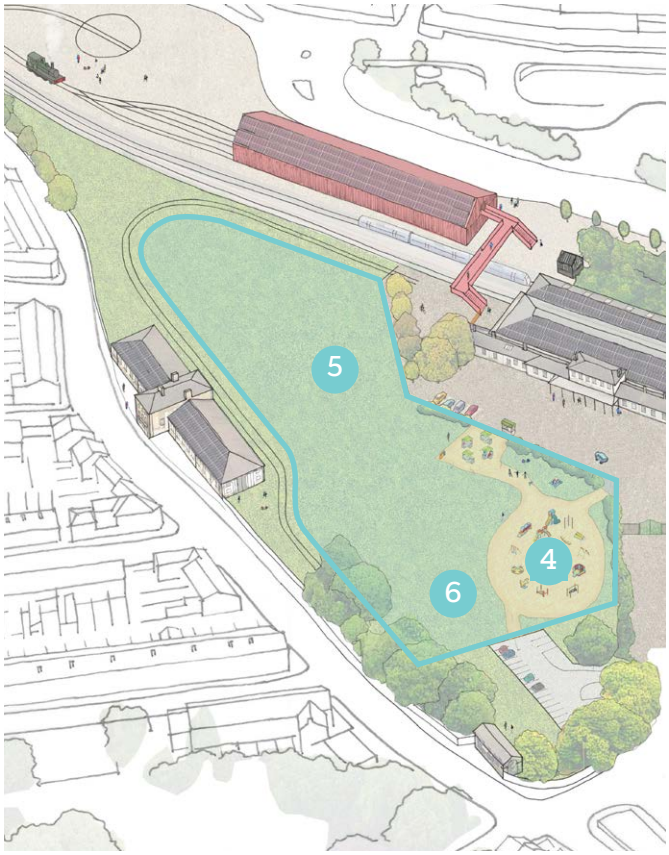
7 Aspirational Bridge

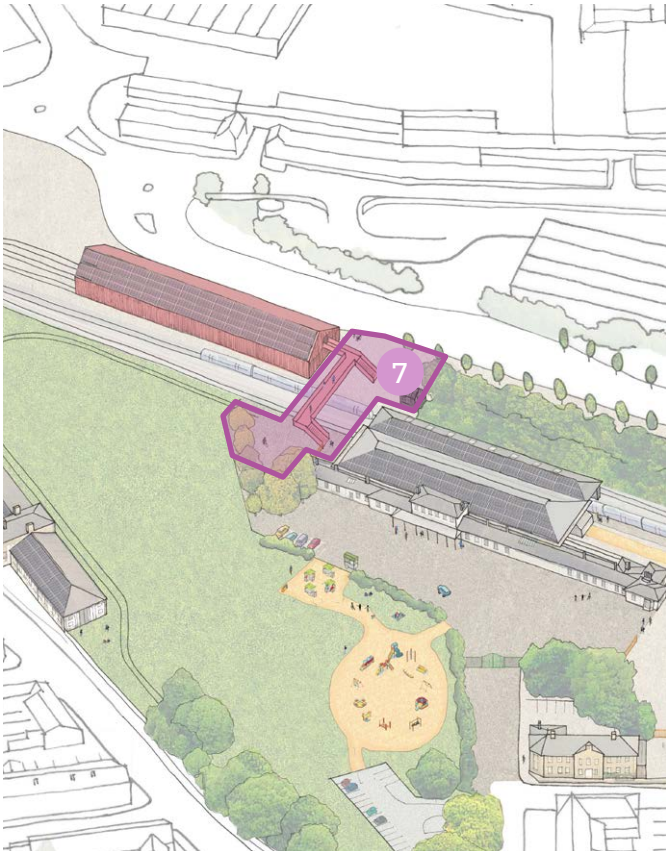
The bridge will be a strategic new connection across the rail tracks and will also allow Live Engineering to be better integrated with the visitor offer on the main site.

The design of the bridge will need to be carefully considered regarding its proximity to the west gable of the North Road Station and its visual impact kept to a minimum. It will have to be accessible by lift and designed to network rail standards.

Interpretation can be integrated into the landing areas of the stairs and lifts and viewing balconies provided off the bridge to facilitate special viewing of trains and steam trains and a photographic opportunity for train enthusiasts.

Public use of the bridge outside opening times of DRHQ should be considered and the impact on security of the site assessed.

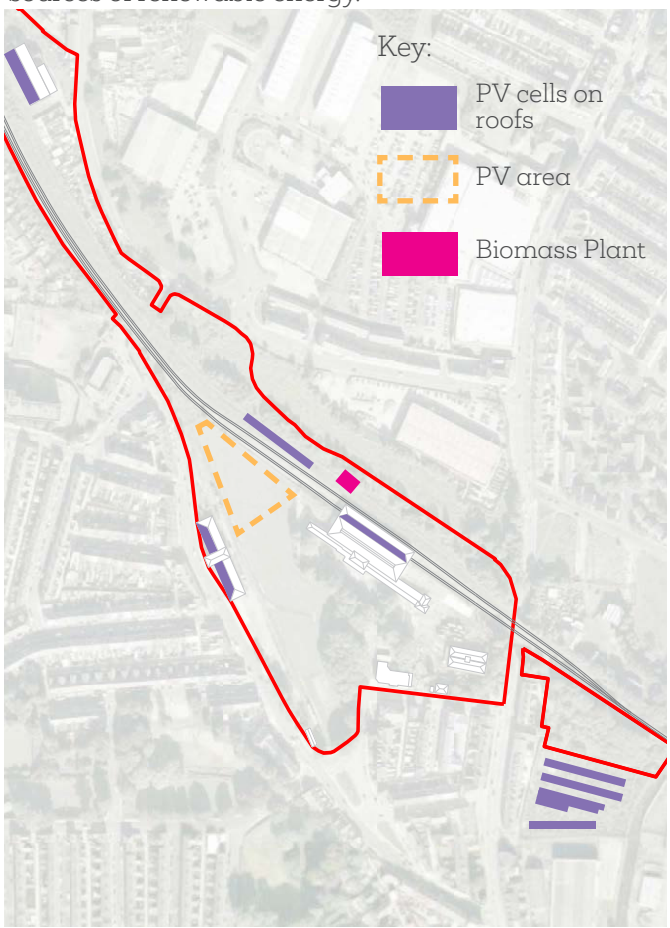




3.5 Site wide Strategies

Energy

All new developments need to consider being net zero for carbon emissions in their design, development and operation. The DRHQ is ideally placed to lead this transformation in energy and transport, just as the innovations that happened on the site and the Stockton and Darlington Railway 200 years ago transformed energy and transport around the world. In addition, it will help future proof the site in terms of minimising its carbon emissions, reducing ongoing operational costs of facility and ability to attract visitors, as well as providing the opportunities to use the renewable energy systems as education and research tools and to involve businesses from across the region. Further feasibility study needs to be undertaken to establish viable strategy.
Biomass and PVs have been identified as potential sources of renewable energy.



Landscape

The existing character and qualities of industrial railway should be preserved and 'new layer' be added with confidence to articulate the renewal and forward looking nature of the regenerative initiative. These layers should be unified by a common 'industrial aesthetic'.
Characteristics to resonate would include the naturalistic, regenerative character of the railside vegetation, the established material aesthetic.

Opportunities should also be taken to reference the landscape pattern and grid of former uses on the site and to reinstate the former 'railway garden' which is evident within the historic plans.
Climatic resilience and sustainable drainage solutions should also be included alongside biodiversity enhancement.

Servicing

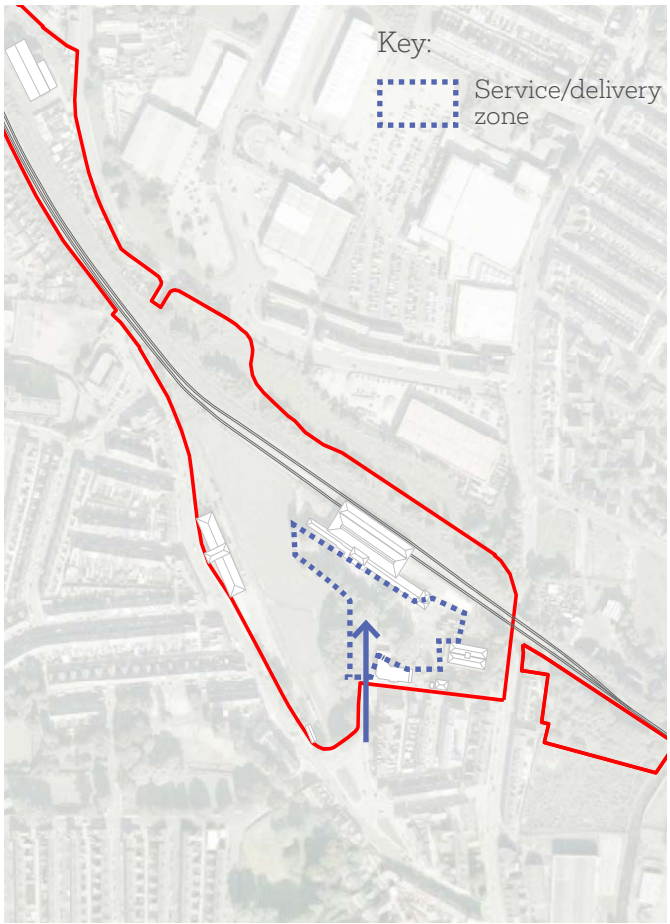
Currently all deliveries and refuse collection at the Head of Steam utilise Station Road and the main entrance of the museum at present.

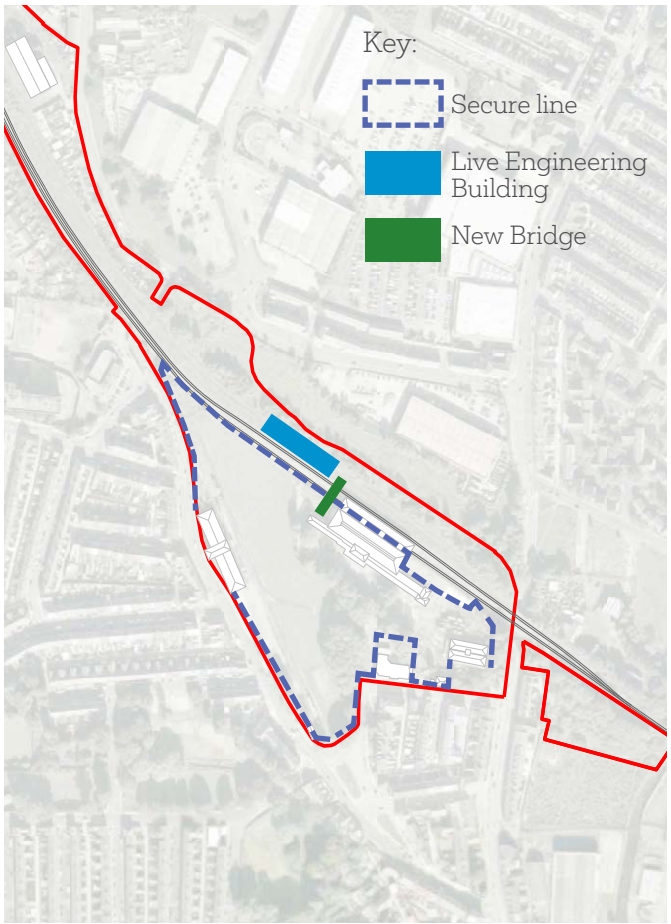
Exhibitions are also delivered through the front of the building, with locomotives entering and exiting the building via the existing roller shutters and transported on low loaders that go through the goods yard on to Station Road.

This will remain the main strategy for servicing the Darlington Railway Heritage Quarter when redeveloped as no other vehicular access options to site are available.

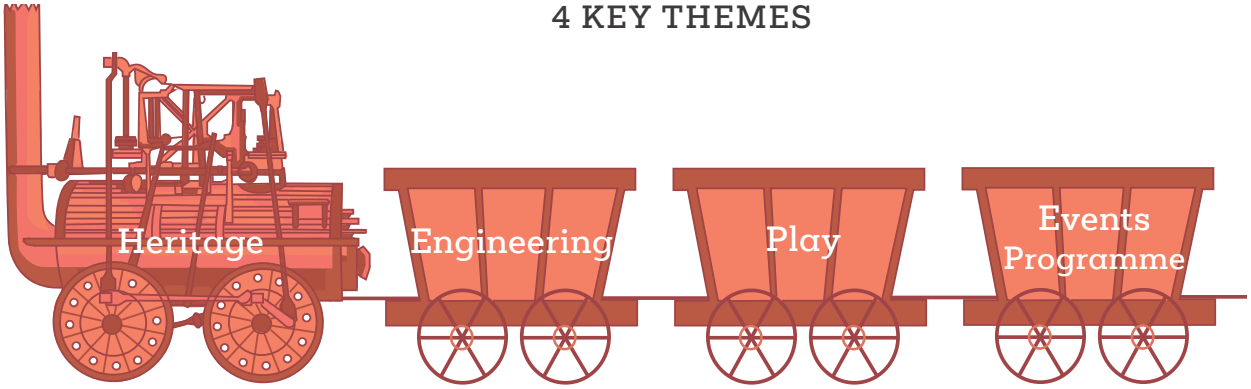
Security and pay barrier

The current inaccessibility of the existing site is exacerbated by fencing to the site boundary and within the site itself between the Head of Steam Museum and the Kitching's Foundry Field.
The removal of the fences all together would not be compatible with the need for security from vandalism. It is therefore proposed to retain the boundary fence and the main gate off Station Road and to provide a fence and a lockable gate at the proposed main entrance to the south of the Goods Shed. The ticket office for the First Day Ride and events is proposed at the Goods Shed. An arrangement for direct access to the site from the train platform is to be negotiated. The bridge is a long term aspiration subject to business case..





4 KEY THEMES



Interpretation

Skills and Learning

BIG OBJECTIVES

1
Create visitor attraction which cherishes its heritage

2
Celebrate, Protect, Retain and Develop Local Engineering Skills

3
Provide Opportunities for Bespoke Play throughout the Site

4
Programme of Events and Engagement Activities

PROJECTS

1.1 Refurbish heritage site and heritage buildings

1.2 Enhance the Heritage Interpretation and displays of the collection and the site

1.3 Provide multimodal transport infrastructure to site

1.4 Provide access to archive of S&D Railway and digitised archive across HAZ

1.5 Provide 'Virtual Experience Ride' or similar wow attraction

2.1 New accommodation for Live Engineering with visitor access

2.2 Restore the 1861 Shed

2.3 Provide live link to rail network

3.1 Provide a bespoke, unique Play Park focused on creativity and learning through engagement in Heritage and in future engineering technologies throughout the site

4.1 Events infrastructure for the site and buildings including data, power and storage

4.2 Programme for community engagement

STEPPING STONES

1. Complete Statements of Historic Significance for all Listed Buildings and the Site
2. Land Acquisition
3. Remote Sensing Survey of site
4. Site Investigation Surveys
5. Develop Brief for Virtual Experience Ride
6. Interpretation Plan including Heritage Site

1. Scope spatial requirements and associated costs for each Tenant as for AISLT
2. Set up service level agreement with Key Tenant Organisations
3. Work with Skills and Learning Partners and Site Tenants to incorporate Training across the Site
4. Undertake Business Planning for Live Engineering to Assess Viability

1. Prototype Play Projects with Key Stakeholders
2. Prepare Brief for Play
3. Commission design of Play offer

1. Prepare Brief for Learning and Skills strategy
2. Commission Audience and Community Development Strategy and Activites Programme
3. Develop Strategy for Volunteering

4.0 Delivery

4.1 Capital Cost

Cost and Procurement

The costs contained elsewhere in this report are based on the likely construction costs of a scheme of this size and nature.
The costs are current as at July 2019. A separate inflation factor has been included which uplifts the construction costs, contingencies and professional fees up to the second quarter 2023. This uplift is based on BCIS Tender Price indices which is a nationally recognised source of statistical construction
data.

The construction costs have been divided into Phase one and two cost centres as well as Stakeholder Contributions.

The construction costs assume either a traditional form of contract or two stage tender approach after
planning has been achieved and significant surveys and design work has been completed.
The costs do not allow for early involvement of a contractor and their associated preliminary/ management costs. If this is required then a separate budget needs to be included for pre-construction contractor's fees.

The construction figures may also need uplifting to factor in a full second stage negotiation process rather than a competitive tender. It is also considered that this development has potential to be divided up into smaller projects that will allow local and regional contractors to tender for the work which could provide a more economical route for some of the works to be procured. This should also allow an element of design and build on some of the elements. Careful consideration needs to be given to the linkage between the different elements along with any Health and Safety complications.

At the moment it is possible that the following areas could be split away from the main museum redevelopment:

• Carriage Works (Building 3) – could be a design and build project as this is a fairly simple building.

• Live Engineering (Building 4) – this sits on the other side of the railway line and is new build. It could be seen as a standalone projects, procured via a design and build route.

• Lime Cells (Building 6) – the building sits on its own and would be an ideal project for a local builder familiar with small sensitive refurbishment projects. Design and Build is considered not appropriate for this as its condition will be uncertain until it is "opened up".

• 1861 shed (Building 7) – this sits away from the main site and could be viewed as a separate contract. The building is relatively simple so if sufficient surveys are done on it and the information is good, then it is possible that this could be tendered as a design and build contract.

• Area 'C' and 'D' contamination removal and landscaping could be considered as a separate contract as much of it is civil engineering. However the timing of the work and how it connects to the main site need to be reviewed. For instance if it were possible to access the site early before other areas around it were started, then it could be possible to remediate the site prior to commencement on the rest of the buildings.

• Off site highways improvements - These areas could easily be separated out from the main project and dealt with by Darlington's Highways Department using their own framework contractors. This could reduce design approval times and mean that the highways department have control of when the works are programmed to be done.

• Off-site Car Park and Photovoltaics – this is a separate site, so there is no reason why this could not be tendered separately, perhaps as a design and build contract.

The figures, other than construction costs, are included as budgets. It is important that these figures are 'tested' as soon as possible to ensure they are robust and in line with the client's expectations of what is to be delivered.

4.2 Business Plan

Introduction

A key aim of the business plan was to create a business model for the project which will ensure that the project will be sustainable. This required an energetic approach to revenue development. The plan therefore, investigated opportunities to build on current activities and develop new income-generating activities, resulting in a vibrant, sustainable mixed economy model.

The process to achieving this involved looking laterally at markets, resources, partnerships and marketing. To develop this plan the consultants drew on experience across the heritage, tourism and commercial sectors and considered the development and delivery models behind some best practice comparators. It concluded that to achieve the aims and objectives of the project a more inspirational and engaging offer would be required which would appeal to heritage and non-heritage users. An approach that would overcome both intellectual and financial barriers.

The plan was developed in conjunction with a suite of documents prepared as part of the masterplan along with the interpretation strategy and audience development research undertaken for the wider Heritage Action Zone.

The business plan considered the likely appeal of a number of potential options and considered the resulting number of visitors that would be attracted by these. It considered the resources necessary to deliver the new attraction offer and considered the impact of the development on operating costs. The result was a 10-year profit and loss forecast showing the level of funding needed to maintain the offer over this period.

Research indicated that a revamped Head of Steam including an immersive experience would be appealing to locals, day visitors and tourists alike. Audience research also suggested that making the museum a free attraction would encourage greater use by the local community.

To keep the site busy throughout the year required something else to attract those who are not usual 'heritage users'. Comparator analysis suggested that a bespoke play experience designed to appeal to young families would attract locals and day visitors who could also experience the free Head of Steam museum. A 'Play and Learn' approach will ensure that the site is both inspiring and engaging, enabling young people to learn about rail engineering through play.

The conclusion of the research and workshops with the client team resulted in the following product proposition:

- A musuem with experience – extended attraction including VR or AR attracting circa 93,476 visitors.
- A themed play park - attracting over 139,709 visitors.
- An extended programme of events - perhaps a continuation of the 2025 programme.
- A new café experience with integrated interpretation attracting 17,136 visitors.
- Live engineering interpretation.

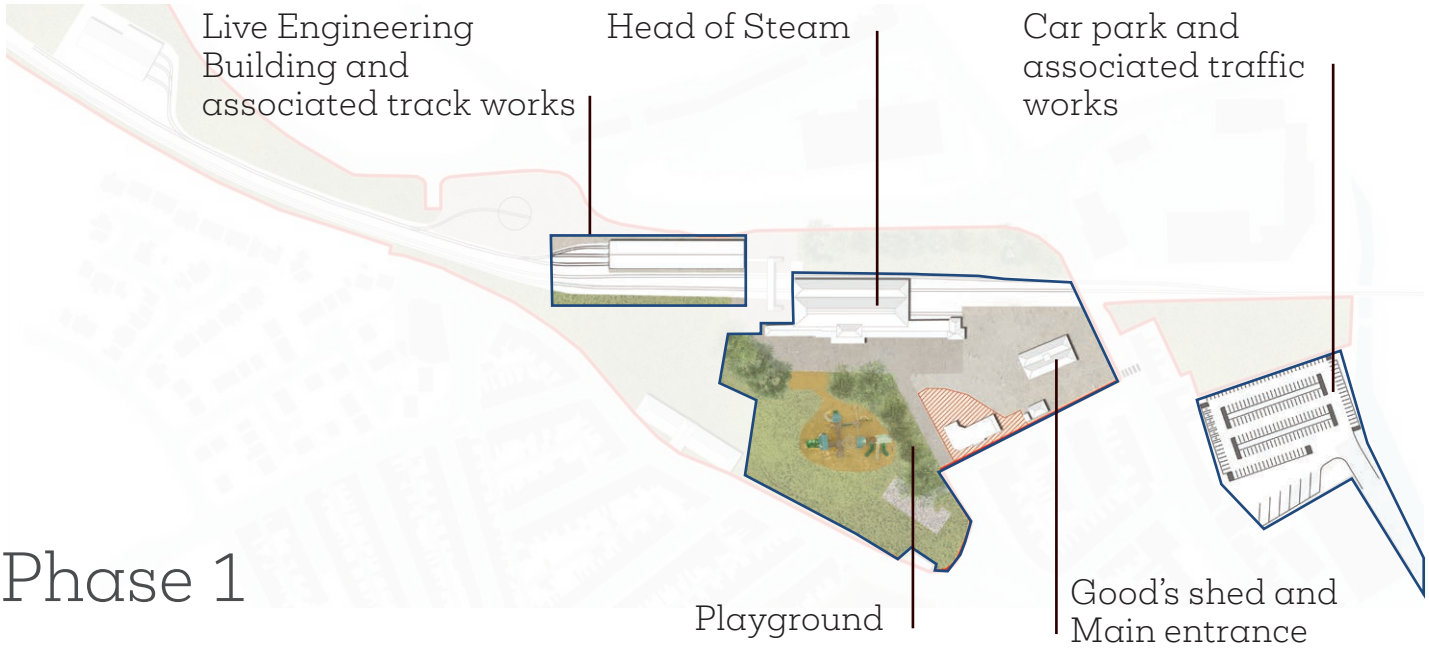
Visitor Numbers

The forecast number of admissions was developed using penetration analysis of local and tourist markets. Potential markets were calculated using population statistics, published data including data on county and where available local authority level tourism performance, and on visitor behaviours including the GBDVS (Great Britain Day Visitor Survey). A penetration analysis of these markets showed potential markets and assumptions were made on the number of repeat visitors that each element might draw.

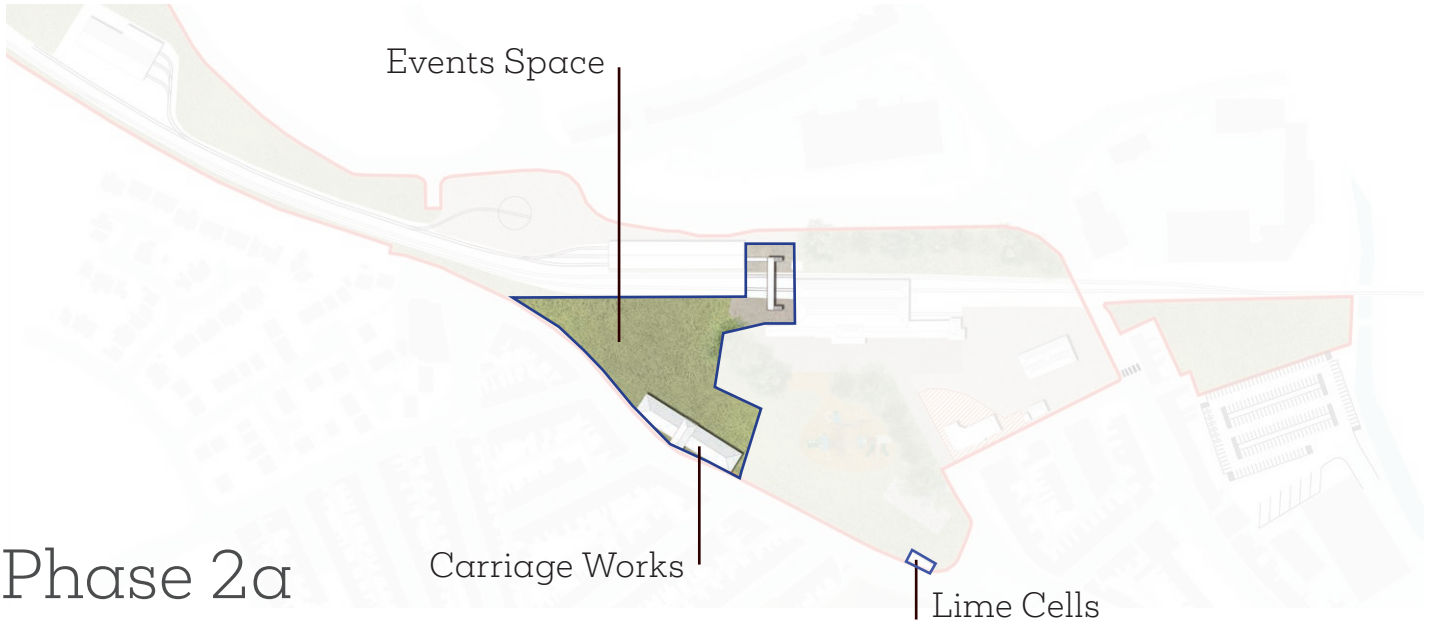
In total it was estimated that the site will attract over 235,000 visits per year. This would be made up of those attracted by the museum experience, those drawn to the play park and those drawn to a great new café in an interesting heritage setting.

Sustainability

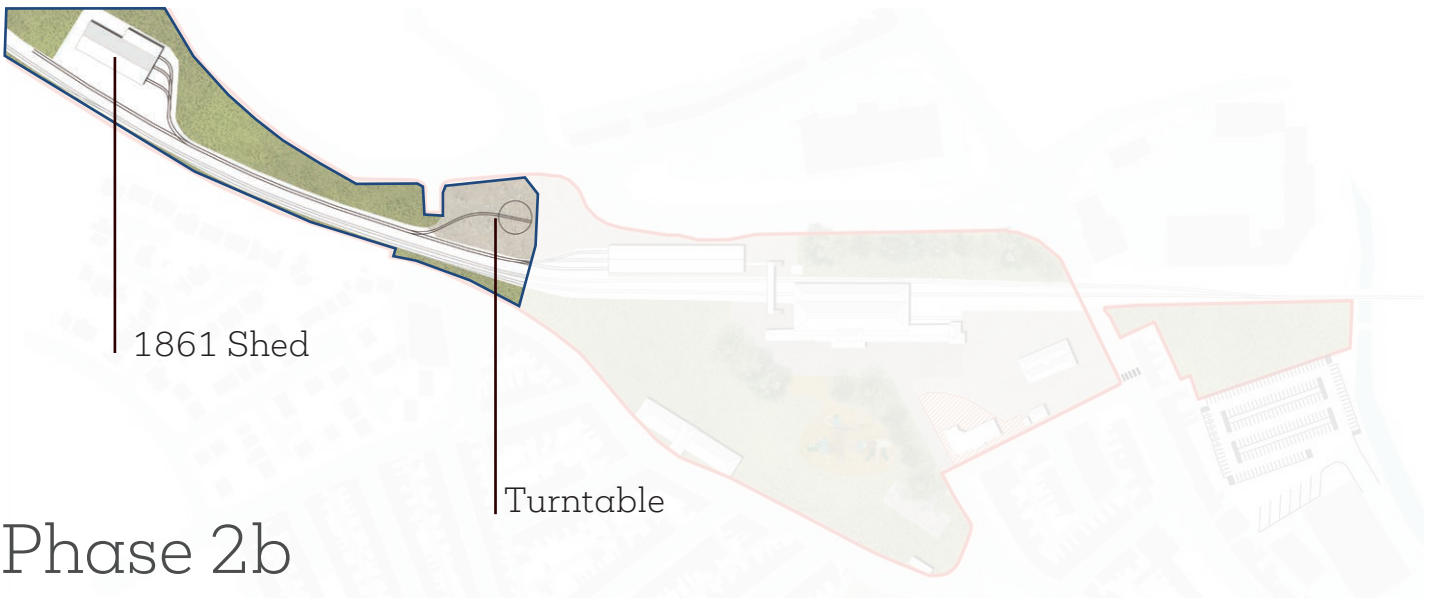
It was recognised by the client team that the site will always required some public funding to be sustained. However the more commercial approach adopted by this masterplan which will draw a significantly increased number of visitors, will ensure that even with an allocation for future development and refurbishments the site will cost less to run that it does currently.



Phase 1



Phase 2a



Phase 2b

4.3 Phasing

The Business Plan projections based on the proposed masterplan indicate that the DRHQ will continue to require some core revenue funding. The masterplan needs to be delivered in time for the 2025 bicentennial anniversary celebrations of the opening of the S&DR.

The success of achieving the project Vision will depend on the strength and effectiveness of the partnerships that is achieved in the process of developing the DRHQ. The work on establishing these needs to commence at the earliest opportunity.

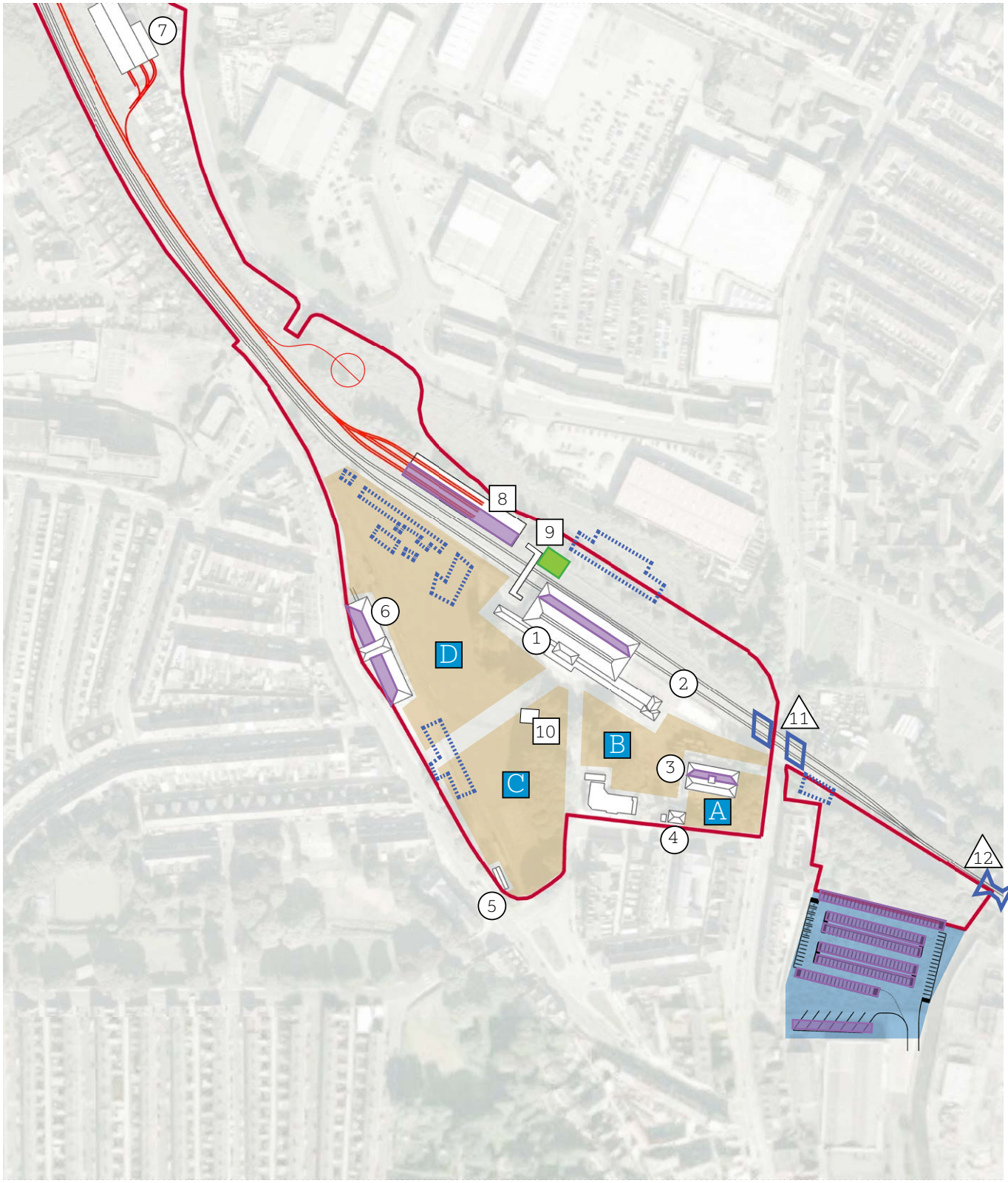
The timescale and the funding dictate that the masterplan should be phased.

The initial phase needs to provide the core visitor offer and the cost of it exceeds the funding currently identifed.

Likewise, the time required to secure all the permissions, land purchases, site decontamination, relocation of existing users and full design development and delivery suggest that a longer period would be required to deliver the full vision. Even the delivery of the core phase within the time scales might be a challenge.

It is important therefore to form a dedicated delivery team from the outset and to prioritise further scoping studies to de-risk the project assumptions in terms of timescale and cost.

	DRHQ Preferred Masterplan **Phase 1 Option1**				Comments
	Evaluation Criteria	**poor**	**satisfactory**	**very good**	**comments**
1	**Potential to be transformational and fulfil Vision**				Unique, authentic, diverse offer
2	**Potential to build up capacity and partnerships**				Strong potential to build on existing resources
3	**Social Value - inclusive engagement of community & industry**				Opportunities for engagement maximised
4	**Attractiveness to funders**				Potential to securing funding through partners and taking up variety of opportunities
5	**Deliverability within time and budget**				It is unlikely that the full masterplan can be delivered by 2025 or enough funding be raised.
6	**Long term Viability**				Network of partnerships = resilient future
7	**Potential for economic regeneration**				Strong project will bring more visitors and enhance secondary spend as well as offer local training opportunities.
8	**Social Value Legacy**				Community engagement, capacity building, enhanced civic pride = lasting social benefits
9	**Successful link with Interpretation Plan**				Full masterplans offers the best fit with the Interpretation Strategy.
10	**Other Risks and Constraints in delivery**				Decanting and site acquisitions may not be completed in time


7
8
9
6
D
1
2
11
10
B
3
C
A
4
5
12

Existing buildings on site:

1. Head of Steam
   Gross internal Area = 1988m²
2. North Road Station
3. Goods Shed - Visitor's Hub
   Gross internal Area = 489m²
4. Goods Agent Office
   Gross internal Area = 114m²
5. Lime Cells
   Gross internal Area = 110m²
6. Carriage Works - Ingenuity and demonstration hub
   Gross internal Area = 1436m²
7. 1861 Shed - Potential expansion for Live Engineering
   Gross internal Area = 1050m²

Proposed new builds:

8. Live Engineering Shed
   Gross internal Area = 975m²
9. Footbridge
10. Pop-up Cafe Kiosk (seasonal)

Significant structures off site:

11. Viaduct abutments
12. Skerne Bridge

External Zones:

A. Main Entrance
   Area = 1988m²

B. Head of Steam Exhibition Yard
   Area = 5000m²

C. Playground Area
   Area = 5000m²

D. Events Area
   Area = 10000m²

Key:

- Surviving Historical Buildings
- Now Demolished Historical Buildings
- External Zones
- Proposed Car and Coach Park
- Photovoltaic Cells to Roof
- Biomass Plant

Note: All areas are approximate

4.4 Stepping Stones

The high-level programme prepared for the masterplan indicates that work needs to progress immediately on scoping all aspects of the masterplan in full detail. Most important are the elements without which other work cannot be progressed. These have been identified as the next set of steppingstones for delivery.

These comprise public consultation on the masterplan, the completion of the Statements of Significance for all the listed buildings and the site itself, scoping site contamination, developing detailed interpretation plan, and the preparation of briefs for Bespoke Play, Audience Development and Interpretation Plan, and most importantly submitting Stage 1 of the National Lottery Heritage Fund.

These stepping-stones are vital to to be able to progress the project to design stage and to gain greater cost and program certainty. The archaeological survey and the ongoing work on Statements of Significance by Heritage England. The NHLF application is slow and it is critical to achieve Stage 1 bid submission by February 2020 at the latest.

Retaining the existing tenants on site and securing better facilities for A1 Trust is vital to the success of DRHQ. It is also vital to work closely with the tenant organisations in involve them in the next stage of the delivery to ensure that they feel ownership of the project.

Business plan projections assumed high visitor numbers in anticipation of high quality, unique play offer. It is a high priority therefore to develop detailed proposal of what the play offer will be. Further research should be undertaken on play provision to ensure that the right brief is developed for designers and operators.

Audience Development and Activities Plan will be a key element of NLHF stage 1 application. Furthermore, getting the infrastructure brief for the events will be critical to how ambitious the future events programme will be. Commissioning of these strategies should commence at the earliest possible stage.

An undated, but early, possibly contemporary painting of the line as working after the goods station was built between 1826-1827 – the goods station to the left and Skerne Bridge in the centre
From 20, 12 2016- S&DR Significance and Management Volume 1

Commissioned by TVCA and DBC
July 2019

TEES VALLEY COMBINED AUTHORITY

DARLINGTON BOROUGH COUNCIL

BAUMAN LYONS

50 years BWA
Proudly celebrating 50 years, 1969 - 2019

TOURISM UK
FOR A FRESH PERSPECTIVE

SLC Rail

Built Heritage Consultancy

Xanthe Quayle Landscape Architects

Accend