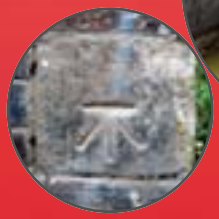
city of stoke on trent

The Trent & Mersey Canal

Conservation Area Review

March 2011



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1. The Purpose of the Conservation Area Appraisal

The Trent & Mersey Canal Conservation Area has been assessed by English Heritage as being in a very bad condition, showing high vulnerability and has been added to the Conservation Areas at Risk Register 2010.

In the face of significant change within the inner urban core of Stoke-on-Trent, the revised appraisal analyses and defines in depth the special interest and characteristics of the historic structure of the canal and its setting.

The appraisal identifies the pressures and challenges facing the survival of the Trent & Mersey Canal as a historic feature.

Recommendations for courses of action are then proposed, in order to aid the sensitive management, preservation and enhancement of the Trent & Mersey Canal.

The analysis and subsequent recommendations form the evidence basis for the management strategy (to follow).

2. Appraisal Approach

The approach of the appraisal produced in 1988 treated the canal as a coherent single historic element. Because of the decline of industry and subsequent replacement development, the canal now reads as the stitching seam and defining edge between a series of different functioning environments. The revised appraisal explores the adjoining historic and present day environments, in order to understand better historic and current functions, and how the resulting form contributes to the setting of the canal. This approach enables the different character areas adjacent to the canal to be recognised.

Distinctive character areas have been identified, in order to support this approach (please refer to appendix 1). The character areas identified, from north to south, are as follows:-

1. Chatterley Valley
2. Westport Lake
3. Longport Wharf & Middleport
4. Festival Park
5. Etruria
6. A500 (north)
7. Stoke Wharf
8. A500 (south)
9. Sideways
10. Trentham

3. Consultation

In order to facilitate the review of the 1988 conservation area appraisal a steering group was set up with interested stakeholders, including British Waterways, Inland Waterways, English Heritage, Renew, Trent & Mersey Canal Society & The Staffordshire Wildlife Trust. Representatives of the City Council were also invited, including planning policy, ecology, development management and the City Cycle team. An exercise in public consultation with landowners and residents was undertaken, in the form of a leaflet drop and public meeting.

Comments from stakeholders and landowners have informed the revised conservation area boundary and content of this document.

4. References

The following documents have been referred to in the review of the Trent & Mersey Conservation Area Appraisal:-

- Trent & Mersey Canal Conservation Area Appraisal, 1988 (Staffordshire County Council)
- Stoke-on-Trent's Canals: A Strategy for the Conservation, Enhancement and Regeneration of the Canal Network, September 1997 (Stoke-on-Trent City Council)
- North Staffordshire Urban Core Study: Historical Significance, November 2005
- Historic plans of the Trent & Mersey Canal (1900 and 1880)
- Middleport & Burslem Masterplan, Executive Report, January 2010
- Emerging Stoke Town Masterplan

5. Legislative & Planning Context

This character area appraisal has been prepared for the Trent & Mersey Canal Conservation Area, whose boundaries were designated in May 1988, with subsequent revision to the boundaries approved by Stoke-on-Trent City Council on 25th March 2011.

Conservation Areas are designated by Local Authorities under fulfilment of duties imposed by section 69 of the Planning (Listed Buildings and Conservation Area) Act 1990. This defines Conservation Areas as:

'areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'.

Special interest may originate from a variety of sources, while character is defined in a holistic sense rather than deriving from the merits of any single building.

Production of Character Appraisals was required under the Office of the Deputy Prime Minister's Best Value Initiative (BVPI 219), though best practice has long required their preparation. The objective of an appraisal is to analyse and define in depth the special interest and traits which make up the character of a conservation area, to identify the pressures and challenges facing its survival and to recommend courses of action which will aid in achieving sensitive management, preservation and enhancement (the latter points fulfilling duties imposed by section 71 of the 1990 Act). This BVPI has now been replaced by a local indicator.

Conservation Area status is a material consideration in the evaluation of planning applications. Here section 72 of the 1990 Act requires local planning authorities to pay special attention to the desirability of achieving preservation or enhancement through their decision making. Appraisals represent an important resource in fulfilling such duties while Planning Policy Statement 5, Planning for the Historic Environment, provides a principal point of guidance. Where new development is planned conservation area appraisals may provide a useful design resource to those proposing it.

Conservation area status curtails certain 'permitted' householder development rights requiring planning permission to be sought in these areas (outlined in the General Permitted Development Order 1995).

English Heritage recommends production of distinct Management Strategy documents for each conservation area. The basis of these documents is the analysis contained within and recommendations arising from each appraisal. These documents will provide a boost in efficiency while helping to ensure fulfilment of statutory duties. In the context of the new Local Development Framework (LDF) these management strategy documents may eventually be adopted as Supplementary Planning Documents.

The Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy 2006 – 2026 was adopted in October 2009. Policy CSP2: Historic Environment makes specific reference to the requirement to preserve and enhance the character and appearance of the historic heritage of the City, including buildings, monuments, sites and areas of special archaeological, architectural or historic significance. Through the adoption of this policy, the authority has committed to fulfilling statutory duties regarding conservation areas and listed buildings. This policy sets design and development standards, while introduces two non-statutory 'lists' of relevance to this Appraisal: a Local List (Buildings of Special Local Interest) and Areas of Archaeological Importance.

Within the original conservation area designation, article 4 directions were put in place for some areas of the conservation area on the 22nd April 1988, as follows:-

1. No painting or re-painting of any external brickwork of any building shall occur without prior consent of the Authority.
2. There shall be no extension, alteration or addition of industrial buildings permitted in Class V111 without prior consent of the Authority.
3. There shall be no replacement of any brick set paved surfaces without the prior consent of the Authority.

These article 4 directions shall remain in place, but have not been extended to cover the revisions to the conservation area boundary. The extent of these existing directions can be obtained on enquiry to Stoke-on-Trent City Council.

When reading or using an appraisal it is important to note that while every effort is made to provide detailed analysis the document can never be comprehensive. Failure to mention a particular element or detail must not be taken to imply that it is of no importance to an appreciation of character or appearance of the Conservation Area and thus of no relevance in considering planning applications.

This appraisal has been produced by the City Renewal Directorate (Urban Design & Conservation), Stoke-on-Trent City Council. Enquiries regarding this Appraisal should be addressed to:

The Urban Design Team: *01782 23 5023* **or** *01782 232154*

Tree Officer: *01782 232556*

6. The Study Area

The Trent & Mersey Canal is located on a north-south axis, extending 13.6km through the entire length of the City. The canal enters Stoke-on-Trent through the Harecastle tunnels near Tunstall in the north and exits at Barlaston in the south. As with most early canals its route generally follows the contours of the landscape, along the valley of the Fowlea Brook until this meets the River Trent at Stoke, in places running close beside it, in order to minimise construction difficulties and costs.

Historically, the Stoke-on-Trent canal system formed the industrial heartland of the North Staffordshire conurbation and the backbone to the market towns of Stoke-on-Trent, with each town's industry developing because of access to the canals and the wider world. Industries included steel and iron works, coal mining and ceramics and raw materials manufacturing. The Trent & Mersey Canal linked with Tunstall, Burslem and Stoke. Recent development of agricultural land to the south of the City has resulted in the canal forming close links with Trentham.

Many of these industries have now fallen into decline. The coal, steel and iron industries are now obsolete, and only a few spatterings of potteries still operate along the edge of the canal. With the decline of industry, the historic use of canals as an industrial transport route has fallen into disuse. The Trent & Mersey canal now functions as a recreational cruising route for boaters. Given current national policies for sustainable living and brownfield development, a chance now exists for the Trent & Mersey Canal in Stoke-on-Trent to re-invent itself to suit modern day needs, whilst maintaining the character of these linear water channels.

7. Historic Significance and Patronage

The 1988 appraisal for the Staffordshire stretch of the Trent and Mersey Canal succinctly describes its significance, as follows:

“The Trent and Mersey Canal is of outstanding industrial archaeological importance, both nationally and locally. It was the first of the major inland waterways which were to form the main arteries of Britain's canal network, the nation's principal transport and communications system in the late 18th and first half of the 19th centuries. It was essential in promoting the rapid development of Britain as the first industrial nation by providing efficient transport for raw materials and manufactured goods. The Trent and Mersey was also the first canal to be begun in Staffordshire, in 1766. It had a dramatic effect on the development and prosperity of trade and industry in the county.”

“On its completion in 1777 the Trent and Mersey Canal was the greatest civil engineering project yet carried out in England. Its construction involved a variety of major works, most notably the cutting of five tunnels. Two of these were in Staffordshire. The longest of them all, James Brindley's Harecastle Tunnel, was the single greatest achievement not only of the entire canal project but also on a national level. It was a notable first: the first major transport tunnel to be constructed in England; for some time it was also the longest. Thomas Telford's new tunnel, built alongside it, is an equally impressive feat of engineering.”

The canal project was initiated in 1765 at a meeting of 'the Company of Proprietors of the Navigation from the Trent to the Mersey'. They included major Staffordshire landowners and manufacturers including the Duke of Bridgwater, Earl Gower of Trentham and Thomas Anson of Shugborough, Matthew Boulton of Smethwick, and, most significantly for the Stoke-on-Trent stretch of canal, Josiah Wedgwood of Burslem. In 1766 Wedgwood bought the Ridge House estate at Cobridge, and built his new pottery works, the Etruria Works, alongside the proposed route of the canal.

On 14th May 1766 "The Navigation from the Trent to the Mersey Act" was passed. Wedgwood cut the first sod at a ceremony near Brownhills in the Potteries to inaugurate construction on 26th July 1766. Work began at once at both ends of the Harecastle Tunnel and at Wilden Ferry in Derbyshire, where Cavendish Bridge at Shardlow now stands.

James Brindley was appointed Surveyor General, and his brother-in-law Hugh Henshall was Clerk of Works. When Brindley died in 1772, Henshall took over as surveyor.

On 24th June 1770 the first completed section of canal was opened from Wilden Ferry on the navigable River Trent to Shugborough. By October 1772 the section to Stoke-on-Trent was finished, and the Cheshire section was completed in 1775.

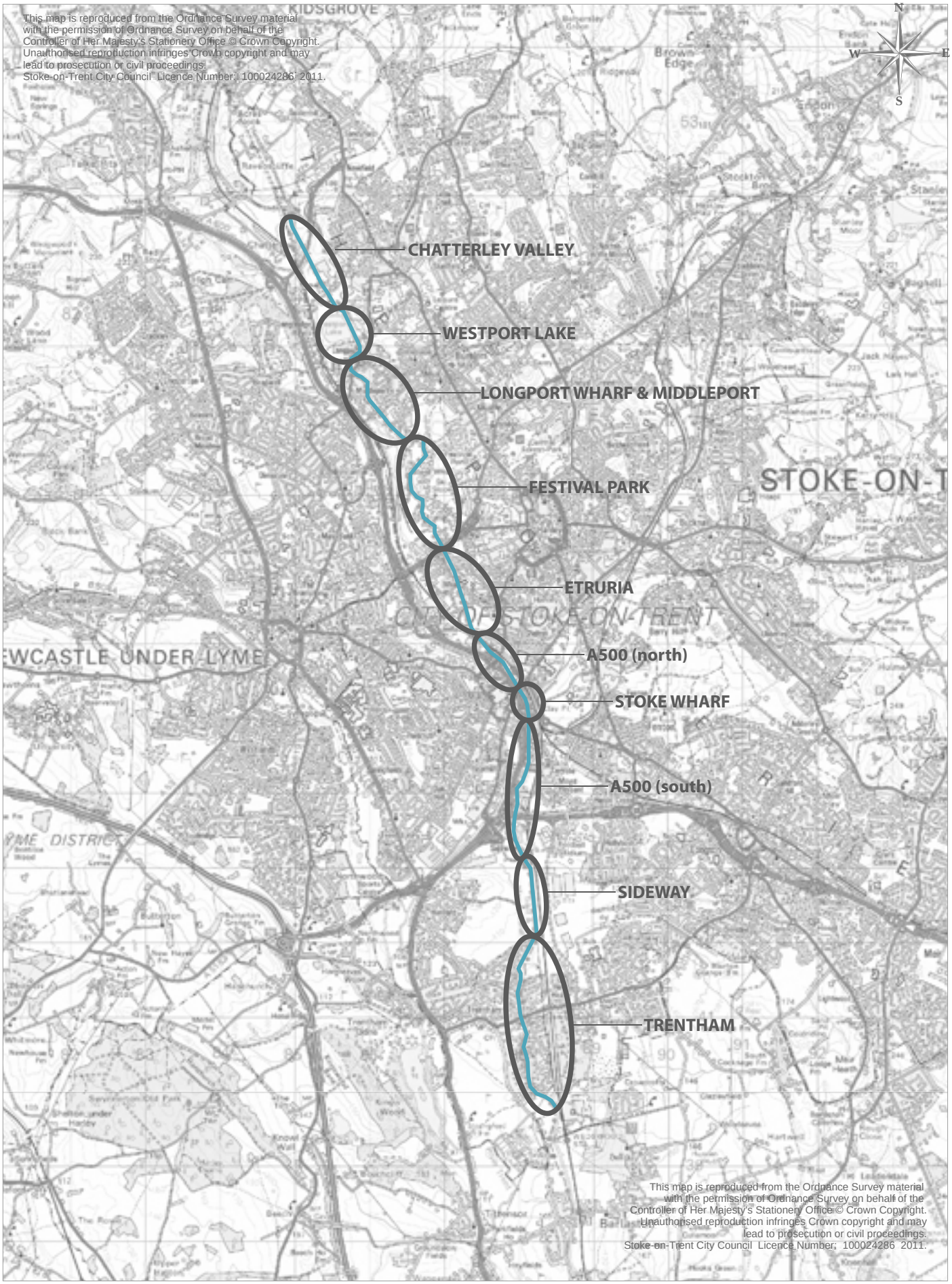
Final completion was delayed by great difficulties encountered in constructing the Harecastle Tunnel, the principal engineering work of the canal. It was not finally opened until 1777. Unfortunately the Harecastle Tunnel soon proved to be a very serious bottleneck. It was narrow, only 9 feet wide, so could only take traffic in one direction at a time. There was no towpath: boats had to be 'legged' through, and on average the journey took about 2 hours. Work began on a second tunnel to relieve the congestion in February 1824 to the designs of Thomas Telford; it was completed in 1827. The new tunnel was much wider and had a towpath, so could be navigated much faster. Telford made a number of other improvements to the canal, including straightening some sections and duplicating locks.

During the ‘Golden Age’, goods transported along the canal included clay, pottery, lime, flint, iron, coal, timber, limestone and food.

In the 1840s the railway boom began, and it became increasingly clear that competition from the railways could not be fended off indefinitely. In 1847 the Trent and Mersey Canal Company merged with the North Staffordshire Railway Company, with its headquarters and main station in Stoke. The Railway Company intended to keep the canal working, as a 'feeder' for its own traffic. However, by the 1860s the railways were beginning seriously to affect canal trade generally. A gradual decline in commercial traffic along the Trent and Mersey Canal continued through the 19th and 20th centuries, dwindling to very little in the 1960s. The canal was nationalised in 1948, and on 1st January 1963 the British Waterways Board took control. Under the Transport Act 1968, the Trent & Mersey Canal was classed as a cruising waterway for recreational use, ensuring its continuing maintenance to the present day.

Historic physical features along the length of the canal include a variety of bridges, generally constructed of brick and following the standard hump-back arched pattern (there are thirty four bridges across the canal in Stoke but only around nine are of historical interest). Locks occur singly or in groups, sometimes associated with a bridge (six locks in Stoke). They are of the standard narrow type for single boats, designed for speed of use and to reduce water requirements, taking less time (and water) to fill. Some of the cast iron mile posts giving the distances to Preston Brook and Shardlow at the ends of the canal survive (5 in Stoke as Listed structures) -they were made in Rangeley and Dixon's Foundry in Lichfield Road, Stone 1819-1820. Other notable structures include cottages, warehouses and factories, boatyards, and of course the Harecastle Tunnels.

Fig. 1: Interior of the Harecastle Tunnels, as viewed from the southern entrance



Plan 2: The Location of the character areas on the Trent & Mersey Canal

8. CHATTERLEY VALLEY CHARACTER AREA

8.1: Introduction

The character of Chatterley Valley today has changed significantly from the character of industrial yesteryears. Excellent transport linkages afforded via the A500 still attract industry to the area and the tradition of tileries within the Chatterley Valley section still exists. Where vacant brownfield sites occur, natural ecological succession has taken place, providing a pleasant green backdrop adjacent to the canal waterway within the valley. The end result is an interesting mix of wildlife habitat and industry. The imposing façade of the Harecastle tunnels and surrounding setting remains unchanged physically, although the site of numerous narrowboats awaiting passage through the tunnel now only occurs on commencement of the recreational narrowboat hire period.

Fig. 2: View on approach to the Harecastle Tunnels

8.2: History & Archaeology

This area includes the southern portals to the Harecastle tunnels, of which both are canal tunnels. A railway tunnel entrance lies just to the north, outside of the Conservation Area. The first canal tunnel was built by Brindley between 1766 and 1777. A great feat of engineering, it ran for over one and a half miles (2.633km) to Kidsgrove. Unfortunately the absence of a towpath through the tunnel meant boats had to be legged through. The second tunnel was built in 1824-7 by Thomas Telford and included a towpath, to alleviate congestion in the first tunnel. In 1914 haulage through the second tunnel by electric tug was introduced, and the first tunnel went out of use. Later the introduction of diesel-powered boats made the electric tugs redundant and they were withdrawn in the 1950s. A fan house was then constructed at the tunnel entrance to extract diesel fumes.

The railway tunnel was constructed in the 1840s and Tunstall Station, positioned at the entrance to the tunnel, was opened in 1864. It was renamed Chatterley Station in 1873, but closed to passenger traffic in 1948. The Tunstall Western By-pass (A527) now crosses the Fowlea Valley and canal as the main transport route.

The area alongside the canal, particularly the slope below Tunstall on the eastern side, was quickly occupied by industry. The local iron-impregnated clays were exploited from the 18th century to produce Staffordshire 'blue' bricks and tiles. These materials can still be found in much of the historic built form of North Staffordshire today

Thomas Peake's works was established during the 1820s and became the largest tilery in Tunstall. John Nash Peake took over the firm in 1861 and doubled the size of works. With

thirty five ovens and kilns it was one of the largest tileries in the country. Richards Tiles, at the Brownhills works from 1933, was the largest tilery in the country in 1963. The tileries were rebuilt as modern factories in the later 20th century and the clay pits and waste dumps tidied up or filled in, with Goldendale fishing ponds serving as an obvious example.

Ironworks, with attendant slag heaps, were established along both sides of canal in the northern section of the area by the middle of the 19th century. Goldendale Foundry was established during the 1870s. Goldendale Ironworks operated c.1848-1970. Ravensdale Forge operated from 1850-1900. Ravensdale New Forge was in disuse by 1900 and subsequently demolished by 1924. The slag heaps have now been largely landscaped away.

The Victorian sewage works abutting the north edge of Westport Lake has recently been greened over.

The Trent & Mersey canal was an integral part of the operational functioning of these industries. Although the canal spurs have all been filled in, several (unused) timber and brick wharves remain along the canal bank. A remnant of workers' terraced cottages also remains at Copp Lane, dating from before 1900.

Also of interest, although less relevant, is the use of the Ravensdale Sports Pitch for training by Port Vale Football Club.

8.3: Historic and Existing Land Uses

Historic maps dating from 1900 show the area as predominantly industrial. An intricate network of canal and rail routes served local industries in the area. The route of the canal structure was designed to follow the contours of the flood plains, for ease of construction. Industries grew in close proximity to the transport network that facilitated import of raw materials and export of finished products.

The canal structure itself within Chatterley Valley was comprised of a main corridor, with six arms branching off from the canal. These arms would have provided efficiency of loading and unloading to individual industrial sites, preventing congestion on the main route of the canal.

Residential uses were sparse and associated with the working practices of the day, such as the tunnel keeper's cottage. Yew Tree Farm is also shown on the 1900 map, although much of the former agricultural uses in this area appear to have been replaced with industry by this date, with only the farmhouse and outbuildings remaining.

The cessation of industry in the area has resulted in various industrial sites becoming disused, with ecological succession taking place on these sites. Industry and ecology are located adjacent to each other, with green spaces acting as a natural buffer between industrial sites. The canal arms have disappeared in many instances, or have become reduced in length. Subsidence has impaired the structural integrity of the now redundant Brindley Tunnel. The entrance to the tunnel was filled into to stop boats entering the Brindley tunnel, and to stop the escape of effluent into the Trent & Mersey (ochre resulting from iron deposits is carried out of the tunnel structure via groundwater, colouring the water orange).

The tradition of Tileries in the Chatterley valley still exists in large floor plate form, although many of the historic industrial buildings have been replaced with buildings of modern industrial style. Logistics industries also benefit from this location, with ease of access to the A500.

An example of a smaller floor plate industry, of bespoke architectural design, can be found on the eastern canal edge, to the south of the Johnsons Tileries site.

The marl pit opposite the former iron works has been adapted to form a local reservoir, named Goldendale pools. The pools provide leisure amenities for local residents, including angling and walking and is accessible from the canal towpath. Ravensdale sports field

replaces isolated incidences of housing associated with the former Ravensdale Iron Works. The former Brownhills Tileries site is now a vacant brownfield site.

8.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

At the most northern-most point of the canal within the City, the Harecastle tunnels are both Grade II listed structures, including all of the attached walling and parapets. The original James Brindley tunnel is on the western side; Thomas Telford's tunnel is to the east. James Brindley's tunnel was constructed between 1766-1767. Due to the fact that the tunnel could only be used one-way, it was decided that an accompanying bridge would be built which was done by Thomas Telford (built between 1824-1827). The earlier James Brindley tunnel was closed in 1914 due to subsidence problems, where the height of the tunnel decreased to an untenable level. Similar problems have also affected the Thomas Telford tunnel but to a lesser effect, though the towpath had to be removed as it was subsiding below water level in places, rendering it unfit for use.

Tunnel keeper's cottage at Harecastle Tunnel is also grade II listed. Constructed to serve the Harecastle Tunnel, this building has strong associations with the historic functioning of the tunnels. The canal building to the front of the Harecastle Tunnel, although modest in stature, assists in the portrayal of historic life on the canals.

The cast iron milepost situated by the entrance to Telford's tunnel is a Grade II listed structure.

Fig. 3: Cast iron mile post

The change in the path of the canal is visible, where it has been diverted away from the older tunnel towards the new tunnel. This has resulted in a kink in the route of the canal that would otherwise have formed a direct line along much of the Chatterley Valley stretch. .

Architectural Character, Materials, Colours and Textures

There is an unusual variety of materials used within the built form in this section. The use of stone at the southern portal of the Telford Tunnel reflects the geology of this portion of the

canal. Different textures of stonework and ashlar dressings are also evident. The use of stone at this juncture is notable as stone features are not common within Stoke-on-Trent.

Red brick and plain dark blue roof tiles are predominantly used within historic buildings. The Canal House has a painted finish to brickwork, but many built structures are faced in their original materials.

Built Form & Massing

Whereas the historic character of this area would have been described as industrial in character, the character of this section could now be described as urban peripheral. Buildings situated within the conservation area are sparse, fine grain in character and one to two storeys in height. At the Harecastle tunnels, the buildings are terraced, due to significant changes in levels. The arrangement of buildings is organic, but three buildings face on to the canal, showing a conscious and deliberate arrangement. Unusually, housing on Copp Lane also faces onto the canal, and is laid out in a terraced fashion. The canal corridor is not defined by buildings, but by undulating topography and mature tree planting.

Style

The style of the buildings in this section of the conservation area is vernacular, small scale and modest. The Brindley tunnel, whilst impressive, has been designed to blend into the hillside and the curvature of the copers reflects the relief of the hillside. The structure is subservient to its surroundings. The Fan House fronting the Harecastle Tunnel is unmistakably industrial and robust in its character and style, contrasting distinctly with the other structures surrounding it. The Tunnel keeper's cottage is different in style again, occupying an elevated position at the head of the tunnels, with a duplication of access routes suggesting that this building was important to the functioning of the tunnels. The painted nature of Tunnel keeper's cottage suggests that extra expense was incurred to articulate that it was an important landmark for narrowboats. The painted elevational treatment contrasts with the other buildings in this location, which have been left as bare brickwork and stone.

The cottages around bridge 129 are small in scale, terraced in form and typical of rural workers cottages. They are modestly decorated on the elevations, with simple stone cills and headers applied to window and door apertures.

External Walls and Facades

Retaining walls are mainly in the form of stone and stone ashlar dessings. Slag walling (produced as a by-product of the ceramics industry) is also evident for considerable stretches within Chatterley Valley, particularly adjacent to the playing fields and walling adjacent to the access leading to the Harecastle Tunnels. There is also some walling in red brick, such as around Brindley's tunnel which is topped with blue copers.

Roofs

Blue Staffordshire clay tiles are predominantly used to finish the roofs of historic buildings.

Windows

A pair of side opening timber casement windows with a fixed timber window to either side can be found on the small building situated to the front of Tunnel keeper's cottage and Fan House. This is a recent intervention, but has been done sympathetically to the historic character of the canal, enhancing the appearance of this small building considerably. The arrangement of glazing bars gives a strong traditional character. Staffordshire blue copers form the sill of the window and timber shutters painted to a black finish complete the frame for this window. The Fan House which faces the entrance to Telford's tunnel has metal windows. The windows of Tunnel keeper's cottage have been replaced with white UPVC.

Fig. 4: Double casement windows to small building at Harecastle Tunnels, with Staffordshire blue clay paviours in the foreground

The small terraced cottages adjacent to bridge 129 have had all of their original windows removed with timber replacements or UPVC units. The UPVC units have affected the rhythm and continuity of the front terrace.

Details and Features

As with most of the bridges within the conservation area, there is no consistent type of bridge. They vary significantly in terms of scale, materials and appearance.

Bridge 130 has significant historic interest. A mixture of red and blue engineering brick forms the supporting piers. The brickwork of bridge 130 displays an English bond for much of its length, but a header bond has been used to construct the curved walls. The detailing of jointing within the brickwork on this structure demonstrates a high level of craftsperson's skill. Curved stone copers finish the detailing on this structure. Painted metal railings complete the design. The brickwork of the supporting piers on bridge 129 has many patch repairs and interventions and consequently the brick types vary within the structure.

To the west of the canal tunnels, railway sidings once existed. There is a distinctive cutting and some structures remain. This provides an interesting record of how the different modes of canal and railway were deemed to complement each other, rather than compete with each other.

Fig. 5: Header bond and stone copers to brickwork in Bridge 130, with traditionally designed stone setts and metal railings

Groundscape & Public Realm

Public access is restricted to entry points from the four bridges (130 to 127) and the lane leading from Chatterley Road to the Harecastle Tunnels. Desire lines leading from the reservoir to the canal towpath suggest that access to this amenity space should be formalised. The canal is functional, in that it supports leisure boating and off road sustainable transport routes. However, the use of angling within the reservoir, and the pleasant environment associated with it, suggests that more could be made of the northern stretch of the canal by way of leisure use in a manner that would complement Westport Lake.

Natural surveillance is poor, due to topographic levels, mature tree planting and orientation of buildings away from the canal corridor, where they occur.

Regenerative tree planting lines much of the Chatterley stretch of the canal corridor, creating seasonal structure that encloses the canal from spring to autumn. The mature trees create a green character that reinforces the urban peripheral edge of the city, and at the same time masks many of the industrial uses surrounding the canal. The quality of the ground canopy could be improved, to further enhance biodiversity in the area.

The towing path is predominantly constructed of resin bonded paving, reflecting the green character on this stretch, with feature paving to the underside of bridge structures, such as traditional stone setts to bridge 130 and clay paviours to bridge 129. A mix of paving occurs at the Harecastle tunnels, including traditional stone sett and clay paviour treatments. Concrete to the central yard undermines the quality of paving to the area adjacent to the tunnels. A more consistent approach adopting historic paving materials in this area would greatly enhance the historic character of the Harecastle Tunnels, strengthening the historic gateway to the waterways of Stoke-on-Trent.

Edge treatments to the canal structure are mixed in quality, but long stretches of traditional edging materials remain in situ, including sandstone copings and Staffordshire blue brick.

Modern development against the canal edge has resulted in the loss of these traditional edging treatments in some instances, with sheet piling used as a replacement material. Where traditional edging treatments survive, they should be retained during future re-development works, or replaced, like for like.

Boundary and wall treatments are varied. The mix of industrial sites and green spaces result in a mix of hard and soft treatments that relate to the adjacent land use. Historic walling treatments in this area have been constructed of traditional materials, using locally sourced, cheap materials. Staffordshire blue and red bricks are common, with staffordshire blue wall copings on this stretch of the canal. Stone pier copings are evident to the bridge piers on bridge 128. Macclesfield sandstone is used for retaining walls in the Harecastle Tunnels area, forming significant structures in their own right. The slag walling adjacent to the Ravensdale playing pitch is also notable for its sense of local vernacular and essence of thrift. Railings to the perimeter of the former sewage works date from the interwar period and are attractive but simple in design. They reflect the prestige associated with the former North Staffordshire Waterboard, that was in a financial position to bear the cost of these railings. Less attractive boundary treatments include the use of steel palisade fencing and corrugated metal sheeting to industrial sites, concrete breezeblock walls to garden boundaries to the access road leading to the Harecastle Tunnels, and steel mesh fencing to the Ravensdale playing pitch. Although they are cheap, they are less likely to be produced locally.

Fig. 6: Slag walling adjacent to the Ravensdale Playing Pitch

A small pedestrian timber bridge occurs adjacent to the reservoir, where the reservoir overflow occurs. Although this structure is small, it has been consciously designed and is constructed of timber materials that are complementary to the surrounding green character.

Orientation and interpretation signage is minimal along the canal towpath, although an interpretation board occurs at the Harecastle Tunnels. Likewise, lighting along the towpath is minimal, with little provided in the way of spill out lighting from adjacent buildings. There is no feature lighting to historic assets within this section. Seating is also minimal.

Litter is associated with the boundaries of industrial premises, and also the reservoir. The reservoir is currently used as a dumping ground, given the concealed location. This practice detracts significantly from the visual quality of the reservoir.

8.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation. The area has a wooded character. This character should be preserved and enhanced. The Goldendale fishing pools and surrounding wet woodlands are designated as a local wildlife site. Regenerative tree and shrub cover lines the edge of the canal structure, including Willow, Oak, Birch, Alder, Elder, Hawthorn and Bramble. This mix of habitat types supports local biodiversity and allows for the movement of invertebrae, small mammals and birds. Typical species sited within this area include damselflies, dragonflies and bats.

Stands of Japanese Knotweed occur to the south west of the Harecastle tunnels. This plant is invasive and should be eradicated, to prevent further spread.

8.6: Topography, Views & Enclosure

The waterway follows a straight line course and is enclosed for much of its length by tree and undergrowth covered slopes, forming a shallow valley. The reservoir is elevated above the level of the canal, as the topography rises further above the reservoir to the west. The focal point of this section is the view of the Harecastle Tunnels, with views channelled along the canal corridor, terminated by the historic southern portal of the Brindley tunnel.

Bridge 130 is historic in character, and the arched nature of the bridge serves as an important local landmark on approach to and exit from the southern portal of the Harecastle tunnels.

The topography becomes lower to the western edge of the canal at Ravensdale Sports Field. The tops of the hills that form a green backdrop to the Fowlea Brook Valley are visible from the towpath. The terraces on Copp Lane and bridge 129 combine to form a focal point of historic aesthetic, looking south from the Ravensdale sports field. The bespoke design and associated activities of the industrial works to the south of Johnson's Tiles reinforces the industrial character of the canal. The lattice work of the iron bridge situated in close proximity to this industrial site possesses an intimate sense of enclosure and is notable for the aesthetic interplay of light and shade created by the penetration of daylight into the structure.

As the topography levels out adjacent to the canal further south of the iron bridge, views are afforded towards the green backdrop of the Fowlea Brook Valley.

On a less positive note, the rear yards of industrial premises facing onto the canal result in views of poor quality from the towpath adjacent to bridge 128. Views towards the developed spur of Tunstall (further south of the iron bridge) are also poor. The main entrance to Johnson's tiles is visible from the southern approach to bridge 129, but the lack of architectural merit within the design of the building results in a view that is of no positive value to the visual quality of the canal.

Views into the conservation area are for the most part screened due to the surrounding topography, land ownership boundaries and restricted access. Views into the conservation area can be gained from the elevated vantage points on the bridges crossing the canal. The surrounding industrial developments at higher ground level significantly detract from the quality of views from bridge 129.

Fig. 7: Interplay of light and shadow formed by iron lattice work

8.7: Detractors & Gap Sites

Whilst the historic character of the Harecastle Tunnels lends a charm to the northern most point of the Trent & Mersey within the Stoke-on-Trent boundary, the quality of the public realm within this northern most gateway detracts from the overall quality of the Harecastle Tunnels. Of particular note are the large stands of Japanese knotweed and poor quality paving to the service yard. The silted nature of the canal leading to the portal of the Brindley tunnel also detracts from the overall quality of this area. Unsympathetic boundary treatments to private gardens adjacent to the track leading down to the tunnels further detract from the quality of this area.

Within the reservoir, litter and dumping significantly detracts from an area that has the potential to contribute very positively to the Trent & Mersey canal conservation area.

Due to a break in mature vegetation, poor quality boundary treatments to the electricity sub-station are visible and detract from the visual quality of the conservation area. Railings assisting access to the towpath from the Tunstall Western Bypass have been removed, leaving the posts senselessly in situ. Modifications to bridge 129 have resulted in a series of add-ons that look cluttered and unpleasant.. Boundary treatments south of bridge 129 are very industrial in character and look unsightly, as does the steel mesh boundary treatment to the east of Ravensdale Sports Field.

The cluttered rear yards of the industrial sites to the north of bridge 127 contrast starkly with the high quality environment associated with Westport Lake.

8.8: Enhancement and Development Opportunities

A good clean-up would benefit the visual appearance of the area, removing litter and repairing items such as the railings adjacent to the western by-pass. Bridge 129 is also in need of repair also.

There needs to be a concerted effort to improve the quality of boundary treatments and enhance the quality of the ground canopy.

Formal access to the reservoirs would help to promote amenity uses in the area, and emphasise the natural assets in this area.

The provision of a car park on the former railway line would help to improve access to the canal from further afield, and support the development of this corridor as a leisure and amenity destination. Use of the disused railway as a greenway to facilitate better pedestrian and cycle linkages to Golden Dale Pools and Westport Lake could also be explored. This measure would help to reduce parking pressures on Westport Lake. Sustainable design that supports the green character of Chatterley Valley would be required, using gravel instead of tarmac, and incorporating tree cover to provide shade for parked cars.

Environmental and public realm improvements to the Harecastle tunnels would help to further enhance the setting to the historic buildings and structures associated with the use of the canal. A small business could be a possibility that addresses the needs of boaters and visitors. A welcome gateway sign and information box should be incorporated at this point, to welcome visitors. The silting of the water channel leading to the Brindley tunnel should be addressed so that the aesthetic appearance is improved. Seating would be useful for narrowboat users at the Harecastle tunnels, waiting to access the tunnel, and would create a more sociable space where dwell time is necessary. A small coffee outlet would enhance the sociability of this space further.

With regard to future re-development of land adjacent to the canal, a bespoke approach to industrial development would be preferred instead of a template approach. The entrance to Johnson's Tileries could articulate the continuing manufacture of ceramics much more strongly through appropriate architectural ceramics, enlivening views from the canal corridor.

Fig. 8: Bespoke industrial architecture adds visual interest and activity

Should viability issues preclude re- development on the former Ravensdale Sports Pitch, it is suggested that the playing pitches be restored, and active sports use promoted. The

potential provision of car parking on the former railway line would help to alleviate parking pressures during peak periods.

8.9: Pressures & Threats

The existing historic structures situated within the conservation area that still remain provide a coherent narrative of how the canal functioned and should be protected from demolition and enhanced.

The urban peripheral character of Chatterley Valley now supports an extensive network of habitat mosaics that enhance local biodiversity significantly and provide a pleasant green backdrop to the recreational waterway. There is a risk that large floor plate industrial premises and associated service yards will erase wildlife habitats in this area, reducing the green character of Chatterley Valley. Any future development should respect the historic character of the canal corridor, and the amenity and ecological value afforded to local residents. Bespoke industrial architecture should be promoted, rather than template industrial architecture, with careful mitigation of habitat loss.

8.10: Summary of Special Interest

The Harecastle Tunnels and bridge 130 are, without doubt, the main surviving features of historic interest within the conservation area. The tunnels provide undisputed evidence of the technical prowess of industrial engineers during the 18th century. Architectural details within and adjacent to the surviving structures still exist that help to illustrate the historic narrative of industrial endeavour within the area.

Over time, the decline of industries in this area has resulted in regenerative tree planting becoming established. The character is shifting from an industrial character to an urban peripheral 'green' character.

8.11: Recommendations and Proposals

The heritage features, particularly the Harecastle Tunnels and Bridge 130, should be protected and preserved, in order to articulate the historical narrative of the Trent & Mersey as a working canal.

The reservoir, when combined with the close proximity of Westport Lake has the potential to provide enhanced leisure and amenity use, through the promotion of its ecological assets and re-use of redundant land for parking.

It is also suggested that residential land uses replace industrial uses currently situated to the immediate north of Westport Lake. This would continue the primary frontage of residential housing overlooking the canal and Westport Lake, extending the desirability of this outlook.

9. WESTPORT LAKE CHARACTER AREA

9.1: Introduction

Westport Lake has attracted significant investment in the last twenty years and has witnessed beneficial improvements, such as the development of Westport Lake Visitor Centre and residential housing development. The introduction of residential uses in this area in addition to industry has created an interesting mix of uses, and the amenity value of Westport Lake is becoming increasingly recognised and valued by the wider surrounding communities.

9.2: History & Archaeology

The construction of this stretch of the canal during the 1770's cut through a rural area. Industries developed on the eastern bank north of Longport Wharf (with an emphasis on potteries), taking advantage of the proximity of the canal for transport linkages but apart from Brownhills colliery and the railway line along the west side, the area was still mainly agricultural until the end of the 19th century. By this time Westport Lake was established along the west bank of the canal, eventually becoming the centre for a wildlife park. On the east bank a housing development has recently replaced a former tilery, which itself had replaced the Brownhills colliery in the early 21st century.

9.3: Historic and Existing Land Uses

Prior to the existence of the Westport Lake, the site was formerly agricultural land, and then a football pitch. The football pitch became unuseable due to subsidence caused from underground mining. The subsequent hollow filled with water, forming what is now known as Westport Lake, evident on historic maps dated 1900 (please refer to appendix). South of the lake, the remnants of agricultural uses remained. Industry flanked the eastern boundary of the canal. Residential uses were peppered occasionally within the area.

Westport Lake Nature Reserve occupies a significant area, with a series of waterbodies and channels adding to the habitat mosaic that supports a wide range of biodiversity. The establishment of the Visitor Centre recently serves as an educational resource for surrounding local schools. Industrial uses still flank the south eastern boundary of the canal, although the functional relationship with the canal has ceased to exist. A significant block of residential housing has replaced industrial uses to the north eastern edge of the area.

9.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

The new Westport Visitors Centre is an interesting and award winning contemporary building and makes a distinct contrast to many other buildings in the vicinity, through the distinctive use of modern materials and form. The building was developed by British Waterways and is constructed using sustainable materials and methods. It has become a landmark building in this section of the conservation area.

Many of the former industrial buildings that fronted the canal (as evidenced in the 1900 maps) have been demolished. This has created gap sites in places that are currently used for servicing and parking. Where re-development has taken place, buildings have been set back from the canal edge, reducing the sense of interaction and the historic narrative of the canal. Some industrial buildings still remain however, showing a utilitarian character.

Fig. 9: View of Westport Lake from the Visitor Centre

Architectural Character, Materials, Colours and Textures

The Visitor Centre building has an interesting mix of materials and textures consisting of timber, steel, glass and brick. The reclaimed red brick gives a sense of continuity from many of the other red brick buildings in the vicinity, where the timber decking and oak stilts fit in with the natural parkland setting.

Other buildings within this stretch of the conservation area are predominantly constructed of red brick. The weathered character of traditional bricks and rhythm of roof pitches adds authenticity to this stretch.

The bridges numbered 128 and 129 are very industrial and simple in their character, consisting of simple red brick abutments and piers with the span consisting of iron girders and iron railings. The stone copers are the only decorative features of note but they contribute to the character and setting of the conservation area.

Although a minor detail, the painted finish to window detailing in some instances to historic industrial buildings is decorative, further contributing to the character of this area.

Built Form & Massing

The character of Westport Lake is diverse. The lake is a natural landscape feature, nestling within the flood plain of the Fowlea Brook Valley, but urban development encloses this natural landscape on the eastern edge. The planned arrangement of urban housing development is reflected in the linear structure of the canal, yet the nature of the lake as a container of water is repeated in the canal also. The canal forms the perfect interface between the two contrasting character areas.

The local topography and scenic landscape has been exploited by the modern housing development on the eastern bank to the north of Westport Lake Visitor Centre, with residential

properties facing onto Westport Lake, enjoying elevated views across the open expanse of water and green backdrop of the Newcastle Ridge.

The built form and massing of the industrial units further south of the visitor centre contrast markedly with the arrangement of residential housing fronting the canal. Building heights vary from single to three storey. The buildings are arranged in an adhoc fashion, as space has permitted with the expansion and contraction of industrial units over a period of time. Consequently, building orientations and roof pitches vary. The historic arrangement of industrial building clusters results in enclosed courtyards on the eastern bank to the south of Westport Lake Visitor centre. The enclosed nature of the courtyards creates a series of open spaces that are reminiscent of amphi-theatre arrangements; the definition of the canal edge is articulated by the intermittent construction of historic buildings to the edge of the canal, where these buildings survive. This characteristic built form and massing is also evidenced within Longport Wharf and Middleport.

Style

The character is informal and transitional, where there is a distinct change from the historic industrial character of Longport Wharf to the more urban peripheral character of Chatterley Valley. Whilst some remnants of historic industrial character remain, these aspects have become diluted in part through demolition and adaptation to more modern industrial uses. Remaining historic structures show a utilitarian character with minimal decoration that is characteristic of the industrial period.

External Walls and Facades

External walls and facades adjacent to the canal are predominantly comprised of traditional red brick that displays a weathered patina. The Westport Lake Visitor Centre has interpreted this characteristic successfully, through the use of reclaimed brick within the lower portion of the building elevation.

Roofs

Plain clay tiles are evident within the industrial roofscape further south of the visitor centre. There is an interesting arrangement of four gable ends and corresponding roof pitches, containing a formal arrangement of building entrances on the eastern bank to the south of Westport Lake Visitor Centre that is noteworthy for its rhythm and symmetry.

The Westport Lake Visitors Centre is covered in a sedum roof that compliments the landscape setting that surrounds it and illustrates how modern design interventions can integrate successfully with an historic setting.

Windows

Traditional examples of timber and metal crittal windows with segmental arches can be found in the industrial area to the south of Westport Lake. As mentioned previously, timber window frames have been further defined through a coloured paint finish. This is a decorative detail that is strongly characteristic of historic industrial architecture in the area.

The windows of the visitors centre are contemporary in design, constructed of metal, and slender in appearance. Modern aluminium windows have been successfully integrated within the façade of Desem Lifts, facing onto Davenport Street. Again, this illustrates how modern design interventions can be integrated successfully within an historic setting.

Fig. 10: Repeated gable and roof pitch details facing towards the canal, south of Westport Lake Road

Fig. 11: Industrial building with painted window frames with segmental arches

Details and Features

Bridges 128 and 129 are very industrial and simple in their character, consisting of simple red brick abutments and piers with the span consisting of iron girders and iron railings. The stone copers are the only decorative features of note but they contribute to the character and setting of the conservation area. The finish of the masonry is of a high quality and the metalwork provides a degree of decoration which is largely absent in this section of the conservation area.

Groundscape & Public Realm

The quality of the natural environment at Westport Lake is very high, with regenerative and wet woodlands framing the walkways of Westport Lake. Tree cover forms an important component of the landscape setting of the waterbodies, providing enclosure to the lakeside setting, blending successfully with the green backdrop of the Newcastle Ridge and providing a natural buffer to the surrounding industrial uses to the south and east of the lakeside setting. The arrangement of planting is naturalistic and informal. The deciduous nature of the trees provides visual interest throughout the year through changing leaf colour and cover. Within the more enclosed wet woodlands of Westport Lake, timber bridges span watercourses, reflecting the green character of the lakeside setting. Visual permeability is maintained between the lake and canal north of the visitor centre due to the lack of shrub planting. Orientation and interpretation signage is common around the walkways of Westport Lake, providing wildlife information.

Public access to and from the canal is sufficient, with bridged access at three points within the Westport Lake stretch. Natural surveillance of the canal north of the visitor centre is excellent, due to the orientation of housing onto the canal and the open nature of the landscape. Natural surveillance further south of the visitor centre is lessened due to the orientation of industrial and commercial premises away from the canal, in order to attract trade from vehicular routes. Premises are only occupied during working hours, reducing natural surveillance further, and unmanaged vegetation adjacent to Westport Lake screens views to the canal from Westport Lake, reducing natural surveillance further.

Paving treatments are predominantly resin bound gravel, which complements the natural character of Westport Lake. Staffordshire blue paviours distinguish the canal moorings from the wider area, re-iterating the use of locally distinctive vernacular materials.

Isolated remnants of brick edging to the canal edge remain in situ, particularly on the eastern bank of the southern section of Westport Lake, and should be retained where possible.

Level changes tend to be resolved through gentle slopes, owing to the undulating character of the topography. However, the steps leading to the bridge north of Price & Kensington are poorly placed and narrow. Level changes leading to the bridge need to be resolved more successfully to allow for inclusive access.

Boundary treatments are comprised mainly of wire netting screened by woodland within Westport lake. Building elevations intermittently line the canal edge within the industrial area, strongly defining the canal edge, whilst internal courtyards provide enclosed spaces adjacent to the canal edge.

Lighting along the canal corridor is restricted to functional lighting illuminating Cloughwood Way. Due to the ecological nature of the site, the potential for lighting is likely to be restricted so as not to deter bat foraging at night time.

Seating and picnic tables are provided within Westport Lake, particularly adjacent to the canal moorings, enhancing the amenity value of Westport Lake for local residents further. There is an absence of cycle stands, which is frustrating for cyclists wishing to secure cycles whilst visiting the visitor centre and café.

9.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Westport Lake is designated as a local wildlife site, due to the over-wintering bird population. The Lake is located on a migratory route for birds, with over 200 species spotted. It supports a range of different habitat types within and adjacent to the conservation area, including wet alder woodland and fresh water ponds, east of the Fowlea Brook. The ponds support breeding amphibians. Bats have also been sighted in this area. This mix of habitat types supports local biodiversity and allows for the movement of invertebrates, small mammals and birds.

Sighted rarities include the black-throated diver, great northern diver, red-necked grebe, slavonian grebe, leach's storm petrel, purple heron, velvet scoter, honey buzzard, marsh harrier, osprey, avocet, kentish plover, purple sandpiper, arctic skua, bonaparte's gull, ring-billed gull, caspian tern, little auk, wood lark, richard's pipit, hume's leaf warbler, yellow-browed warbler, great grey shrike and arctic redpoll. During April to September the species numbers increase. Passage waders and terns have been sighted. However, due to the popularity of the park, bird sightings are decreasing, illustrating the requirement to balance the amenity use of the park against the needs of migratory bird species.

9.6: Topography, Views & Enclosure

Westport Lake is situated within the valley flood plain of the Fowlea Brook, enclosed by the Newcastle and Tunstall ridge lines, with the brook forming the lowest level within the valley. The character of the topography edging Westport Lake can be described as gently undulating. The canal sits to the eastern edge of the lake, elevated above the main expanse of water. Land to the east of the canal rises up from the canal.

The Newcastle and Tunstall ridge lines enclose the valley flood plain, and tree cover further encloses the lakeside setting. The expanses of water limit successional growth of trees. The resulting open character creates picturesque and expansive views across the lake within the valley setting.

Urban development on the eastern edge of the canal obscures long distance views, and defines the canal edge. Vegetative growth lining the brook to the north of the Sea cadet hut screens views of Westport Lake from the canal.

The topographical nature of the area, combined with the arrangement of tree cover and open water bodies combine to create expansive views from the canal across the valley flood plain that are of exceptionally high quality within the canal corridor. The innovative architectural design of Westport Lake forms a focal point within the natural landscape setting.

Further south of the visitor centre, views within the canal corridor become channelled, due to the arrangement of development and natural vegetation, but the curvature of the canal and clustered arrangement of buildings creates local points of interest. The orange and blue cladding treatment to a four storey tower within one of the industrial building complexes is also a feature of visual interest that can be viewed from various locations within this section of the conservation area.

The dilapidated condition of the sea cadet hut and unmanaged nature of the vegetation surrounding it impairs the quality of views from Longport Wharf.

Views of parked cars associated with the visitor centre detracts from the quality of views afforded within Westport Lake.

There are very few views into the conservation area, as the natural vegetation surrounding Westport Lake screens views from the north, west and south. Additionally, buildings screen

views into the conservation area from the east. Views can be obtained from vehicular access points leading from the eastern approaches towards the lake.

9.7: Detractors & Gap Sites

Whilst sustainable design principles have informed the development of Westport Lake Visitor Centre, these principles are not reflected fully in the design of external works associated with the development. The design of the car park is open, expansive and covered with tarmac surfacing that precludes sustainable urban drainage. By way of character, it could be described as a distinctly urban intervention within the natural landscape setting of Westport Lake. Views of parked cars and the toilets are visible from the opposite side of the lake and detract from the high scenic quality of the lakeside setting. The inclusion of tree planting within the car park would significantly help to mitigate views of parked cars. Poor quality landscaping immediately surrounding the visitor centre further detracts from what would otherwise be a high quality built intervention within the lakeside setting.

Likewise, views of car parking and industrial clutter within the enclosed courtyards of industrial units also detract from the overall visual quality of the canal. Views could be enhanced by tidying up courtyards and introducing tree planting in some instances to partially screen views of parked vehicles.

The former sea cadet hut situated at the southern entrance to Westport Lake offers little in the way of architectural quality. It is in poor condition and subject to vandalism. Stands of the Japanese knotweed to the north of the sea cadet hut are extensive, and will continue to spread if an eradication programme is not undertaken.

The quality of the public realm leading to the bridge opposite the sea cadet hut is extremely poor. At the very least, level changes need to be properly resolved to allow for inclusive access and encourage pedestrian and cycle use.

Fig. 12: The Sea Cadet Hut

9.8: Enhancement and Development Opportunities

Management of the woodlands and fresh water ponds by the Staffordshire Wildlife Trust should continue, and consideration should be given to obtaining a balance between the amenity uses of the area and the needs of wildlife. This could include restricting access to more remote areas. Tree planting to the visitor centre car park would further enhance the quality of views of the Visitor Centre from Westport Lake.

The symmetrical gable and pitch arrangement that currently houses the leisure centre would contribute significantly to the visual quality of the canal corridor if it was given a lick of paint. There is also an opportunity to utilise this western aspect for outdoor seating to the front of this elevation during the afternoon and evening that would further complement and advertise the facilities contained within the leisure complex.

The southern entrance to the park could be enhanced through the removal of the Sea cadet hut and development of high quality public realm, to better articulate the location of the park within the immediate vicinity of Longport Wharf & Middleport. As part of this initiative, the quality of the public realm leading to the steps and bridge adjacent to the Price and Kensington building could also be addressed. A Japanese knotweed eradication programme would have to be implemented in the short term, to facilitate this improvement. This measure, combined with a selective thinning approach to scrub lining the brook, would help to open up views of the park from the industrial units fronting onto the canal, increasing the desirability of this location for the re-location of small cycle-friendly businesses, thereby contributing to a more sustainable local economy. By way of a community initiative, the courtyards associated with the industrial units could be de-cluttered & tidied up, to further enhance the visual quality of this area. These measures would help to make the area looked cared for and transform the image of Longport Wharf. A guaranteed uplift in the property market of this area would result, with minimal public sector investment.

Infrastructure provision for cyclists at Westport Lake would promote the use of sustainable transport, including cycle hire and maintenance facilities, in addition to cycle stands. These measures would support the cycling links to Chatterley Valley.

9.9: Pressures & Threats

The ever increasing popularity of the lake is resulting in conflicts between the needs of wildlife and people. The needs of wildlife need to be prioritised and protected, as the success of Westport Lake is, to a large part, due to the wildlife of the area. A management plan should be produced that overlays human leisure and amenity uses onto the habitat of Westport Lake in such a manner that the very special ecological value of Westport Lake is protected and preserved.

As popularity of the lake increases further, there will be increased pressure for additional parking provision. It is suggested that overspill parking be provided within the Chatterley Valley area (as identified previously). This will encourage access to the lake by sustainable transport modes and provide opportunities for regional boating events, whilst minimising damage to the natural habitat and environment.

Future re-development schemes need to be integrated carefully, and should be restricted to the eastern bank, preserving the quality of views towards Westport Lake and the green backdrop of the Newcastle Ridge. Associated with this pressure is the likelihood that existing industrial buildings will be proposed for demolition. The organic character of building arrangements should be preserved, and original features become incorporated within developments where possible. Materials should be carefully selected to reflect the historic built character of the canal corridor.

Future development on the Tunstall and Newcastle Ridges will also impact upon the quality of views from the lake, and these impacts should be carefully considered during any planning applications for development on this ridge. The naturalistic character of Westport Lake should be promoted, rather than eroded.

9.10: Summary of Special Interest

The organic arrangement of historic industrial units, with the resultant changes in building scale, orientation, enclosure and architectural detailing creates significant character along of this stretch of the canal conservation area that is locally distinctive. It further articulates the historic narrative of the development practices along the edge of the canal during the 'Golden Years'. This trait should be respected and preserved.

Likewise, the historic landscape setting of Westport Lake undeniably contributes to the high visual quality of the conservation area in this section and needs to be protected and preserved.

9.11: Recommendations and Proposals

The organic character of the industrial area on the eastern bank to the south of the visitor centre needs to be acknowledged and respected. Heritage regeneration initiatives would be appropriate in this area.

Buildings built to the edge of the canal should be retained, or re-instated during re-development. Bridges 128 & 129 should also be retained and maintained.

The landscape setting of Westport Lake contributes significantly to the successful re-development of this area and should be protected and preserved, with an emphasis on placing the needs of ecology above amenity uses and re-development.

The design of car parking and servicing arrangements need to be sympathetic to the historic setting.

10. LONGPORT WHARF & MIDDLEPORT CHARACTER AREA

Fig. 13: The courtyard of the Westport Tool & Die Works

10.1: Introduction

The character of Longport Wharf and Middleport has changed very little, with many of the pottery factories, mills, works and houses still in situ. Terraced streets lead directly into enclosed factory courtyards that face directly onto the canal. The completeness of the historic fabric is remarkable when compared to other sections of the Trent & Mersey and tells a complete social history of the area during the industrial era.

10.2: History & Archaeology

Longport Wharf developed from the 1770s where the turnpike road from Newcastle to Burslem crossed the Fowlea Brook on a causeway known as Longbridge. The name changing to Longport following construction of the canal.

Initially the area was developed by men intimately connected with the canal, including John Brindley (brother of the engineer James Brindley), and Hugh Henshall, who took over as engineer following Brindley's death in 1772. Even before completion of the canal John Brindley bought land at Longport and erected two pottery factories and lime kilns. Henshall operated the main canal wharf at Longport and built the Packhorse Inn. He was a partner in two potteries.

By 1843 three of these potteries (Longport Pottery, Top Bridge Works, and New Bridge Works), and a fourth nearby at Newport, were owned by John Davenport, along with a glass works adjacent to the Longport Pottery. Davenport was also a significant investor in the building society that constructed houses at Princes Square and Clarence Street in 1807 (all now lost to modern development). This was the first housing in the area; previously workers walked down to the factories from Burslem. The Davenports also enlarged Longport Hall on Newcastle St. Mismanagement led to the bankruptcy and break up of the Davenport empire by the 1880s and the terraced houses of Newcastle St, Bridgewater St, and Shirley St were built on the site of Longport Hall in 1885.

Several wharves occupied the east bank of the canal, as did several potteries. As well as the Davenport's works these included the Dale Hall Pottery (established by John and George Rogers in the late 18th century), the Dale Hall Works (founded in 1790), and the Albion & Leighton Pottery from the mid-19th century; all these three have now been subsumed by the Steelite factory. Burgess and Leigh built their model Middleport Pottery in 1888-9, and the Anderton Canal Company erected a large warehouse and boat repair yard on the adjacent site in the 1890s. Further down at Newport the Mersey Pottery of c.1850 (where Clarice Cliff's wares were produced in the 1930s) and the Newport Pottery of c.1795 have both been replaced by a modern housing development. Three mills still stand on the canal bank: the Port Vale Corn Mill of 1844 (locally listed); the Middleport Flint Mill of the 1880s (grade II listed); and Oliver's Mill, a flint mill of c.1900 (grade II listed); only Oliver's continues to operate as a mill.

The area between the canal and Burslem was gradually filled with terraced housing throughout the 19th century: the grid of streets of Maddock Street, Morton Street, Woolrich Street, Travers Street, and Port Street remains largely intact. Middleport Park was laid out in 1908 on the former St John's Rectory garden.

The west bank of the canal, however, saw little development, except for Station Street, where buildings of the mid to late 19th century survive either side of the Packhorse Inn, including a brass foundry now used as smaller workshops. The area now occupied by Scott Lidgett Industrial Estate remained empty until an expansion of the Furlong Colour Works in the 1960s. The colour works had been replaced by the industrial estate by the 1990s.
The low-lying marshy area along the Fowlea Brook was managed with drains and sluices but used mainly for refuse heaps of pottery waste throughout the 19th and 20th centuries, which are now greened over. Allotment gardens, still in use, were established in the early 20th century.

A branch canal connecting the Trent and Mersey with Burslem was built at a later date (in 1805), with wharves at the end of Navigation Road and a railway running along Navigation Rd to the town centre. Elements of these wharves survive, including stone-lined retaining walls and warehouse buildings. The branch canal bank collapsed in 1961 and the branch was filled in the following year, leaving several canalside buildings redundant, including the former Co-op bakery, latterly used as a warehouse.

Fig. 14: Original warehouses still line the former Burslem Port Basin, now filled in

10.3: Historic and Existing Land Uses

Historically, land uses adjacent to the canal were industrial, with residential land uses sandwiched between the Trent & Mersey and Burslem branch canal. Commercial and civic uses were located at key nodal points and on main transport routes. Notably, the rectory was located at the centre of Middleport, signifying the status of the church during the historical development of this area. Agricultural land use still remained to the west of Middleport where industrial uses did not encroach.

Land uses flanking the Trent & Mersey canal remain relatively stable, although housing has replaced former industrial uses south of Middleport Park. A transition occurs between the industrial character of Longport Wharf and residential character of Middleport South. In the Longport Wharf area, industrial uses still flank the canal, with housing situated to the east of industrial sites, accessed via Newport Lane. Residential uses and allotments have replaced former agricultural land to the western edge of the canal, and Middleport Park has replaced the former Rectory on the eastern edge of the canal. The allotment and park provide valuable amenity space to local residents and signify a change in cultural practices whereby amenity pursuits are replacing religious practices. Civic and commercial uses still remain adjacent to key transport routes such as Station Street.

The Burslem branch canal has been filled in but industrial sites flanking the former Burslem branch canal have survived in places. Vacant brownfield land now replaces former residential uses in this area.

10.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

Fig. 15: View of Price & Kensington Pottery and bottle kiln from Newcastle Road

The Price and Kensington Teapot Works, Newcastle Street is a Grade II* pottery, which is currently on the At Risk Register. It consists of a significant complex of historic buildings and works including a bottle kiln which acts as a landmark along the canal, significant for its relatively large girth. The very tall chimney within the site is also an important feature. The Pottery factory was constructed in the 19th century, with later additions, constructed mainly of brick with plain tiled roofs. The main range to Newcastle Street is 11 bays. Other buildings are arranged to form a series of enclosed spaces. The Price and Kensington warehouse is early nineteenth century, brick and plain tile, two storey warehouse building with cambered head windows, standing close to the canal edge. Workshops and warehouse buildings line

the canal, with many of their window openings now blocked up. The canal twists and turns through the complex of industrial units. This provides many vantage points and views into the enclosed yards which contributes to the distinctive sense of place.

The Duke of Bridgewater Public House on Station Street is a listed grade II structure. Formerly an early nineteenth century dwelling house, the building has been adapted to function as a public house. It is mainly of brick construction with a plain tiled roof. Comprising 3 storeys, the front elevation has three bays with a central door and side lights in wide architrave, with paired pilasters carrying open pediment. The flanking windows are sashes with flat arched stuccoed heads with expressed voussoirs. The lower windows are renewed in their original openings but are filled in with metal sheeting. The building also has a moulded eaves cornice, gable and chimney stacks.

The front elevation of the Packhorse Pub on Station Street shows architectural detailing that is typical of the 1840's and retains the original wooden mouldings, windows and other features, within a rendered finish to the front elevation, and plain tiles to the roof. The rear of the building is designated as having special local interest. It was built by Henshall in the late 1770's to provide accommodation for boatmen and carters and their horses. When it was offered for sale in 1871 it was described as containing 'extensive cellaring, bar, bar parlour communal room, tap room, kitchen, scullery, large billiard-room and club room to seat 150 persons, and the outbuildings comprise large brewhouse, malthouse, stabling for 11 horses, coach-house, piggeries and large skittle alley'.

No. 34, Station Street is interesting because the richly detailed front elevation, incorporating decorative stone detailing to the upper floor window and Flemish gable. The gable is designed to conceal the more modest and utilitarian side elevation that can still be viewed from Station Street.

The Westport Tool and Die Works on Canal Street is a brick and plain tile building with repetitive window patterns, fronting onto the canal towpath. The surrounding buildings associated with the factory are a mixture of different building styles. One historic gable remains that has been compromised by later structures, significantly affecting its integrity.

Longport Wharf (Grade II listed) consists of a pair of warehouses that are owned and leased out by British Waterways, with associated boat yard. The buildings date from c1840, and are of two storeys, with brick with plain tiled roofs. The roof of one of the warehouses has suffered from arson attack and a new roof covering is urgently needed. This listed building is currently at risk. The building has a distinct set of bays forming a strong elevation and features a series of oculi.

Middleport Pottery is a grade II* listed works, dating from 1888-1889. It is constructed of brick and terracotta with plain tiled roofs. This building is currently on the At Risk Register. The character of this listed works vary considerably between that of the canal and Port Street. Port Street's façade is very formal with a grand appearance which is assisted by the regular spacing of gables, the cart entrance and its terracotta detailing. The main range of 2 storeys and 34 bays, articulated by advanced gables at intervals housed the printing shops, offices and showrooms. An entrance is situated beneath the pedimented gable to the right, with double step brick arch and narrower foot-door alongside. A cartouche is contained within the pediment with date and name: 'Middleport Pottery'. Other features to Port Street include the terracotta eaves cornice and axial stacks. A series of workshop buildings arranged within the rear yard still enables the original production processes to be traced, with the former engine house to the east, the preparation and making areas adjacent and to the north and the single surviving bottle kiln at the centre of the site, with a broad circular hovel. Production processes finished at the western side of the site, and there is a surviving warehouse range and loading cranes alongside the canal. The factory was built as a new complex for an established company and was seen at the time as a model factory designed with a logical production plan incorporating linear movement with some sideways movement reflecting the quantity and range of production on the site.

Fig. 16: Middleport Pottery facing onto Port Street

The Anderton Building in Port Street is a tall, thin brick building with plain tiled roof and wooden loading structure overhanging the canal, adjoined by a relatively low building, with a canopy overhanging the canal. The gable detailing includes the wording *Anderton Co.* and the date *1890*. The windows have cambered arch heads and timber frames. This building is designated as a building of special interest and was developed by the Anderton Canal Company as a warehouse and boat repair yard. The wooden structure facing onto the canal was a lift that was used to load and offload goods from the narrowboats below.

Port Vale Mill, Milvale Street is an example of a Hungarian Roller Flour Mill. It was commissioned by Fitton & Pidduck Ltd who were millers and flour merchants, hence the explanation for the name of Pidduck Street adjacent to the mill. The Hungarian Roller system replaced the original system of stone milling with a mechanical and efficient system of flour milling that produced a flour product that was more consistent in quality. The building is a structure comprised of brick walls, built directly onto the water's edge. The original roof has been removed. This building is suffering from neglect.

Middleport Mill (former calcining works), on Milvale Street is a listed grade II structure, constructed during the early nineteenth century, with later additions. It is constructed of brick with plain tile roofs. Buildings are arranged around a central courtyard which contains a tall rectangular section calcining kiln, with two flues separated only at the apex. The long range to the right was formerly single storeyed, but was raised in the early 20th century to incorporate a narrow tower. There are various other single storey workshops around the perimeter of the site and a small gabled building adjoining the left is possible a former engine house. A loading gantry overhands the canal above a first floor loading door. This building is in a state of disrepair and is at risk. The Mill to the south of Pidduck Street is of special local interest, given the brick construction, built to the canal edge.

Oliver's Mill on Newport Lane is a listed grade II, late nineteenth century structure. It is two storeys in height, constructed of brick with plain tiled roof. It was formerly used as a calcining works. The kilns add interest to the structure, in that one is round in section and one is square in section with heavy moulding. This building is in a state of disrepair and is at risk.

The terraced form, providing efficiently compact accommodation, is ubiquitous to industrial development. In this area however, the standard of detailing rises considerably above that, say, in the cottom belt from Merseyside to the Lancashire Pennines. The double fronted

terraced housing on Maddock Street is referred to in the North Staffordshire Connurbation Assessment of Historical Significance and is described as ‘exceptional’ in its historical interest. These houses were built to accommodate the managers and designers of Middleport Pottery, and consequently are more generous in their dimensions, architectural quality and decoration. The decorative ceramic dentil that marks the eaves line is interrupted by a series of small roof gables, the ridge of which is decorated with ceramic ridge tiles. Decorative string courses are marked with contrasting brickwork. The original footscraper inset into the front elevation is still in situ. Other housing in the area is more austere in style and character, but remains relatively intact. Decorative details do occur however, such as the decorative console brackets that finish the flat arches to doorways and decorative engravings. The use of stone dressings and decorative brickwork produces streets of definite quality. Some of the houses still retain the original bottle bollusters to front windows.

Fig. 17: Double fronted housing on Maddock Street housed managers and designers who worked at the Middleport Pottery

The White Swan Public House was originally two semi-detached houses. The 1900 map shows amalgamation of the houses within a pottery that developed on Newport Lane. The building has been substantially modified to attract passing trade, but the modest character of the original housing is still evident.

The original wharf building that defined the Burslem Port Basin is still in situ, although the Basin has been filled in and now functions as a yard. The building is two to three storeys in height, with a corrugated roof.

Fig. 18: Canal wall leading to the Staffordshire Union Railway Canal

The Shropshire Union Railway Building on the former Burslem Port Arm alignment is a surviving example of an industrial building that had a branch arm connecting directly with the building, defining the orientation of the building. The building is constructed of brick, with a double pitch plain clay tile roof. The roof overhang to the branch arm is still evident. The building is two storeys in height, Two circular arched entrances that are infilled with blockwork are still evident on the south east facing orientation. New entrance arches have been added at a later date. Many of the original features of the building still survive internally. Similarities in the design of this building exist with the Longport Wharf warehouses opposite Price & Kensington.

The former Co-op Bakery Building is surprisingly high, comprised of 4 storeys, with a large commercial floor plate. The remains of a wooden loading structure are still evident to the façade fronting the canal, yet again demonstrating the working relationship of the canal to the buildings. This building is in a significant state of neglect and disrepair.

Architectural Character, Materials, Colours and Textures

The predominant style of buildings is modest and simple in character. The eastern façade of Middleport Pottery is notable for its austerity, reflecting the authority and power of Burgess & Leigh at the time of construction.

Buildings are constructed predominantly of red brick, with decorative stone and brick details in instances. The main colours are brick red and grey.

Fig. 19: The former Burslem Port Arm Canal, with the former Co-op Building to the foreground

Built Form & Massing

The built form in the Longport Wharf area can be described as urban. Buildings range in scale and massing from single storey to three storey. By way of exception, Middleport flour mill adjacent to Pidduck Street comprises of 5 storeys and the former Co-op comprises 4 storeys. Historic bottle ovens punctuate the skyline, due to the contrast of sinuous form and height. Within the industrial areas, the roofscape and gable orientations vary with the different heights between the different workshops and warehouses. The built form is best described as organic. The organic character has become accentuated over time due to the ad-hoc arrangement of extensions to buildings over time, as businesses became more successful and expanded. Middleport Mill is a prime example of this. The organic arrangement of buildings provides a great deal of visual diversity and interest, especially where bottle kilns and towers punctuate the skyline.

The geometric street grid of Port Street, Harper Street, Maddock Street, Morton Street, Woolrich Street , Burgess Street and Travers Street contrasts with the organic layout of industrial units adjacent to the canal. The two storey terraced arrangement of housing results in a consistent building line built to the back of pavement: eaves lines and roof pitches are consistent. Residential buildings adjacent to the canal and situated further south of Middleport Park are consistently 3 storeys in height, with rear elevations facing the canal edge.

Buildings and walls to the eastern edge of the canal tend to define the canal edge boundary. The fenestration and detailing of elevations combines to form a prominent and distinctive feature within the conservation area at this point. Buildings to the western edge of the canal tend to be set back from the canal edge. The drop in topography further decreases their prominence within the conservation area, as buildings are situated below the canal tow path. The historic arrangement of building clusters results in enclosed courtyards, such as can be seen at Price & Kensington and Canal Street Works.

The former Co-op Bakery Building is the last remaining building in situ that illustrates the typical scale and massing of buildings adjacent to the Burslem Port Arm canal edge that would have existed prior to demolition. It is surprising high (comprised of 4 storeys), but

historic photographs show that this was typical along the western edge of the Burslem Port Arm Branch Canal.

Style

Within the Longport Wharf and Middleport stretch of the conservation area, remaining historic buildings are typical of red brick industrial buildings and housing of the 19th and 20th century, displaying a utilitarian style. A sense of rhythm and proportionality is evident on the public face of Middleport Pottery (facing onto Port Street), but elsewhere a vernacular style pervades.

External Walls and Facades

Building façades tend to define the edge of the canal or footway, rather than walls. The Middleport Pottery gable facing onto the canal is distinctively angled, adding further character to the canal corridor.

Significant retaining walls negotiate the level differences that separate former housing areas in Middleport with the lower levels of the former Burslem Port Arm Canal Basin. They are constructed of stone and brick. The battered brick structure is particularly high (approx. 10m height) and demonstrates engineering skill typical for its time.

Fig. 20: View of Middleport Pottery yard and loading cranes from the canal towpath

Roofs

Roofs are predominantly that of plain blue Staffordshire tile with some Welsh slate used on some structures**.** The orientation and height of roofs differs within industrial premises, reflecting the adhoc nature of extensions. This is noticeable on the north facing elevation of the Westport Tool and Die Factory. However, roof pitches within residential areas are consistent in their pitch and orientation, reflecting the geometric street grid on which terraced housing is placed.

Fig. 21: The random arrangement of roof pitches and storey heights within the Bradwell Street elevation of the Westport Tool & Die Factory.

Windows

As with many areas along the canal, many of the window openings that directly face onto the canal are blocked up. Where window openings survive, a mixture of timber and iron casement units are visible. Some openings have their windows missing. Of particular note are the examples of oculi, or rounded windows, that can be seen on the Longport Wharf warehouses and the Shropshire Union Railway Building. The oculus on the gable of the Shropshire Union Railway building has a decorative metal grill (the original windows to lower storeys have been infilled with block work but segmented arches are still evident). The round head arched windows with iron frames to Port Vale Mill also add distinctive character to this section.

Fig. 22: Longport Wharf Boat Yard enclosed by listed warehouses

The windows on the Price & Kensington building are mainly flat arched heads and timber frames. Original flat arched head sash windows have survived above ground floor level on the Duke of Bridgewater front elevation. Stone flat arches and sills are used on the front elevation to houses in Maddock Street. The middle window on the upper floor is defined by a brick relieving arch with recessed brick infill below. A corner gable elevation facing onto Burgess Street at the junction with Travers Street displays a pointed stone arch window detail with moulded terracotta infill.

Segmented headed brick arches and plinth headed sills define the windows of Westport Tool & Die Building on Canal Street. Many of the windows are infilled but panelled glazing is evident to elevations on smaller extensions west of the canal, suggesting that surviving casement windows have been replaced using a more modern design.

The Port Street elevation includes a series of pediments, containing Diocletian windows. The windows of this elevation are arranged in pairs and have cambered arched heads and timber frames.

The windows of the Anderton building facing onto the canal and Oliver's Mill have cambered arch heads and timber frames.

The Port Vale Mill possesses round head arched windows, many with iron glazing bars, as does Middleport Mill.

The windows to the ground and upper floors have been filled in on the warehouse fronting the Burslem Port Arm Basin, but the original timber panelled frames are still in place on the first floor windows. Large timber panelled windows are still in visible on the former Co-op Building, designed to allow for maximum light penetration within a building of large floor plate.

By way of anomaly, the decorative stone detailing to the upper floor window of no. 34 Station Street is comical for its ostentatiousness.

Fig. 23: Station Street elevation with no. 34 Station Street situated in the foreground

Details and Features

The entrance points to Price & Kensington & Middleport Pottery are worth mentioning for their decorative character. The decorative metal railings to Price & Kensington are finely worked.

Terracotta moulded signs above important entrance points are noteworthy features, including the terracotta detailing above the cart entrance to Middleport Pottery and the moulded signage above the wooden loading structure of the Anderton building.

The restored wooden loading structure is also a distinctive feature worthy of note, demonstrating the functional links between the building and the canal. The wooden loading structure of the former Co-op building is also evident, but in a state of bad repair. Historic photos also show a loading structure to the elevation of Port Vale Mill overlooking the canal.

Recent excavation in the former Burslem Port alignment has uncovered the canal wall and piers to the north of the former Co-op Bakery. This gives a good indication of the former canal alignment and the spatial relationship the canal had with the surviving industrial buildings.
Original timber doors are still in situ in instances, with smaller doors incorporated within them. External metal stair cases are also evident within courtyards.

As mentioned previously, the recurring use of oculi is also notable.

Fig. 24: Original timber doors mark a cart entrance from Longshaw Street

Groundscape & Public Realm

Public access to the canal is available from Station Street Bridge, Pidduck Street bridge, Newport Lane bridge and the bridge to the north of Price & Kensington. There is also private access for workers provided between the Steelite sites separated by the canal. Anti-social behaviour on Pidduck Street deters full use of this access point, restricting access to the canal for residents in the Port Street area. Heavy vehicular usage of Station Road results in delayed crossings for pedestrians, and severs the area of Longport Wharf in two.

The public realm is predominantly functional in character, providing for sustainable transport routes and boatyard access, although space exists for the development of a more generous and sociable public realm associated with some historic buildings, notably Price & Kensington courtyard, Middleport Pottery courtyard and The Duke of Bridgewater Public House.

Natural surveillance along the canal edge is restricted, due to the partial lack of occupation of historic buildings, combined with restricted hours of working associated with industrial land uses and inactive design of modern industrial elevations. Alternative uses for unoccupied buildings would help to address the lack of natural surveillance in the area for an extended period of time during the day and evening. The orientation of public frontages away from the canal compounds the lack of natural surveillance further.

Incidental trees serve to soften the hard industrial character of Longport Wharf. Mature tree planting adjacent to the A500 is visible in the distance and provides a green backdrop to Longport Wharf. Stretches of mature tree planting and native hedging lining the towpath edge in the Middleport area provides a sense of enclosure and enhances the quality of the canal-side setting. Areas of regenerative tree planting screen unsightly views of industrial yards situated at lower levels to the west of the canal. The scale of mature tree planting on the western edge of the canal complements the scale of the built environment on the eastern edge.

Due to the relatively intact nature of the historic built environment, large remnants of traditional stone sett paving treatments are numerous, with good examples of sett paving occurring in old factory courtyards and the forecourt to the boathouse. Stone setts and impressed metal panels are also evident at factory site entrances. Staffordshire blue clay paviours also occur in numerous locations in the Longport Wharf area, including the canal structure itself. The paviours complement the use of historic vernacular materials. Tarmac reinforces the urban character of Longport Wharf further, although the quality of surfacing is poor within the streets contained in the conservation area. Canal moorings occur on Canal Street, opposite Kensington & Price, but are not used. A poor example of paving in this area is the use of stones set into concrete at an inclined angle, next to the Packhorse Pub in order to accommodate an awkward level change. The stone sett incline within the Burslem Wharf area shows the characteristic raised course to provide a firm foothold on ascent.

The use of paving materials reverts to resin bonded surfacing with concrete edging in the less urban areas. This helps to reinforce the transition from dense urban character of Longport Wharf to the softer urban character of Middleport. Steel piling to the canal edge in Middleport detracts from the historic character.

Fig. 25: Staffordshire blue Rosemary tiles and square copers constitute vernacular walling

Boundary treatments make an important contribution to the visual quality of the conservation area due to the linear nature of the canal structure and associated land ownership. Boundary treatments within the conservation area on the Longport Wharf & Middleport section comprise a good mix of hard and soft treatments.

Typical hard boundary treatments to urban industrial areas include red brick, timber and corrugated metal finishes to building elevations. For the most part, walls are constructed of red brick and Staffordshire blue brick. A nice example of moulded copings can be found to the bridge to the south of the Burslem Port Basin. Metal railings, steel palisade fencing and corrugated metal boundaries are characteristic of the more industrial character of Longport Wharf, where quality takes second place to cost. High metal sheeting defining the northern boundary of Price & Kensington detracts significantly from the historic character and screens views of this historic factory from the approach of Newcastle Street. Boundary treatments on the western edge of the former Burslem Port Arm alignment are particularly poor in quality. Isolated incidences of traditional stone walling occur in the Longport Wharf area.

In the less urban area of Middleport Pottery, boundary treatments to the western edge of the canal are softer in character, although hard building elevations still predominantly occur on the eastern edge of the canal. An interesting example of historic vernacular treatments for walling occurs opposite Midwinter Court, behind the timber seat. Ceramic tiles have been laid on top of each other, and finished with a Staffordshire blue and stone coping. Timber sleepers laid on edge between steel H posts occur opposite Middleport Pottery. Timber retaining walls can be found at the bridge leading to Newport Lane. The use of timber complements the softer, green character further south of Middleport Pottery.

Fig. 26: Anderton's warehouse, with terracotta sign and loading lift

Signage in this section is associated with business use. Historic examples of signage can be found, such as the use of painted brick (Price & Kensington) pictorial swinging signs and chalk boards (Duke of Bridgewater public house). The moulded terracotta details signifying the Anderton boathouse and Middleport Pottery entrance are particularly beautiful examples of historic commercial signage, referencing the traditional industries in the Middleport area. Other methods of signage in the area are more modern, but predominantly constructed of timber, fixed to the building elevation. The Longport Wharf area has managed to avoid the onslaught of plastic neon signage in the main. Orientation signage and interpretation information for pedestrians and cyclists is not evident along the canal edge.

Lighting fixtures located within the canal corridor are sparse suggesting that night time lighting is minimal. Lighting columns are situated at entry points from Station Road and Newport Lane. However, there is no street lighting to Pidduck Street, resulting in anti-social activities in this area during night time hours. Additionally, due to the neglected state of historic buildings, feature lighting to historic elevations that would ordinarily emphasise the architectural character of Longport Wharf and Middleport does not occur. Incidental internal lighting spilling out from buildings adjacent to the canal does not occur because of the daytime working practices contained within the surrounding industrial buildings.

Seating within the Longport Wharf and Middleport area is minimal, although one bench opposite Midwinter Court is evident. Traditional timber materials have been selected, which ties in well with the surrounding green character of the western edge of the canal.

The amount of street furniture along the towpath is minimal. Consequently, general views along the canal are maintained due to the lack of clutter.

Within the former Burslem Port Arm alignment litter and tipping is a significant problem, due to the concealed nature of the former alignment and surrounding heavy industrial uses. In particularly, the setting to Oliver's Mill is compromised because of litter generated from the scrap yard to the east of the Mill. The environment along the Trent & Mersey canal further north of Oliver's Mill is generally litter free.

10.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Regenerative tree and shrub cover lines the edge of the canal structure on the western side of the Trent & Mersey, south of Burleigh Pottery. Regenerative shrub planting also occurs to the eastern edge of the Burslem Port Arm Branch Canal. Species include Willow, Sycamore, Ash, Birch, Maple, Buddleja, and bramble. The tree cover attracts bats. Middleport Park, vacant brownfield sites and the allotments combine to provide a range of different habitat types within and adjacent to the conservation area. Birds are attracted to the allotments, adjacent to the migratory flight-line of the Fowlea Brook Valley.

10.6: Topography, Views & Enclosure

The watershed for Middleport follows the line of Newport Lane, with the land sloping down to the Trent & Mersey to the west and the former Burslem Port Arm Branch Canal to the east.

For the most part, the eastern edge of the Trent & Mersey canal inclines slightly above the canal. The topography adjacent to the western edge of the canal varies significantly. The topography slopes away from the canal edge towards the A500 and flood plain of the Fowlea Brook, with significant changes in level occurring at the allotments. The disused tip associated with Middleport Pottery has resulted in a significant mound that rises above the level of the canal, which over time has become re-vegetated. The scrub planting screens views of the disused tip.

The arrangement of built form at Longport Wharf combines with the working industrial yards and boatyards to create a sense of enclosure along the canal that is comparable to that of an amphi-theatre. Buildings contain the space, but large areas of space occupy the centre.

The degree of enclosure increases adjacent to the Middleport Factory, as the canal edge becomes more strongly defined by building elevations, mature vegetation and rising topography. This results in more channelled views along the canal on this section.

Fig. 27: Port Vale Mill and Middleport Mill define the eastern canal edge

The stretch of the canal within the Longport Wharf and Middleport area is rich in local landmark features. The bottle ovens at Oliver's Mill provide a landmark feature on the approach to Middleport from the south. The Mill itself is a striking architectural relic from a bygone era. The bottle ovens and towers of the various historic industrial buildings provide distinctive landmark features due to their sinuous form and height, punctuating the skyline, including the former calcining kiln, Middleport Pottery kiln and tower and Price and Kensington kiln. The kilns are visible from the canal and bridges, but are screened from view from the wider townscape because of their locations within the general arrangement of factory buildings. The tower at Middleport Pottery is visible from the wider surrounding townscape because of its extraordinary height. The signage for Middleport Pottery and Anderton's boathouse create landmark features also as does the angled elevation and window detail of the Middleport Pottery building fronting on to the canal. Sadly, many of these landmark features are screened from view by buildings and are only visible from the canal. Consequently, they are savoured by the few, rather than the many.

The amphi-theatre arrangement of buildings within Longport results in wide views of the surrounding industrial townscape, with panoramic views available from Station Street Bridge, incorporating the Price & Kensington bottle oven and front elevation of the Longport Wharf boat house.

A further historic townscape view of good quality can be gained from the canal towpath looking towards the main Middleport Pottery entrance and cobbled courtyard. This view is

notably intact and untouched. A similar atmospheric view can be obtained looking through the entrance to the Westport Tool & Die Factory into the enclosed yard.

The enclosure of the canal whilst looking north from the towpath opposite Windsor Court frames views of the former calcining Mill and kiln in the distance. Another long distance view of the roofscape of Middleport Pottery and the associated terraced housing on Port street can be seen when standing to the south of the Steelite bridge, looking south. The continuous rhythm of chimney stacks is quite striking. An important townscape view can be obtained from Station Street bridge, following the line of Station Street to the junction of Porthill Road. The characteristic industrial townscape is set within the green backdrop of the Fowley Brook Valley and Newcastle-under-Lyme. Similar long distance views of the Fowley Brook Valley and Newcastle-under-Lyme can be viewed from the bridge to the north of Price & Kensington.

The comical elevation of Cherished Chimneys can be clearly seen from the approach of Scott Lidgett Road. The buildings and narrow street dimensions on Longshaw Street channel views towards The Duke of Bridgewater Public House. The decorative character of the pub contrasts visually with the utilitarian character of buildings enclosing Longshaw Street. Characterful views of the Price & Kensington Factory are also available from the approach on Bradwell Street and Station Street.

Characterful views within Port Street, Maddock Street, Morton Street, Woolrich Street and Burgess Street are strongly channelled within the extent of the street and enclosing buildings. The quality of views on Travers Street is diluted because of the absence of housing frontage onto the street, combined with poor quality public realm and derelict housing. Views into Port Street from Harper Street, Travers Street and Burgess Street afford opportunities for good quality townscape views that reflect the character of the conservation area. The austerity and symmetry of built form within the street is markedly intact. However, industrial boundary treatments to Port Street South and Harper Street compromise the quality of this townscape view. Views looking east towards Newcastle Street from the lane behind Price & Kensington reveal an intact historic townscape that has changed little over the years. However, vehicular traffic and signage detracts from the quality of this view.

Boundary and elevational treatments to industrial premises severely compromise the quality of views looking west from Newcastle Street to the lane bordering the northern boundary of the Price & Kensington Works. Likewise, views from the canal looking west towards the Scott Lidgett industrial estate are compromised for the same reason. Views from the canal towards the Steelite car parks could be improved by screening expanses of parked cars from view, or using an arrangement of buildings to enclose the car park, creating an internal courtyard that accommodates active use. The view from Pidduck Street looking towards the rear of properties on Milvale Street is particularly poor. Views of Oliver's Mill from the towpath are compromised by the scrapyard opposite the Mill, and associated litter.

Channelled views within the former Burslem Port Arm Branch Canal are marred by the derelict nature of buildings and poor quality boundaries enclosing the space. Heaped piles of metal and fridges are also visible from the former Burslem Port Arm alignment and detract further from the visual quality of this area.

Notable views into the conservation area occur looking north towards Station Street Bridge from Station Street and looking southwest from the Newcastle Street approach. The historic detailing of buildings frontages and bottle oven at Price & Kensington, combined with the rising arch of the bridge result in good quality views into the conservation area.

Land to the west of the former Burslem Port Arm Canal rises steeply, enclosing the western edge of this alignment for much of its length and obscuring views to the wider western landscape. Land to the east of the former alignment drops significantly and then banks up to form an undulating landscape.

10.7: Detractors & Gap Sites

Within the Longport Wharf area the neglected and disused state of the Price & Kensington building is a cause for concern. The car park to Price & Kensington is not used to its full potential and the quality of boundary treatments to the north and east of the factory are of low quality and are not complementary to the historic character of the conservation area. The quality of external works treatments to the lane north of the factory is poor.

Incremental demolition of former warehousing to the western edge of the former Burslem Port Arm alignment and subsequent lack of site development erodes the character of the conservation area further. The canal edge that was once defined by warehouses and factories is slowly being reduced to a pile of rubble, similar in character to the former Winkle & Wood Pottery within the A500 (south) stretch. The former Co-op Bakery is the last remaining building to define the western canal edge.

The Duke of Bridgewater public house and associated courtyard has also fallen into disuse and is in need of re-use and repair. Fire damage to the Longport Wharf boathouse detracts from the quality of the conservation area significantly, indicating the low value attached to significant historic assets within the area. The Steelite boundary to the south west of the towpath is inactive and does not integrate with the canal setting.

The historic industrial buildings are bespoke designed. More modern day industrial structures tend to be designed by template and fail to respond to the canal setting, such as the Scott Lidgett Industrial Park buildings, providing little in the way of architectural interest.

Car parking associated with industry detracts from the historic character of the area and quality of the built environment. The car parks are expansive and featureless in their plan form and contribute little in the way of activity or character to the conservation area. Treatments to car park boundaries do not complement the conservation area and are of low quality.

The demolition of end housing to various street blocks has resulted in the loss of building frontage to the back of pavement, further fragmenting the historic character. Empty and vandalised properties speak volumes about the lack of value that is attributed to the historic assets in the Port Street area. The quality of car parks and green space within Travers Street is poor, reduces the impact of the characteristic geometric street grid and contributes little to the historic setting of the terraced housing. The former enclosure to Newport Lane has been entirely lost. The newly developed Middleport Health Centre has been set back from the street, missing the opportunity to repair the street frontage to Newport Lane. A car park with mesh fencing now presents the public face onto this street.

The poor layout of modern housing to the north and south of the Port Street area further detracts from the character of the geometric street grid and terraced streets and shows no sense of continuity or reference.

Service yards and industrial sites in a state of neglect detract from the visual quality of the canal corridor and former Burslem Port Arm alignment. The scrap yard on Newcastle Lane adjacent to Oliver's Mill serves is a particular detractor to the setting of this listed building. Inappropriate boundary treatments (particularly on Port Street and Milvale Street) and poor quality boundaries on the western bank of the former Burslem Port Arm alignment combine to impact negatively upon the overall quality of the conservation area.

Generally, the quality of the conservation area is marred by the state of disrepair and neglect of historic assets in the area, and unsympathetic re-development that disregards the historic character of the built environment.

10.8: Enhancement and Development Opportunities

Longport Wharf and Middleport offer opportunities for regeneration that would boost the existing economy of the area significantly. A heritage led approach to regeneration would be

entirely appropriate, building on the strong architectural identity that the area already offers. An emphasis should be placed on re-activating and emphasising existing historic assets, bringing dis-used buildings back into active use, whilst extending periods of activity after working hours. A precedent example of this type of approach can be seen in Deritend, Birmingham, where fine grained industry has slowly become interspersed with fine grained cultural industries in close proximity. The historic urban form should be sympathetically replaced where it has been lost through demolition, with reference to historic character.

The car park to Price & Kensington may provide an opportunity for a corner development, in order to enhance the sense of enclosure to the lane leading to the canal from Newcastle Street and increase natural surveillance within the lane. Views of the Price & Kensington building from Newcastle Street should be maintained. The Price & Kensington building should be considered for developing small workshop based industries to bring disused buildings back into active use, allowing for renovation of the buildings and boundaries in the long term, and increasing natural surveillance onto the canal corridor. The good vehicular transport links to the A500 and M6 increase the viability of this option significantly. Likewise, the upper floors to the Westport Tool & Die Factory could also be brought back into active use in similar fashion.

The Duke of Bridgewater Public House needs to be brought back into active use, and access to the courtyard opened up from the canal. This site presents an ideal opportunity to provide catering facilities next to the canal. This will further help to activate and enliven the canal corridor. Renovation of properties on Station Street should also be encouraged and supported in the long term, as these properties line the gateway approach to Longport Wharf from the A500.

The instatement of windows within the elevation of the Steelite building to the west of the towpath would increase natural surveillance onto the canal, and provide a shop window opportunity to promote the activities of the ceramic industry in Stoke on Trent. Cycle stands in this location would also help to enliven this frontage. The current Steelite car park to the east of the canal needs to be activated or screened by tree planting. Alternatively, the space could be activitated by developing a building configuration to enclose the car park. This would introduce activity and natural surveillance to the car park, whilst referencing the historic tradition of courtyard arrangements already evident in the area. Both methods could become integrated to develop a high quality development in this area, whilst repairing the historic urban form.

The footpath north of the allotments could be enhanced to provide a stronger visual link from the station and residential areas of Middleport West to Middleport Pottery, increasing the sustainable credentials of the area further. Clearance of vegetation would allow views through to the footpath from Port Street. A bridge link to the pottery near to this access point would increase pedestrian permeability further. The former lime kilns on this corner could be developed to provide an archaeological feature of interest in this area, to further reinforce the industrial heritage of Middleport.

The bank of historic factories and mills from Middleport Pottery to the former calcining works south of Pidduck Street should be developed for mixed use purposes and renovated, in order to increase natural surveillance onto the canal and activate the area after working hours. The loss of this series of historic assets through demolition would present a significant loss of historic townscape that could never be replaced.

The frontage of Middleport Park facing onto the canal provides opportunities for community events. Proposed re-development for Slater Street should emphasise links to the park and canal. A bridge link to the canal from the park would help to activate the canal further. The opportunities that the park offers are not fully realised at present.

Architectural lighting to existing historic features would enhance the image of the area significantly during evening hours and create a strong identity for Middleport. This is particularly relevant for buildings adjacent to Station Street and Newport Street.

In the long term, residential uses are likely to replace industrial uses that are currently situated on the western bank of the former Burslem Port Arm alignment. New development should respect the setting to Oliver's Mill and reference the scale and massing of the former canal edge on this alignment. The long term vision for the former Burslem Port Arm alignment is to re-instate the canal and renovate the remaining wharf buildings. Future development should recognise this long term aspiration through the provision of a structured urban environment that would constitute a waterside setting. A good precedent example is canalside housing within City Waterside. This would significantly enhance the visual quality of the western edge of the former alignment. New development should be sympathetic to the historic character and of high quality adjacent to the conservation area, incorporating appropriate materials, such as reclaimed brick and timber.

10.9: Pressures & Threats

The 'At Risk' status of many of the historic structures in this area poses the threat of demolition if considered to constitute dangerous structures. The sheer number of historic assets in this area that are at risk is of great concern. If the condition and disuse of buildings is not addressed in the short term, a significant loss of historic assets will result. Dis-used historic buildings need to be repaired and brought back into active use as soon as possible, to prevent further deterioration.

Insensitive development of vacant sites may also further erode the quality of the conservation area. New development should respect the characteristics of the historic form in Longport Wharf and Middleport and should be of high quality adjacent to the canal conservation area. In particular, the geometric street grid and building line to the back of pavement should be respected, in order to reinforce the street grid within the Port Street area. Where this is not possible, other interventions, such as avenue trees, should be implemented in order to define the linear character and sense of enclosure. New development should not prevent the potential for re-instating the Burslem Port Arm canal alignment in the longer term.

Industrial development that follows a template approach, rather than a bespoke approach results in bland, inactive facades that erode the character of the conservation area. Any future industrial schemes should adopt a sensitive approach to the historic environment and respond to the canal setting.

Historic industrial buildings adjacent to the canal may be demolished to assist the development of heavy industrial uses, such as car scrap yards. These industries have an impact on the visual quality of the conservation area, and measures to screen these activities sensitively should be considered, including retention of the building walls.

Remnants of paving and boundaries may be removed due to maintenance requirements, such as traditional paving and bricks forming the canal structure. These should be retained or re-instated like for like. In particular, the historic canal edge should be protected and preserved.

The requirements for car parking to support industrial uses may result in proposals for demolition of existing buildings to provide additional space, resulting in fragmentation of the historic environment.

10.10: Summary of Special Interest

Longport Wharf and Middleport illustrates the historic evolution of a small agricultural settlement to a much larger urban settlement that was due to the construction of the Trent & Mersey Canal, and later the Burslem Port Arm Branch Canal.

This section provides an interesting context in terms of industrial archaeology, particularly in the form of the organically laid out industrial buildings, varied roofscape and punctuation provided by the Grade II listed bottle kilns and associated chimneys that lie adjacent to it. The edge of canal development, orientation of buildings to facilitate loadings arms and wooden loading structures that are evidenced on elevations fronting the canal testify to the

close functional relationship between the industrial buildings and the canal to facilitate economic industry in the area.

The decorative details, such as the window and door fenestration, moulded decorative signs and decorative metalwork signify the attention to detail and craftsmanship that was available locally. The scale of the buildings, particularly on the former Burslem Port Arm alignment is notable, given that many of the buildings within the Stoke conurbation outside of the market centres were modest in scale. This reinforces the economic power and importance that industries flanking the canal attracted.

The location of housing laid out to a geometric grid adjacent to the factories is also worthy of note. The factories and mills attracted workers from further afield and the potbank and mill owners recognised the need to build high density housing for workers that was within walking distance of the factories. The different architectural design of housing to Maddock Street that was intended to accommodate managers and designers reinforces the hierarchical structure that would have prevailed within the factories.

Historic boundary treatments and paving within the area further testifies to the use of readily available materials that were robust enough to support heavy duty industry.

10.11: Recommendations and Proposals

Historic assets should be protected, preserved and re-used.

The historic urban form should be repaired where it has become fragmented.

The re-development of former industrial sites needs to respect the historic character of the area.

The former Burslem Port Arm alignment should be re-instated in the longer term.

11. FESTIVAL PARK CHARACTER AREA

11.1: Introduction

Significant changes have taken place in this area during the last 25 years. Following the demise of industry, the Garden Festival heralded the beginning of the regeneration of Festival Park and modern commercial premises are now replacing the former industrial sites. The process of re-invention is well under way within the southern section of this stretch, although the northern section is proving much slower in its response.

11.2: History & Archaeology

Etruria was the creation of Josiah Wedgwood, who built his Etruria Pottery on the route of the Trent and Mersey Canal in 1769. Production was relocated to a new factory at Barlaston in the 1940s and the Etruria site is now occupied by the Sentinel newspaper offices and printing works. Only the 'Round House' (Listed Grade II*), a small circular building, remains from Wedgwood's works adjacent to the west bank of the canal. Wedgwood's residence, Etruria Hall, built in 1770, survives near the east bank as part of a hotel on Festival Park. It is grade II listed. Pevsner, writing in 1974, described the view from Etruria Hall towards the canal as "all desolation" but the Garden Festival of 1986 resulted in a new marina built along the canal edge.

The rest of the study area was originally rural but came to be dominated by iron and steel works, and their associated railway sidings. Ironworks were built on the west bank of canal by the fifth Earl Granville in 1850 as an extension of the Shelton Works to the east. Expansion continued throughout the 19th century. In its heyday the Shelton Bar works stretched across Etruria Valley to what is now Festival Park in Hanley. It had a 10,000 strong workforce, five coal mines, steelworks and rolling mills, blast furnaces and a bi-products factory. In 1964 Shelton was the world's first steel plant using 100% continuously cast production. The later 20th century saw a contraction of output. The last part of the works still in operation (a rolling mill) was closed and demolished in 2000.

11.3: Historic and Existing Land Uses

Land uses adjacent to the canal conservation area were predominantly industrial. Within the canal corridor itself, the steel mills used to extend over the canal, enclosing the towpath. The orange illumination of molten metal within dark confined spaces, the loud noise of industrial machinery and industrious activity of workers would all have been on view from the towpath. Within this environment, isolated small crofts and Josiah Wedgewood's manor house were peppered sparsely throughout. A small pocket of commercial use appears to be evident on Lord Street (now the A53).

Much of the land formerly used for industry now lies vacant or has been redeveloped to support business commercial uses. The Steel rolling mills have been demolished to make way for re-development. Small pockets of industry remain in the northern section of Festival Park. Fingers of regenerative tree planting flank much of the eastern bank of the canal where levels preclude development. The newly constructed marina provides a waterside feature, which is supported by surrounding businesses, leisure facilities and houses nearby.

11.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

This section of the conservation area has generally few buildings of significance. There are only two listed buildings which are of note, firstly that of the Roundhouse which is Grade II* adjacent to Etruria Road. This round plan structure was built circa 1769. The building formed part of Wedgwood Pottery works and was constructed of brick with plain clay tiles to the roof. It is unclear as to why it was built and for what purpose, but it may have been used variously for grinding raw materials, as a counting house, a stable or simply for storage purposes. The unusual form suggests that a bespoke design for Wedgwood's factory was commissioned.

Other buildings that would have been spatially arranged in close proximity, include a second roundhouse. This feature would have been arranged at the other end of the original Wedgwood Factory. The factory was demolished in the 1960s, as production was moved to Barlaston. The factory buildings would have formed a long façade along the canal and would been very ornately decorated including features such as cupolas. Other structures of interest would have included a windmill.

Fig. 28: Wedgwood's Factory at Etruria during the 20th century


Fig. 29: The Round Tower in 2011

Etruria Hall, constructed just one year after the Roundhouse was built to house Josiah Wedgwood and his family, close to his own factory. The Hall is located outside of the boundary of the conservation area, but the historical links are worth mentioning in this appraisal. The Hall was built originally circa 1770 and designed by Joseph Pickford of Derby, but extensively remodelled in the early 19th Century. The building still stands to this day, although now functions as a hotel. The building is built in brick with stone dressings and slate roofs. It has a formal and symmetrical appearance enhanced by the regular arrangement of timber sash windows that are typical of the period. The Hall was built at a time when Etruria had a more rural character, (which the picture below illustrates) and has a rural country house character to it. Its setting somewhat changed when the area become more industrialised from the 1850s onwards when a foundry and mill were built. The building then became surrounded by substantial steelworks.

Following the de-industrialisation of the post-war period, the former steelworks was demolished by the late 1970s and the site was redeveloped into a hotel as part of the Garden Festival regeneration scheme during the mid-1980s. Some of the surrounding landscaped gardens were redeveloped as part of the Garden Festival Scheme. These areas are now overgrown and are in need of management.

Both Etruria Hall and the Roundhouse are practically invisible from the canal. Clearance of vegetation adjacent to the towpath that screens both of these buildings from view would help to restore views onto both of these buildings so that they can be appreciated once again, as well as enhancing the character of the conservation area.

Fig. 30: Etruria Hall (ref: www.thepotteries.org)

Architectural Character, Materials, Colours and Textures

The bustling industrial character of this area has disappeared. The emerging character adjacent to the conservation area can best be described as calm and introspective, although the Marina has a more sociable and lively character.

Red brick is still the prevalent material within the area, although buff brickwork and cheaper cladding materials are appearing within building elevations facing onto the canal. The seasonal colour variation and different leaf textures provides visual interest throughout the year that reflects the different seasons.

Built Form & Massing

The built form situated adjacent to the canal conservation area on the western bank of the southern section of Festival Park is comprised predominantly of large floor plate, commercial premises with associated expansive car parks, to the western bank, such as The Sentinel Newspaper and Print works. Buildings range in height from two to three storeys. Gable orientations vary. The arrangement of commercial buildings addresses the canal side environment in part, but main entrances are located away from the canal. There is no spatial relationship between the buildings themselves. The commercial buildings exist, independently of each other, in autonomy, with each building distinguished and defined by extensive tarmac car parks. There is an absence of street form and integration between buildings.

The built form on the eastern side of the canal conservation area is much more domestic in scale, comprised predominantly of two storeys. The public house (Festival Toby Carvery) occupies a prominent vantage point that serves to mark the entrance to Etruria Marina. Terraced housing to the north of the Marina helps to form enclosure, although front elevations face on to the street instead of the Marina. Detached housing overlooks the Marina in a similar fashion, and small commercial premises address the canal frontage well, particularly where the branch arm occurs, to the north of the marina. The general arrangement of buildings on the eastern bank of the canal is more respectful of the waterside context in which it is located.

There is an absence of built form within or adjacent to the canal conservation area to the north of Festival Park.

Style

There is little cohesive style in this section of the conservation area. The remaining listed buildings are very early Georgian (Roundhouse and Etruria Hall), but the remaining built environment is relatively contemporary. Some of the 1980s Garden Festival development has a more vernacular style, using red brick and tiled roofs with traditional pitches, though this contrasts with the office development that is constructed of brick and metal calzip, built from the 1990s onwards.

External Walls and Facades

The walls mainly consist of brick on bridge piers. Boundary walls are quite rare along this section of the canal. The facades of office developments are generally that of metal cladding and buff brick. Generally, the historic relationship of the canal with the buildings adjacent has been eroded, with little in the way of consistent or coherent edges. New development does not integrate with the canal well.

Roofs

Roofs are generally plain clay tiles.

Windows

There are no historic examples of windows within the conservation area.

Details and Features

The bridges are industrial in their character. The most historically significant bridge is that of bridge 118 which formed the junction to the former Etruria branch arm canal which is now

disused. The structure has distinct and robust stone copers with stone setts. It is built of brick with cast iron railings at the top. Bridge 119 adjacent to Waterworld is an important bridge as it transfers the towpath from one side of the canal to the other. Like bridge 118, it has the same distinctive stone copers and stone setts. However, it has a few modern interventions such as some blue engineering brick plinths with posts and railings. The bridge adjacent to Marina Way has brick piers, iron deck and railing parapets. Whilst generally simple in its architectural design, the structure contributes to the character of the conservation area in terms of its simple span and rich use of different materials. The lift bridge at Festival Park marina is an interesting contemporary structure and is quite a contrast to the other bridges in the vicinity but it generally adds to the variety and interest of different styles of bridges that form along the whole of the Trent and Mersey canal. The bridge is constructed in timber so it contrasts with the other bridges in the vicinity in terms of the materials used in its construction, appearing less industrial and more associated with leisure.

This section of the conservation area has a good proportion of metal railings which somewhat reflects the former steel industries surrounding this section of the conservation area. The railings are well maintained, using the British Waterways colour scheme of black and white. This provides coherency to the Trent & Mersey route through the north Staffordshire conurbation.

Two cast iron Mileposts occur along this stretch of the canal, but are not listed.

Groundscape & Public Realm

Fig. 31: View of Bridge 118 from southern approach

There are three bridges providing public access to the canal adjacent to the Marina, including the lift bridge at its mouth. The towpath diverts to the eastern edge of the bank. Access to bridge 119 from the business park is obstructed by railings. Consequently, connectivity from the business park to the marina is frustrated by the convoluted pedestrian route required to access the leisure amenities, potentially reducing the economic and social vibrancy of the marina. Pedestrian linkages further north of bridge 119 are poor, the only point of access

being the stepped and ramped access adjacent to bridge 123, leading to Oliver's Mill on Newport Lane.

The public realm adjacent to the public house incorporates external seating, for customers. Commercial premises have made use of land adjoining their buildings by providing picnic tables for staff to take advantage of during breaks. The canal and towpath becomes more functional in character further north. Simple steel ring mooring fixtures flexibly accommodate narrowboat users north of the marina.

Natural surveillance within the northern section of the festival park stretch is poor, due to the redundant nature of former industrial sites. Natural surveillance adjacent to the business park is increased during working hours, with windows overlooking the canal. The buildings within the business park are all currently in use. The best opportunities for natural surveillance occur within the marina, with residential and commercial uses extending beyond working hours, into the evening and weekends.

Regenerative tree planting defines the eastern edge of the canal for much of the Festival Park stretch, enhancing enclosure and providing seasonal colour variation. Specimen tree planting adjacent to the marina has been less successful, but the car park associated with the public house has incorporated tree planting at the design stage, which helps to soften the impact of parking adjacent to the canal. Regenerative woodland would benefit from woodland management, particularly in respect of thinning, to reduce competition between individual trees.

Boundary treatments vary, both in their quality and design. Mesh fencing defines much of the canal corridor north of the business park. Boundaries are further defined through regenerative tree planting on the eastern bank. Further south, adjacent to the marina and business park, steel railings are more common, utilising various designs and possessing a range of quality, from functional to decorative. Walls constructed of Staffordshire blue brick and copers define small level changes at the marina.

Edging treatments are comprised of sheet piling, concrete and bricks. The original brickwork is gradually becoming replaced, but much of the original brick canal edge within the business park and marina still survives. Copings to the marina edge are missing and need to be replaced. Sheet piling and concrete forms much of the canal edge further north towards Oliver's Mill.

For much of the towpath, resin bonded paving is used, sympathetically reinforcing the green character of the canal. Different paving treatments occur at key nodal points, reflecting the importance of feature points along the tow path. Clay paviours are used extensively adjacent to the canal at the Marina. Concrete paviours are used within the curtillage of the public house. A mix of clay paviours and concrete are also used at bridge 123, opposite Oliver's Mill, further reflecting this use of material change at key nodes, although it has not been conciously designed. Instances of historic setts to the footbridge ramps and marina provide historic remnants of traditional paving materials that should be retained.

Interpretation signage is evident along the canal, but is not intrusive. Existing signs have suffered from vandalism, and would benefit from repair. The interpretation sign for the Roundhouse is still visible above the vegetation but looks a bit sad. Orientation signage for pedestrians is absent at nodal intersections.

Incidental internal lighting spilling out from buildings adjacent to the canal tends to occur during late winter afternoons because of the daytime working practices contained within commercial buildings. Other than that, night time lighting is restricted to the marina. The towpath is unlit where there are no buildings.

The quality of boundaries to bin stores and service areas differ from the materials used within main office buildings. Often constructed of cheap timber, these stores are visible from the canal towpath and detract from the general tidy character of festival park. Any extensions or

additions to buildings in the future should respect the historic context and be positioned discretely within the arrangement of the building.

The amount of street furniture along the towpath is minimal. Consequently, general views along the canal are maintained due to the lack of clutter. Litter is evident within stands of regenerative tree planting and the boundaries of brownfield sites adjacent to the canal, where natural surveillance is poor, or litter is difficult to extract. Volunteers frequently clear plastic cups away from vegetation in the area. The plastic cups come from workers in nearby premises throwing their cups away once finishing their breaks.

11.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

There are significant blocks of woodland planting in this area, located on the mounds, constructed for the Garden Festival site in the early 1980's. These are unmanaged and dense. They would benefit from an increase in structural diversity and clearance of non-native species. They are a valuable semi-natural screen that softens the impact of the urban development to the east of the canal. They also attract bats. Species include Poplar, Ash, Rowan, Birch, Oak, Sweet Chestnut and Horse Chestnut.

Areas of tree planting and water bodies combine to provide a range of different habitat types within and adjacent to the conservation area.

Fig. 32: Tree planting adjacent to the canal edge

11.6: Topography, Views & Enclosure

The canal is situated within the alluvial flood plains of the Fowlea Brook, with land rising steeply to the east of the canal. The steep banks associated with the rise of land to the east results in a strong sense of enclosure to the eastern bank. Very few views are visible to the east from the canal. By way of contrast, the level nature of the Fowlea valley alluvial plains,

combined with a lack of built development, or development with large expanses of car parking surrounding it results in long distance views across the Fowlea valley towards Newcastle, Wolstanton and Burslem. Along the northern section of the Festival Park stretch, long distance views looking northwards towards the Fowlea Brook Valley and Burslem are afforded. Long distance views of Basford are available from the towpath adjacent to the canal, but are marred by unsympathetic development and/or car parking associated with business premises.

The three grade II listed bottle kilns at Oliver's Mill form a local landmark on the southern approach to Middleport. The row of poplar trees to the south of Oliver's Mill forms a distinctive backdrop to the chimneys of Oliver's Mill. Views on the northern stretch of Festival Park are marred by the clutter associated with the car scrap yard and container storage site.

Further south, historic remnants punctuate an otherwise modern environment and form distinctive features. Examples include channelled views of bridge 119. The surrounding topography, built environment and vegetation enclose the canal, with the bridge forming a focal feature when viewed from the north and south. Likewise the bridge over the branch arm to the north of the marina becomes visible from the southern approach that follows the curvature of the canal. The roundhouse has the potential to form a local landmark, but overgrown vegetation screens views of this historic building.

Festival Park Marina forms a distinctive focal point within the canal corridor, due to the concentration of moored narrowboats, lift bridge and spill out activity created within the curtillage of the public house. Poorly managed planting obscures full views towards the marina from the towpath.

Fig. 33: Festival Park Marina

11.7: Detractors & Gap Sites

Vacant brownfield land comprises a significant gap site within the northern section of the Fowlea Brook Valley. The working car scrap yard and container storage, situated at the

northern most section of Festival Park is industrial in character, but detracts from the green character of the canal.

The architecture and car parking associated with the Vodafone warehouse exhibits architectural quality that does not address the historic context of the canal.
Further south, large expanses of tarmac car parks associated with commercial development have a negative impact on the visual quality of the conservation area.

Boundary walls north of the footbridge leading from Marina Way are in a poor state of repair and would benefit from attention. Similarly, boundaries within the marina complex are poor in quality and detract from the overall visual quality.

Litter further detracts from the visual quality of Festival Park.

11.8: Enhancement and Development Opportunities

The quality of the public realm adjacent to the marina needs to be refreshed, with a possible upgrade in quality. The quality of boundaries within the marina also needs to be reviewed and replaced with higher quality boundaries where appropriate. The consistent use of railings and feature paving at nodal intersections along the canal would provide design continuity within the festival park stretch. The use of black and white could be adopted as a smart colour scheme. Interpretation signage that has been subject to vandalism would benefit from repair. Orientation signage at key nodal points would help to inform users of potential destinations.

Existing woodland adjacent to the canals should be managed to encourage long term maturation and associated increase in local biodiversity. Views of the marina could be extended by removing vegetation to the rear of railings south of the lift bridge. Views of the Roundhouse could similarly be improved through removal of overgrown vegetation. Uplighting to this historic building would further enhance views during evening hours, providing a strong landmark that can be viewed from the marina and public house. The possibility of opening up views to Wedgwood's former manor house from the canal should also be explored. Existing obstructed linkages should be opened up to increase pedestrian access within festival park.

Infill development between large commercial buildings on the western boundary of the conservation area would reduce views of car parking and provide a more consistent building line to the canal. Where infill development is not possible, tree planting would achieve similar objectives, reinforcing the green character of the canal.

It is acknowledged that the re-development of the former British Steel site will take some considerable period of time. Informal use of the land as a tipping ground should be screened from view through tree planting. This measure would help to re-inforce the green character of the canal corridor. In the longer term, re-development of this site could help to increase natural surveillance along this stretch of the canal. Residential uses would extend the period of time for natural surveillance, although the potential for flooding may be restrictive in development terms. Future design proposals should acknowledge the context of the canal conservation area through building line and orientation, architectural and urban design and good quality materials, whilst ensuring pedestrian and cycle access and storage facilities onto the canal towpath for local users.

Tree planting adjacent to the conservation area boundary would help to screen views of the Vodafone car park and container storage site. The negative impact of car parks could be lessened through tree planting; where car parks are extended, or re-surfaced, gravel surfacing and tree planting should be considered, to allow for surface water absorption and filtration and reduce surface water run-off flows.

Volunteer action to clean up litter should continue, involving workers from premises nearby.

11.9: Pressures & Threats

There is a risk that the quality of future development north of the existing business park may be of lower design quality and fail to acknowledge the historic context of the canal. Development schemes adjacent to the canal should be of high quality and sympathetic to the conservation area.
Future development adjacent to the canal should provide opportunities for users to interact with the canal. Picnic tables, cycle parking, pedestrian/cycle linkages and doors and balconies are good examples of how this can be achieved. The design of future proposals should negate the need to use security fencing and inactive boundary walls facing onto the canal.

Lack of maintenance of the towpath and associated historic bridges may result in the loss of pedestrian and cycle permeability, and historic features within Festival Park.

11.10: Summary of Special Interest

The Festival Park stretch of the Trent & Mersey provides an example of an area that has re-invented itself to suit modern day economic needs. The demolition of industrial buildings formerly occupying the British Steel Site, and replacement with modern commercial premises has visibly eroded the historic narrative. The remaining historic features are fragments of a bygone era, whilst contemporary life moves forward into the 21st century.

11.11: Recommendations and Proposals

The area around the marina would benefit from a repair and tidy session. Enhancements, such as lighting the Roundhouse and clearing vegetation, would help to promote the marina further as a leisure destination.

Future development should respect the historic context of the canal through the use of high quality architectural design and materials. Buildings should try to inter-relate with each other and the canal more in the future, rather that operate independently of each other.

Car parking should be sensitively integrated within development, respecting the green character of the canal.

Existing woodland defining the canal edge should be retained and managed to allow for maturity and enhanced local biodiversity in the longer term.

The public realm needs to be maintained to its current standard, and improvements made where appropriate.

12. ETRURIA JUNCTION CHARACTER AREA

12.1: Introduction

Fig. 34: Etrurian Bone & Flint Mill

Historically, Etruria Junction formed a very important hub for narrowboating activities and festivals. Today, the character of Etruria Junction is slowly changing from industrial use to residential use. Extant planning permissions for residential development are in place for some of the remaining industrial sites adjacent to this stretch of the canal and it is envisaged that as these developments come forward, more pressure will be brought to bear on remaining industrial sites to become re-developed for residential use.

12.2: History & Archaeology

Etruria junction was developed following construction of the Trent and Mersey canal, and subsequent construction of the Caldon Canal, Bedford locks and associated wharves. The locks, wharves, graving dock, and flint mill (established in 1857), now form Etruria Industrial Museum. The gaging dock was used to weigh narrowboat loads, using a system of measurement for displaced water and canal tolls were subsequently calculated, making Etruria Junction an important destination on the narrowboat map. By the 1870s the east bank was built up with industries including iron works, gas works, pottery works, brick works, copperas works, boiler works, a flint mill, and canal wharves.

A gas works was established at Lower Bedford Street by the 1830s. It was closed by the 1920s but the footprint of one of the gas holders is still obvious on the ground.

The western bank of the Trent & Mersey remained predominantly as agricultural land and was subsequently hemmed in by the main railway line to the west. The railway line branched to the canal at a wharf (now long gone) at Cockshott lock. Residential development eventually extended south from Wedgwood's estate on Etruria Road.

South of Shelton New Road, Hanley Cemetery was laid out in 1859 and Twyford's Cliffe Vale sanitary works was established in 1887. Only the front range of the works and a pair of calcining kilns remain, designated as listed buildings.

12.3: Historic and Existing Land Uses

During it's heyday, Etruria junction would have formed a significant hub of industrial activity and commercial interchange, incorporating a stepped series of locks, wharfs and gaging dock. The green character of the cemetery would have contrasted significantly with its industrial surroundings. The 1900 maps show residential housing, civic and educational uses beginning to develop at key transport corridors crossing through the canal corridor.

Current land uses within the area reflect changing trends. The locks on the canal are now used to support leisure boating uses and the historic buildings and Museum at Etruria locks now form a heritage tourism offer. With the demise of commercial activity the gaging dock now lies redundant. The working wharfs have disappeared. Land use associated with industry and manufacturing has decreased. Residential land use has increased, with development occurring on former agricultural and industrial sites. The development at Lock 38 provides a good example. Green open space has also increased within the area, reflecting the amenity needs of local residents. Brownfield land occurs to the west of the cemetery, providing storage facilities for railway maintenance.

12.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

Etruria Industrial Museum (otherwise knows as the Etruscan Bone & Flint Mill) is designated as a Grade II* listed building. The mill was established in 1820 on the site of Ball's Chemical Works, but the present buildings were erected in 1857 by George Kirk, under the direction of Jesse Shirley, who took over on the death of John Bourne in 1852. The flint mill is one of the earliest industrial sites along the canal. The building is built in very dark red brick with a mixture of plain clay and slate tiled roofs. The main chimney stack is a distinctive feature, due to its excessive height, and features as a landmark along the canal, especially from the southern approach. The chimney adjacent to the canal arm is a calcining kiln. The main workshop range incorporates 2 storeys, with 6 upper windows (one now a door approached by 20th century steps. An inscribed stone in the apex reads 'Etruscan Bone Mill 1857 Jesse Shirley'. The building has various parts from the engine house to various other workshops, so works as a distinct complex. The range includes a square section calcining kiln and a very tall square section chimney. The building houses a working steam-driven beam engine. The site now comprises a calcining kiln, pan room, gear room, engine room and boiler house. There were originally also drying beds, bone boilers and more extensive grinding works. Bone and flint were important materials for the manufacture of pottery. Bone was boiled, calcined and ground and used to whiten the body, the clay from which pottery is made. Flint was burned and crushed, and used to harden the body. Raw bone, flint and stone were brought up the canal, unloaded at the Wharf and processed in the mill. Stone was ground for talcum powder. The building currently functions as a museum.

The industrial buildings adjacent to the gaging dock are also important in the spatial arrangement and former function of the junction. Constructed of red brick with plain clay tiled roofs, they are modest and small in scale, but the angled gables that relate to the pathways create an interesting vernacular form.

The middle section of the front face of the fomer Cliffe Vale Pottery Works remains and is grade II listed. It was constructed in 1887. It is constructed of brick with stone dressings and a plain tiled roof. The original frontage range of 3 storeys and 22 bays has been reduced to 9 bays ((4-1-4). The entrance bay has stone pilasters and entrance with cast iron lintel over and ornamental segmental pediment bearing date. Flanking this entrance bay are two towers with stone quoins. New development adjoining the original façade displays a recessed building line and flat roof, although the scale of the building reflects the original scale of the works. The two calcining kilns opposite Hanley Cemetery are of circular section joined

together at the base, but with free standing caps. It is unusual and distinctive that the bottle ovens are located in such close proximity to the canal. New development frames the view of the bottle ovens. The geometric form of the new development contrasts with the sinuous shape of the bottle ovens. This treatment emphasises the form of the bottle ovens against the backdrop of new development.

Fig. 35: Front elevation of former Cliffe Vale Pottery Works, as viewed from Shelton New Road

The former industrial buildings adjacent to Shelton New Road are unlisted, but are within the existing conservation area. This dark red brick former industrial building is in very poor condition but distinctive. The roof has long since disappeared and collapsed, and the northern elevations have largely disappeared. The elevation facing Shelton New Road is slightly newer, with a small chimney stack on one corner.

A grade II listed milepost is found on this stretch, circa 1819. It is of cast iron construction, possessing a circular post with moulded head and embossed lettering on 2 convex tablets reading as 'Shardlow 56 miles, Preston Brook 36 miles'. It was probably cast in the foundry of Rangeley and Dixon in Lichfield Street, Stone.

Architectural Character, Materials, Colours and Textures

The character of buildings within the conservation area can be described as mixed. The buildings adjacent to the gaging dock are simple and modest. The Etruscan Bone Mill shows an incremental composition that combines to form an imposing façade. The bottle kilns are simple in their design. The frontage to the former Cliffe Vale Pottery Works is richly decorated in stone and ironwork detailing.

Built Form & Massing

The buildings at Etruria junction have been consciously arranged adjacent to the water. The combination of buildings within the Trent & Mersey and Caldon boundaries combine to form an organic arrangement, due to the different routes, branch arms and levels associated with

the canal. The changes in levels and significant lock structures impact on the consistency of small scale floor plates and one to two storey heights of the buildings, creating a more diverse townscape. Roofscape and gable orientations vary in orientation and height. Historic towers punctuate the skyline, accentuating the diversity of the roofscape further. The sinuous form and circular section of the bottle ovens is strongly characteristic of the Potteries.

Fig 36: Remaining bottle kilns from the former Cliffe Vale Pottery Works

The open character of the cemetery contrasts strongly with the urban character of the lock 38 development. Residential buildings at lock 38 are consistent in height. Comprised of three to four storeys, with balconies and elevations facing on to the canal edge, the development presents a tidy public face onto the canal that defines the canal corridor well.

Although falling outside of the conservation area, development to the north of Etruria locks has been planned. Residential buildings are of small floor plate, comprising two and three storeys, taking advantage of the significant drop in levels to the west of the canal. Rear elevations consistently face onto the canal, allowing for a voyeuristic glimpse into personalised gardens. Consequently, roofscape and gable orientations are consistent. Industrial buildings are located in close proximity to the canal towpath, forming a distinct boundary wall. Further south of Etruria locks, large scale industrial floor plates varying in height from 3-10m increase the visual diversity and interest of the built environment adjacent to the conservation area. Level changes to the west of the towpath at Twyfords lock reduce the visibility of one and two storey industrial premises, with only the roofs being visible.

Style

Within the Etruria stretch of the conservation area, remaining historic buildings are typical of red brick industrial buildings of the 19th century, displaying a utilitarian style, although the remaining frontage to the former Cliffe Vale Works displays a decorative character through

the use of ornamental stone work and roof form. A sense of rhythm and proportionality still remains within this elevation, although the length of the original elevation has been reduced. Contemporary red brick development has been sympathetically integrated within the remaining industrial buildings for the former Cliffe Vale Pottery Works.

External Walls and Facades

This section of the conservation area has a good proportion of remaining boundary brick walls. Walls remain around industrial buildings surrounding the Etruria Industrial Museum continuing into Lower Bedford Street which then connects with the Caldon Canal. A section of walling remains to the west of the canal on Shelton New Road which has attractive blue copers.

Brick walling defining the boundary of former Cliffe Vale Pottery Works has been repaired during redevelopment. This has given a sense of continuity and connection with the bottle kilns, constructed of the same distinctive brick, as well as a distinct contrast to the new development behind it. The wall provides a distinct edge.

Around the canal junction, there are numerous cast iron railings that surround the locks, including some pedestrian bridges and lock gates which are painted in the British Waterways corporate black and white colours.

Roofs

The roofs are Welsh slate and locally manufactured Staffordshire blue plain clay tile. Ridge tiles are evident on the roof of the Etruscan Bone Mill. Minimal detailing to the eaves line of the industrial buildings next to the gaging dock leaves an exposed roof on view, but the Flemish feature gable on the Etruscan Bone Mill conceals the roof from view. There are varying roof pitches to the front elevation of the former Cliffe Vale Pottery Works, with steeper pitches to the towers, ending in a square profile instead of the usual point.

Windows

Etruria Industrial Museum demonstrates a full height, round arched window to the engine house. External shutters painted black are fixed to the service building adjacent to the gaging dock.

Three stilted arched windows are situated above the original front entrance of the former Cliffe Vale Pottery Works. Paired windows with stone aprons occur within the two towers flanking the entrance.

The former industrial building on the northern edge of Shelton New Road has distinctive windows. Two round arched headed openings, one of which still has its remaining cast iron window frame, are situated within the elevation overlooking the canal. The elevation facing Shelton New Road has three openings with segmented headed arches.

Timber casement units are commonly used, with fragments of cast iron frames evident on occasion.

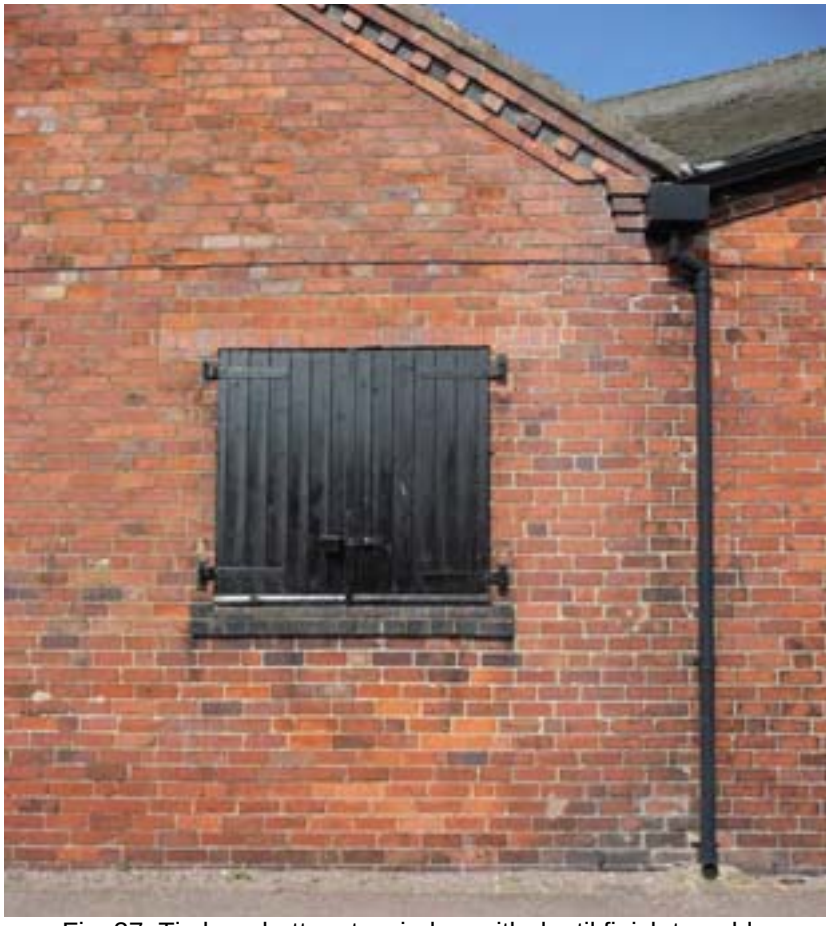


Fig. 37: Timber shutters to window with dentil finish to gable

Details and Features

Etruria locks, Twyford lock and Cockshott lock are impressive historic engineered structures. Cockshott lock provides an interesting boundary between the leafier section to the north and the more intensely urban area to the south of the weir.

Bridges are mainly of industrial and modest character. They are simple and functional, mainly consisting of iron girders and metal railings. Despite their modest appearance, they fit the context of the general urban and industrial character of this section of the conservation area.

Groundscape & Public Realm

Access points to Etruria locks and canal north of Etruria are sufficient to allow for connectivity with the surrounding environment, although connectivity could be further improved. Existing access points can be found from the A53, Bullrushes Close, The Caldon Canal and Lower Bedford Street. Rear housing plots facing on to the canal reduce options for public realm linkages. Access into and out of the conservation area further south of Etruria is severely restricted. With the exception of Penstock Drive, as signified by the bottle kilns at the former Twyfords Factory, the canal sits in isolation from the city. The setting of Hanley Cemetery is appreciated only by the few. Improved connectivity to the area would allow for greater public use and appreciation of this area. Additionally, entrances to the canal are poorly defined, with the exception of the bottle kilns; existing land uses exacerbate this problem.

Public space within the Etruria section of the Trent & Mersey is functional. There is little in the way of opportunity for creating sociable space, but the opportunities for sociable space within the Caldon section at Etruria offsets this need.

Natural surveillance on this stretch of the canal is poor, particularly at Etruria and to the immediate south, where the blank facades of industrial premises face on to the canal corridor. The orientation of housing, resulting in rear gardens facing on to the canal, moves the zone of natural surveillance further away from the canal, but the perception of natural surveillance is still apparent. The best opportunity for natural surveillance occurs at the lock 38 development, due to the close proximity of the building line, combined with elevations that allow for interaction with the canal.

Mature tree planting is a strong characteristic within this area, with trees lining the canal corridor on both sides for significant stretches. The arrangement of trees creates strong enclosure to the canal corridor, whilst providing an idyllic green backdrop to the canal corridor. Consequently, industrial sites are screened from view. Where tree planting is sparse, such as at Twyfords lock, the urban character becomes much more noticeable. A small copse of regenerative trees screen the Etruscan Bone and Flint Mill from view, in addition to the more modern industrial buildings. Historically, mature tree planting would not have been evident along the canal corridor, and the canalscape would have been stark, with a completely different character. An interesting balance between industry and nature is establishing itself that also supports amenity use by visitors and local residents.

Paving materials are consistent in their application, defining the heritage status of the built environment, whilst respecting the green character along the canal. Historic paving materials occur at Etruria junction and Cockshott lock, including stone setts and Staffordshire blue paviours. The stone sett paviours at Cockshott lock are arranged is a peculiar bond. Stone setts at Etruria locks are raised on some courses, to assist passage up the ramp. Stone setts are also found to the base of the bottle ovens at Penstock Drive. Red clay paviours mark the lock gate turning radii. The towpath is comprised of resin bound gravel.

Steps and ramps at Etruria junction and Cockshott lock form features of interest in their own right, due to their configuration and use of traditional materials. Stone plinths, stone setts and Staffordshire blue paviours are some of the materials used, incorporated within curved brickwork laid to English bond. Brick and stone edge treatments to the canal can still be found adjacent to Hanley Cemetery, Etruria junction and Twyford Lock. Where recent development has taken place to the north of Etruria junction, traditional boundary treatments have been replaced with sheet piling, eroding the historic character of the canal structure.

Fig. 38: Stone steps curve around the lock wall

Boundary treatments are comprised of mature trees and hedging, brick walling (incorporating staffordshire blue bricks) and palisade railings. The mix of boundary treatments reflects the mixture of land uses within the area. The palisade fencing articulates established industrial uses within Etruria. The boundary between the canal and Hanley Cemetery is literally the waterline, resulting in open character. This open character is refreshing along the canal edge, and serves as a reminder that boundaries can be minimal yet still be effective. Rear gardens to the north of Etruria locks form an interesting boundary, although they are not strictly speaking a boundary because their character is open. They add character to the canal. A poor quality boundary treatment occurs adjacent to Etruscan House, where timber fencing is used. The fencing is not complementary to the historic character of the canal.

The majority of signage occurs at Etruria junction, to denote the heritage uses contained within the buildings and adjacent to the canal. Painted lettering is used to denote the forge and Museum. Timber notice boards provide lock and narrowboat information. Enamel signage provides information on a more functional level. All of these methods of signage are traditional in their approach. Similarly the black and white metal Twyfords lock sign is traditional in character. The interpretation signage at Etruria is more contemporary in design, but the black finish to the pillar blends in with the surrounding historic context. There is no orientation signage within this stretch of the canal corridor. Signage for cyclists is low key, using timber posts.

Lighting within the conservation area is minimal. Where lighting does occur, it is functional in character. Buildings of architectural merit are not further defined by feature lighting. There is no seating on the Etruria section of the canal, as the space is functional in character rather than sociable.

Most items of street furniture within the Etruria stretch are located at the Etruria junction. Railings, moorings, mile posts and lock gates are consistently painted black and white. Although individual items differ in design, the consistency in finishes to items of street furniture creates cohesion and ties individual items together into a branded whole that suits the character of the canal and looks smart. The area is generally litter free.

12.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Regenerative tree and shrub cover lines the eastern edge of the canal structure, providing bat territories. The floodplain of the Fowlea Brook is situated to the west of the canal and currently consists of scrub and unmanaged grassland with defunct sewage settling pools. Tree species include Willow, Sycamore, Ash, Birch, Maple, Buddleja, and bramble.

The parkland setting of Hanley Cemetery and Etruria locks provides for additional habitat types within and adjacent to the conservation area.

12.6: Topography, Views & Enclosure

For the most part, the eastern edge of the canal inclines above the canal. The gentle inclination of topography at Hanley cemetery is particularly striking, allowing for open views towards the church and wider urban landscape beyond. The topography adjacent to the western edge of the canal varies significantly. The land drops away from the canal edge towards the A500 and flood plain of the Fowlea Brock, with significant changes in level occurring at Etruria locks. The tip to the south of lock 38 is visually prominent, forming a significant mound that rises above the level of the canal. Scrub planting at the edge of the canal boundary partially obscures views of the disused tip.

The first layer of enclosure to the Etruria stretch of the canal is formed by mature tree planting. Mature trees consistently enclose the canal corridor for much of the Etruria stretch, resulting in channelled views, except from elevated locations such as the bridges and locks. The open nature of Hanley cemetery is an exception, resulting in wide and open views

towards distant urban settlement. The setback and orientation of buildings forms a second layer of enclosure, creating a backdrop to the canal corridor at close range whilst obscuring views of the wider landscape.

There are a significant number of good quality views within the conservation area and the overall visual appearance is high in quality.

The approach from the north of Etruria junction affords a distinctive and characterful canalscape view, where the confluence of the two canals and associated historic buildings meet. The changing topography at Etruria junction results in a constantly shifting perspective that creates a series of historic views from the towpath. The retaining walls of the locks and gable arrangements of the historic buildings are some of the features of interest, whilst the locks themselves provide elevated viewing platforms to view Etruria locks and the Etruria Museum. Further visual interest is created at Etruria locks by the punctuation of the skyline by the kilns of the flint mill. The lower level of the Etruria Bone and Flint Mill results in the building being concealed from view unless viewed at close quarters. The sudden view of the Mill on the approach from the south under lower Bedford Street bridge emphasises the visual impact of this historic building, within its original setting. The approach towards the Trent & Mersey from Lower Bedford Street can be best described as visually charming. The brick wall enclosure, industrial roofscape and mature tree planting combine to form an attractive composition.

Fig. 39: The approach to the canal from Lower Bedford Street

The sinuous forms of the former Twyfords bottle kilns create a local landmark that is visible at close range within the canal corridor. New development has been arranged to frame the bottle kilns, forming an interesting compositional arrangement between old and new. The historic elevation of the former Twyfords factory on Shelton New Road can be glimpsed in passing on Shelton New Road, although the quality of this view is marred by the poor condition of the pottery works to the north. Idyllic views of Hanley Cemetery and church are also afforded from the towpath for a considerable stretch. The green and open character of this view contrasts with the surrounding canal corridor environment within Etruria.

The southern approach within the tunnel leading to Cockshott lock is also very nostalgic. This view possesses a raw authenticity that has remained untouched for centuries.

Voyeuristic views towards rear gardens are afforded from the towpath, north of Etruria locks.

Good quality views into the conservation area can be gained from the White bridge crossing the Caldon Canal north of the Bedford locks. Views of the canal are also available from Hanley Cemetery and from Penstock Drive, south of Twyfords lock

On a more negative note, the quality of views from the towpath towards Etruscan House is marred by the poor architectural quality of the building and boundary treatments. The cul-de-sac arrangement of housing on Bullrushes Close is at odds with the historic character of the built environment adjacent to the canal, marring views towards the green backdrop of Newcastle-under-Lyme.

12.7: Detractors & Gap Sites

Bin storage provision at Etruria locks is prominently positioned, constructed of materials that are not sympathetic to the historic character of Etruria locks.

The derelict pottery works north of Shelton New Road is in a state of ruin and inactive, forming a significant gap site within the inner urban core of Stoke-on-Trent.

Unsympathetic public realm and boundary treatments affording pedestrian access from the A53 and defining industrial premises detract from the historic character of Etruria. Boundary treatments at Twyford lock look unkempt and detract from the visual quality of the area. The indent of open space is dysfunctional and unmanaged. Likewise, poor quality boundary treatments and architectural elevations at Etruscan House detract from the overall quality of the canalside setting.

Views looking north from Cockshott locks towards Hanley cemetery are marred by stands of Japanese knotweed and spoil heaps.

12.8: Enhancement and Development Opportunities

Overall, the visual quality of the area is good. Enhancement and development opportunities need to focus on improving natural surveillance and connectivity to the canal, in order to support sustainable transport and amenity use of the canal within a safe environment.

Etruria junction needs to be brought forward as a sociable hub, providing facilities for medium sized festivals and events that will help to attract visitors to the area. Opportunities to bring the gaging dock back into active use should also be explored, in order to bring back activity to this prominent location. It would also improve boating infrastructure within the Stoke-on-Trent waterways network, promoting an attractive environment for narrowboats. The existing bin storage provision at Etruria locks needs to be reviewed so that the storage is less prominently positioned, and constructed with more suitable materials.

By way of development, it is recognised that the remaining industrial and brownfield sites are likely to be developed for residential use in the surrounding areas. Design proposals should incorporate high quality development that interacts with the canal corridor, to enhance the visual quality and safety of the canal corridor and increase the desirability of canalside development within Stoke-on-Trent. Good quality materials need to be incorporated within future design proposals. In particular, the derelict pottery site to the north of Shelton New Road would lend itself to future re-development. Any future proposals for this site should integrate with the canal side setting, providing natural surveillance and enhanced connectivity to Etruscan Street. Residential uses should be considered, in order to extend hours of natural surveillance onto the canal. Likewise, the garage and industrial premises to the east of Twyford lock would lend itself to re-development for residential housing, providing interaction with the canal and improving natural surveillance. Connections should be enhanced from the canal to Lomas Street and Bedford Street. A bridge link would greatly increase access for

local residents to Etruria junction for amenity use. The potential for sustainable surface water drainage afforded by the Fowlea Brook valley provides an opportunity for a strong design ethic within the public realm of any future development.

In the event that the spoil heaps to the north of cockshott lock become redundant, this site would lend itself to an extension of the residential development at lock 38 (the former Twyfords factory site), continuing the pattern of integration between the buildings and the canal. Re-development of this site would remove the spoil heaps that currently marr views of Hanley Cemetery from Cockshott Locks.

The quality and design of the public realm providing access to the A53 could be improved in a manner that is sympathetic to the historic setting. Boundary treatments at Etruscan House should be replaced with something denoting higher quality, or removed, with elevational improvements undertaken to Etruscan House.

12.9: Pressures & Threats

The most significant threat to the Etruria stretch of the canal is the redundant use of historic buildings at Etruria junction, resulting in the potential for dereliction. This collection of buildings forms a key historic asset within the canal network within Stoke-on-Trent, is much loved by the local community and should be preserved.

As the area becomes more aspirational, pressure will increase to replace industrial land uses with residential land uses. The traditions of industrial endeavour at Etruria junction would be lost, and the historic narrative will be eroded. Existing industrial land uses at Etruria junction should be preserved where possible, whilst industrial land uses further south can be sacrificed.

A second threat to the historic charm of the canal is future development that is poor in quality and fails to interact with the canal or respect the canalside setting. Mature tree planting should be retained as much as possible, with active frontages facing onto the canal. High quality materials should be incorporated into the development, particularly in respect of elevations facing onto the canal.

As use of the canal by walkers and cyclists increases, pressure may be incurred to remove historic stone sett paving details. These details should be retained.

Likewise, improvements to energy performance within historic buildings may result in proposals to remove single glazed timber windows. Historic windows should be preserved.

12.10: Summary of Special Interest

The remaining built fabric of the Etruria section is still capable of telling the story of the function of the canals during the industrial revolution in Britain. The design of the locks and gaging dock resolved the issue of significant level changes in this area, illustrating the confidence and prowess of 19th century engineers. Historic stone sett paving reflects historic practices, where stone used for ballast in commercial narrowboats was offloaded and re-used for paving.

The remaining historic buildings in this area are typical of their period, displaying a utilitarian style and constructed of local materials. The decorative character of the frontage to the former Cliffe Vale Works departs from the characteristic utilitarian style because it presented a public face to attract passing trade on Shelton New Road that was not required adjacent to the canal.

The design of contemporary development adjacent to remaining historic buildings and structures is an interesting modern day intervention that reflects the architectural practices of our times.

The surviving historic window fenestrations in this section are also interesting features.

12.11: Recommendations and Proposals

The canal at Etruria is romantic and picturesque, but derelict industrial sites suggest that the area needs repairing to suit modern day needs. Residential development can provide the opportunity to engineer a safer and more vibrant environment for local residents, encouraging use of the canal as a sustainable transport route at the heart of the city. Greater amenity use by local residents will support additional uses for the Etruria Industrial Museum in the light of threats for closure.

Fig. 40: Northern approach to Etruria junction, with the Caldon Canal joining with the Trent & Mersey Canal to the left

13. A500 (NORTH) CHARACTER AREA

13.1: Introduction

This stretch of the canal formed the historical link with Newcastle-under-Lyme. Swift House is the last remaining fragment of this former canal junction that linked Newcastle-under-Lyme to the emergence of the North Staffordshire conurbation. Brutalistic highways interventions during the 1970's have radically altered the character of this stretch of the Trent & Mersey irreversibly. However, in an atmosphere of spiralling fuel costs, the canal has relevance for its potential to support mixed sustainable transport links at a regional scale.

13.2: History & Archaeology

Three transport routes run parallel to each other: the canal of 1777; the railway of 1848; and the A500 road of 1972 (substantially rebuilt in 2005). Railway sidings and depots to the rear (west side) of the mainline station have largely been removed, leaving land for potential re-use. Mixed use development that formerly occupied Copeland Street, to the west of the canal has been demolished to allow for the construction of the A500.

Historically, the Newcastle branch canal connected with the Trent and Mersey just north of Glebe Street (built 1795-6). Most of the Newcastle Canal was filled in by 1938, leaving only a 100 yard stretch from the main canal, over which the towpath and Copeland St were carried over on hump-back bridges. A wharf existed at the canal junction by 1832, and was still in use in 1916. Charles Dickens described Stoke in 1852 as 'a picturesque heap of houses, kilns, smoke, wharfs, canals and river lying (as was most appropriate) in a basin'. In 1960 the canal stump and wharf was used by Stoke-on-Trent Boat Club. This final stretch was filled in during construction of the A500 during the late 1970s.

13.3: Historic and Existing Land Uses and Function

Historically, this section would have been full of industrial and commercial activity, with the railway station and sidings lending a significant sense of industrial importance to this area. The importance of the railway station is exemplified by the heavily engineered and costly retaining structure abutting the eastern edge of the canal. This stretch of the canal was predominantly surrounded by industrial land uses, with residential and commercial uses attaching themselves in response to the industries located there. To the north west of the canal, agricultural uses occurred in the flood plain adjacent to the Fowlea Brook.

In the present day national road infrastructure, storage & car parking has replaced former industrial land uses to the east and west of the Trent & Mersey canal, resulting in the loss of economic activity and demolition of many historic buildings in this area. Residential land uses have also reduced. Civic administration uses now occupy the site of the former branch canal and associated wharfs.

13.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

Swift House on Glebe Street is locally listed. It was formerly a bonded warehouse. The upper sections are now disguised behind metal cladding. However, the lower levels to the canal frontage remain clearly visible. These are of brick with segmented arched windows (one and a half stretcher). To the interior is extensive brick vaulting.

Fig. 41: Swift House, external metal fire escape and brick retaining wall

Architectural Character, Materials, Colours and Textures

The general character of this section of the conservation area is fragmented. Brutalistic engineering structures strongly position the canal corridor within an urban environment. A degree of intensity and greater sense of enclosure results from the activity taking place on the bridges feeding off the A500.

Swift House is constructed of dark red brick which is reflected in the use of materials for the A500 retaining walls. Other buildings adjacent to the conservation area are of limited architectural merit.

The main point of interest is where the railway line crosses the canal. The two railway bridges and footbridge create a strong sense of enclosure within the canal corridor.

Built Form & Massing

This section of the canal is notable for the occurrence of significantly engineered structures, such as high retaining walls and bridges that create a strong sense of containment and definition to the canal corridor. The retaining walls lining the eastern edge of the canal range in height from 5 to 12 metres (approx).

Six bridges occur in this section, three designed to carry vehicular traffic, two designed to carry rail traffic and one designed to carry foot passengers. Vernon bridge, Osborn bridge and Glebe Bridge are engineered modern structures that are brutal in character, designed for enduring robustness. The need to support heavy loading over the canal has resulted in tall supporting brick and concrete piers that tower over and above the individual within the canal corridor, creating a strong sense of containment for extended lengths. Likewise, the railway bridges convey a similar effect. The diagonal route of the railway bridges creates a quirky massing structure within this section of the canal.

Fig. 42: Railway bridge cuts across the canal south of Cockshott Lock, creating a strong sense of enclosure

Most of the traditional historic buildings and houses evident within historic plans have been demolished, and modern industrial buildings or major roads have taken their place. This has resulted in a loss of context and relationship with the neighbouring built environment. Due to the erosion of the historic fabric in this area, few buildings are located adjacent to the canal. A small cluster of one and two storey buildings, laid to an organic arrangement occurs around Vernon Road.

On the eastern bank to the north of Bridge 113, Swift House displays a large floor plate, extending in height to four storeys. The increased scale of Swift House complements the scale of the retaining walls adjacent to it.

By way of summary, the historic scale and massing of buildings within this stretch of the canal has been eroded due to highways interventions in the built form.

Style

This section of the conservation area has changed from an industrial area to an area of road infrastructure during the post-war period. The A500 boundary interventions resonate a more modernist style and character. In the absence of any other notable pattern of built form, the modernist style predominates.

External Walls and Facades

There is a mixture between dark red brick which is used on the eastern bank and the A500 retaining wall. The A500 road intervention has resulted in the heavy reliance of concrete, applied in a utilitarian and brutal fashion.

Roofs

Roofs are constructed of modern roofing materials, such as metal calzip type roofing. The roof of Swift House has been modernised in this manner. Traditional roofing materials that would have been characteristic of the conservation area have been replaced and updated.

Windows

Although the upper storeys have been altered, Swift House still has the original segmented headed openings, although the windows themselves are not the originals.

Details and Features

The railway bridges and weir lock near to Newlands Street provides an interesting transitional point from this urban section of the conservation area to the more rural character of Etruria. The railway bridge piers consist mainly of blue engineering brick which consolidates the general industrial and robust character of this section of the conservation area. The industrial character is further reinforced through the use of rivet work to metal panelling, demonstrating historic construction methods in the 19th century. The diagonal route results in an expansive span crossing the canal.

Groundscape & Public Realm

Fig. 43: Stone retailing wall to edge of canal

Boundary treatments within this section of the conservation area create striking urban features, due to their monumental stature. The retaining walls lining the eastern edge of the canal range in height from 5 to 12 metres (approx). The stone retaining wall edging the railway sidings and former railway depot is of historic interest, due to the significant height of this structure (approx. 12m), combined with the use of locally sourced stone for construction. Other brick retaining walls show the development of engineering and construction technologies over time, including the brick retaining wall with battered face to the front of Swift House car park, and the modern reinforced walls with straight face and expansion joints

adjacent to the A500. Boundary treatments to the north of Vernon Road are less robust and poor in quality.

The public realm is predominantly functional in character, providing for sustainable transport routes. The very close proximity to the rail station makes this stretch of the canal an important node for mixed sustainable transport routes, creating options for combined rail and cycle travel modes. Brompton cycles should be the norm along this route. However, the close proximity of the rail station is not communicated in any way along this stretch of the canal. Access points to the canal are numerous, and make provision for inclusive access, but difficulties are presented in the form of heavy traffic when pedestrians have to negotiate the major infrastructure network to access the canal. Crossing points are absent and the pedestrian or cyclist takes their life in their hands if they want to access the canal from the rail station.

Access to the eastern edge of the canal is difficult, resulting in a lack of management and maintenance to the high retaining structures south of Osborn Bridge. Natural surveillance at different times of the day and evening is lacking due to the surrounding topography, engineering structures and absence of buildings.

The historic canal edge has been significantly eroded in this stretch, with concrete defining the canal edge for the most part. Timber facing on the eastern bank to the south of Vernon Bridge softens the harshness of engineering solutions in this area and creates a higher quality edge detail. North of Vernon Road, the eastern bank is angled to 45 degrees, and of banked earth. Paving is predominantly resin bonded gravel. Clay paviour detailing occurs in isolated instances.

This stretch of the canal is very urban in character. Vegetation that is resilient enough to thrive softens the hard edges. The narrow strips of grass verge adjacent to the towpath make an important contribution visually. Hardy and invasive buddleja soften the stone retaining wall. Shrub planting has become overgrown to the front elevation of Swift House, obscuring views from windows towards the canal. Shrub planting occupies incidental space situated on the western bank. North of Vernon Road, regenerative scrub lines the canal corridor and contributes to the sense of transition from hard urban form to peripheral urban fringe.

The canal is situated adjacent to the A500 and A5007. Consequently, traffic signage and highways interventions are visible from the conservation area. These interventions detract from the historic character of the canal setting where the canal rises to meet the major infrastructure. Posts for roadway signage are located within the canal corridor, and are visible from the canal corridor. Whilst it is acknowledged that these signs are intended to give directions for road users, they give incorrect directional information to users of the canal. Directional signage is generally absent, with no indication of the close links afforded to Stoke town, the Station or University Quarter.

Unusually, functional lighting fixtures adjacent to the A500 provide illumination along the canal between Osborne bridge and Glebe Bridge. Further north, lighting fixtures are sparse suggesting that night time lighting is minimal.

A number of mooring posts are situated underneath Osborn Bridge, characteristically painted in black and white, but do not appear to be used. This may be due to concerns about criminal damage to narrowboats, given the concealed location of moorings, and lack of information about possible connections to the surrounding location.

Litter significantly detracts from the overall visual quality.

13.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Generally, there is little in the way of marginal vegetation, due to the engineered nature of the canal edge in this section. However, regenerative shrub cover lines the edge of the canal structure to the north of Vernon Road, providing feeding and shelter opportunities for wildlife.

13.6: Topography, Views & Enclosure

For the most part, the canal is situated at a slightly lower level than the surrounding townscape. The topography to the east of the canal is elevated above the canal, resulting in the need for retaining structures. Highways infrastructure rises to meeting key transport junctions to the western edge, accentuating the sunken and recessive character of the canal at this point. Further north, level differences decrease, reducing the need for engineered structures.

This section of the canal corridor is not pretty, but it holds visual interest by virtue of the monumentality of the engineering structures surrounding it. The experience of passing through this imposing series of engineered structures can best be described as foreboding. The enclosed, linear nature of the canal allows for a series of channelled views of engineering structures that frame each other sequentially.

The individual experiences a strong sense of light and shade as one bridge after the other is passed under. A charming view of the arch of old Glebe bridge, framed by, and subservient to, the new Glebe Bridge is afforded on the northern approach to Glebe bridge, looking south. A second view worthy of note is the cumulative view of the wrought iron panelled railway bridges spanning the canal at an acute angle. The view of the lock structure north of Vernon Road from the southern approach is also imposing, set within the frame of Vernon and Osborn Bridge. Close range views of the high retaining structures to the eastern edge of the canal are also worthy of note.

Glimpses of Stoke town can be obtained from the approach to Vernon Road Bridge with views towards Stoke Minster, the Spode Chimney, Minton Hollins Building and The Church of Our Lady and St. Peter in Chains and attached Presbytery. Views of Stoke train station roof and the University are also evident at this point. Townscape views on the approach to Glebe Bridge become more pronounced, as the viewer looks up towards an eclectic mix of larger buildings situated at a higher level, including Swift House, The Civic Building, the new sixth form college and BT block. However, views of the A500 at this juncture detract from the quality of this townscape view.

Views into the conservation area are limited, due to the local topography, but are available from vantage points on vehicular bridges and from tall commercial buildings overlooking the canal, such as The Civic Offices and Swift House.

13.7: Detractors, Neutral Areas & Gap Sites

The A500 has replaced much of the traditional built environment associated with this stretch of the canal, and significantly detracts from the area, in terms of severance, noise pollution and quality of the built environment. Highways interventions and associated signage reinforce the dominance of transport infrastructure at this juncture of Stoke-on-Trent. This results in an uncompromising, urban feel to this stretch of the canal.

Metal railings fixed to the approach to Osborn Bridge result in visual clutter. To the north of Vernon Road, poor quality boundary treatments and cluttered storage further detract from the visual quality of the canal corridor.

13.8: Enhancement and Development Opportunities

This stretch of the canal is a modest geographical area that is further impinged upon by proximity to the busy A500 to the west and the west coast mainline railway to the east. The indiscriminate route of the A500 has resulted in pockets of land that have become constrained in future development terms, despite the close proximity of the A500. The main issues relate to vehicular access.

Should the current railway depot to the west of the rail station be capitalised on to support the regeneration of Stoke town, the railway depot site to the north of Vernon Road would provide a ready made alternative for a replacement depot, with strong connections to rail infrastructure already in place resolving the access issues. Future re-development of the site must acknowledge the visual impact on the northern gateway to Stoke town.

At the canalside level, a more positive connection needs to be made between the Trent & Mersey and the regeneration of Swift House and Railway Station. More sociable uses contained within Swift House would provide an intermediate destination that helps to link the station and University with Stoke town. Future re-development of Swift House should exploit the waterside location to maximum effect. Pedestrian connections should be emphasised through directional signage to link with the University and Stoke town. Traffic signage and associated clutter should be minimised or screened from view.

Whilst the character of Stoke Wharf generally requires re-invention, remnants of historic character should be referenced. Historic features could be highlighted during the darker hours through sensitive lighting to elevations fronting on to the canal. Restoration of the original frontage to Swift House would contribute to restoring a small part of the original character to Stoke Wharf.

13.9: Pressures & Threats

Further road improvements are a potential threat to the setting of the canal and quality of the public realm associated with it. Poor quality development may also diminish the visual quality of the conservation area further.

Poorly maintained historic structures, such as the stone retaining wall, may become dangerous and require interventions to prevent structural collapse.

The location of Stoke Wharf near to the A500, train station and Civic Centre may place pressure on land in this area for more car parking.

13.10: Summary of Special Interest

This section of the conservation area provides an interesting context in terms of industrial architecture & engineering works, particularly in the form of Swift House and the retaining structures associated with the rail station and depot.

The series of bridges creates alternating degrees of enclosure. The oblique routes and large spans of the railway bridges are striking.

13.11: Recommendations and Proposals

This section of the canal is closely implicated with Stoke town, the rail station and the University Quarter, and together with Stoke Wharf needs a clear vision for re-development of the area as a whole that sympathetically respects the existing historic features in a contemporary way. Existing historic features should be accentuated, whilst high quality new development is brought forward to repair in some way the extensive damage to the built fabric in this area. Links between the train station, University Quarter and Stoke town centre should be emphasised, in order to address the severance of Stoke town from Station Road. Links between sustainable transport routes should be emphasised.

14. STOKE WHARF CHARACTER AREA

Fig. 44: The bottle kiln of the former Dolby Pottery Works

14.1: Introduction

The urban context of Stoke Wharf has resulted in many interventions since the post ware period that has incrementally eroded the historic charm of this area. However, it holds historic interest and industrial archaeology.

14.2: History & Archaeology

The construction of the canal required a low aqueduct of three brick arches to be built in order to span the River Trent. The arches have subsequently been reinforced with concrete beams.

Initial development along the canal was part of an expansion of Stoke town centre along Glebe Street with a new street, Wharf Street, running parallel to the west bank of the canal by the 1830s. Wharf Street was occupied by wharves, pottery works, flint mill, gas works and a timber yard in the 1870s. The development of the A500 in the 1970's removed Wharf Street, leaving only a mid-20th-century telephone exchange (now used as offices) and a car park squeezed between the road and the canal. A remnant of Glebe Street remains as Glebe Court with late 19th-century buildings and the original canal bridge now leading nowhere.

On the east bank Lytton Street was laid out with terraced houses from the later 19th century. These houses have now been replaced by modern industrial units, although a mid 20th-century flint kiln remains as a reminder of earlier industries.

The east side of Lytton Street, inside a small triangle between the street and the railway line, retains an industrial character dating back to the 18th century, when a water mill stood on the

Trent. Part of the mill may form part of extant buildings along the river. An unusual triangular-plan pottery works, the Crown Works, still remains in situ and has been converted to commercial units. A remnant of the gas works survives in the form of a former governor house. The complementary transport system of the railway of 1848, carried on brick arches parallel to the canal, at this point forms a definitive edge to the canal's east bank.

The construction of the A500 'D' Road, including the re-alignment of Glebe Street with a new bridge across the canal, has drastically changed the character of the canal in this area.

Fig. 45: A car park replaces the former alignment of Glebe Street

14.3: Historic and Existing Land Uses

The Stoke wharfs were predominantly surrounded by industrial land uses, with residential and commercial uses interspersed throughout, forming an interesting mix. National transport infrastructure and car parking has replaced former industrial land uses to the west of the Trent & Mersey canal, but industrial use has been maintained to the eastern edge. Residential land uses have been removed entirely.

14.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

The only statutory listed building in this character area is that of the square based bottle kiln which formed part of the former Dolby Pottery works (grade II listed). It is surrounded by other structures which post-date the bottle kiln but they add a degree of historical context and promote its setting and industrial archaeological importance.

Architectural Character, Materials, Colours and Textures

The character of the canal is tranquil and calm, but industrial activity buzzes within the Lytton Street area. The area is marked for its fine grained activities, with an interesting mix of trades and craftsmanship evident.

The combination of steel, brick and corrugated iron forms an interesting mix of textures, although some brick facades have been painted white. The predominant colours are red, grey and white.

Built Form & Massing

The block form arrangement to the canal edge is organic in its character and layout. For the most part, properties present a public face away from the canal, resulting in rear boundary walls, rear building facades, yards and car parks adjoining the canal. The scale and massing of the built environment to the east of the canal corridor is predominantly single and two-storey industrial buildings, of small to medium sized floor plate. Historic towers, bottle kilns and industrial vents add interest and variety to the roofscape by virtue of their height. The scale and massing of the railway arches is similar to that of the surrounding buildings, but is notable for the scale of the void within the arch that encloses the passing pedestrian. Within the Lytton Street area, buildings are built to the back of pavement, with workshop openings facing directly onto the street for ease of access.

The scale and massing of buildings increases adjacent to the Glebe Street area to three and four storeys, of large floor plate, notably Swann House, the British Telecom (Telephone Exchange) building and the warehouse adjoining Wharf Place.

The historic built fabric to the west of the canal corridor has been significantly eroded through demolition and re-use as car parking and the A500, resulting in a loss of context and relationship with the neighbouring built environment. The single span brick bridge which carried the old Glebe Street (now known as Glebe Court) is now used as a car park.

Style

The overall form and layout is generally that of a strip which is vernacular and organic in its nature, though much of the layout is dictated by the route of the canal, Lytton Street, and the railway especially towards Grant Street and Oldmill Street. The canal frontage is addressed by buildings which have variation in terms of orientation and do not follow a pattern. The architecture is utilitarian and functional, serving the purposes of the industries that inhabit them. Some of the buildings have been adapted to suit modern uses.

External Walls and Facades

Fig. 46: Car parking underneath a railway arch

Remnants of locally sourced stone walling are evident to the edge of the railway line, but where the road and river crosses under the railway arches, there is a switch in materials to staffordshire blue bricks. This suggests that consideration was given to the stability of the arches and that brick was considered to be the more suitable choice for this section by the railway engineers.

An decorative façade detail can be seen on Queensway House in Lytton Street, where the brickwork has been recessed and dressed with a dentil to the top of the recess.

The facing bricks of the buildings that line the canal range from blue engineering, red brick and brindle, as can be seen on the grade II listed bottle kiln. Such bricks have an interesting patina given by aging albeit from smoke emissions associated with the former manufacturing industries. Commercially produced modern deep red brick is also used to the newer buildings. These bricks are generally more standardised in terms of their source.

Many original brick wall boundary treatments remain. However there are variations that contribute to the overall diversity of the conservation area. There is one small section of a red brick wall which has been recently partially rebuilt with decorative blue bullnose bricks used as copers.

Roofs

There is a degree of variance of the roofscapes and orientations. However, the skyline is characteristically punctuated with the bottle kiln and the surrounding chimneys. The bottle kiln also relates with other square profiled chimneys along this section of the canal which punctuate the skyline and add visual interest and composition along the canal, as well as acting as landmarks in their own right. In terms of materials, a mix of blue clay tiles, corrugated sheeting and some slate is in situ. The corrugated sheeting provides a strong texture within the roofscape that is distinctive. Modern calzip type roofing has replaced traditional roofing materials on some of the workshop buildings.

Windows

The main windows of note are that of the Grindey building (warehouse) which dates from the 1930s. These are metal framed, opening on a pivot in the middle of the window which is quite distinctive. The second floor windows have a high degree of vertical emphasis.

The windows to Queensway House on Lytton Street have been very consciously designed and depart in instances from the usual window detailing that is typical of this conservation area. A double row of Staffordshire blue engineering brick is used to the circular headed arch, with a brick keystone detail finishing the arch. Unusually, a stone sill with chamfered inset detail is used to define the window base. The existing timber windows are not the original windows. It is likely that sash windows would have occupied this space. The painted railings are also a later addition to the window detail, but are sympathetic to the overall window design. A recess to the gable suggests a vent has occupied this space at some time. The rounded arch contrasts with the simple roof pitch.

Fig. 47: Queensway House

Bricked up oculi can be seen to the gable of the building that now houses Metal Masters.

There are very few window openings worthy of note which overlook the canal, or face directly onto the canal. Where windows do occur, many are either bricked up or boarded over. Some of the windows have been bricked up for a considerable period of time. The brickwork is recessed and selected to match with that of the principal building.

Details and Features

The grade II listed bottle oven on the former Dolby Pottery site provides an interesting feature to the canal corridor, notable for its transition from the square base to the circular top that displays ridged and indented brickwork.

The Staffordshire blue brick railway arches are also a significant historic engineering feature. The arches are modest in scale, reflecting the changes in topography that needed to be overcome.

Glebe bridge is an interesting structure in its own right, although somewhat compromised by the steel girders that have been added to widen the bridge. It provides evidence of Glebe Street's former layout and orientation before the A500 was constructed during the 1970s. Stone dressings address the single span bridge arches.

Groundscape & Public Realm

Access to the canal from the surrounding street network is restricted to points of entry and exit from the Glebe Street and A5007 bridges, but inclusive access is provided for and the tow path is well used, particularly by cyclists. The public realm is predominantly functional in character, providing for sustainable transport routes, although space exists for the development of a more generous and sociable public realm. Natural surveillance on the canal at different times of the day and evening is lacking due to the daytime uses within

industrial premises. This is further compounded by the orientation of public frontages away from the canal.

Mature tree planting provides a sense of enclosure and enhances the quality of the canal-side setting, reinforcing the sense of tranquillity of the canal that distinguishes it from the surrounding road and rail network. However, areas of regenerative tree planting partially obscure views of key townscape assets, such as the view of the bottle kiln from the car park. Lytton street is harder in character.

Typical boundary treatments along the canal include red brick and Staffordshire blue brick walling, concrete render finish, concrete walling, coloured net fencing, traditional post and rails and steel railings. Within Lytton street, palisade fencing is intermixed with brick walling. The accumulation of different boundary treatments detracts from the visual quality of the conservation area.

The canal itself is built in blue engineering brick, where about three courses are usually visible just above the water line. The brickwork is laid in a tight fashion which again demonstrates a high standard of build quality and craftsmanship. A singular cast iron bollard is situated near to the middle of the towpath in the middle of this section. It is painted in the familiar British Waterways black and white colour scheme and references the original working nature of the wharfs.

Historic paving types sporadically occur along the towpath varying from blue brick to stone setts. These provide visual interest and texture that is sympathetic to the character of the historic structure and reference the historical need for robust paving materials that facilitated the loading and unloading of goods on the wharf. The blue brick tends to be modern for this section of the conservation area, but is generally considered a traditional source of paving and it complements the canal environment well. The quality of the streetscape within the Lytton Street area is more functional in character, but stone sett paving is still evident to the edges of the street, indicating that the streets were originally sett paved in the area before being covered with tarmac. There is a good example of stone steps near to the descent from Glebe Bridge. Substantial slabs have been laid between the canal and the towpath. These steps demonstrate robustness and craftsmanship in the original building of the canal.

The canal is situated adjacent to the A500 and A5007. Consequently, traffic signage and highways interventions are visible from the conservation area. These interventions detract from the historic character of the canal setting where the canal rises to meet the major infrastructure. Lighting fixtures at key transport nodes bordering the conservation area are numerous in number and differ in the design of fixtures. By comparison, lighting fixtures located within the canal corridor are sparse suggesting that night time lighting is minimal.

Signage is common within the Lytton Street area. The remains of painted signage are found to the elevation of the industrial building facing onto the River Trent.

The amount of street furniture and signage along the towpath is minimal. Consequently, general views along the canal are not obstructed by clutter.

Litter floating in the canal further detracts from the overall visual quality.

14.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Regenerative tree and shrub cover lines the western edge of the canal structure, including Willow, Sycamore, Ash, Birch, Maple, Buddleja, and bramble. This mix of regenerative planting supports bat flight paths & local biodiversity.

The canal widens below Swift House, where it has been colonised by aquatic marginal vegetation. Otters have been sighted along this stretch of the canal and are likely to use the canal for occasional fishing and movement activities through the city.

14.6: Topography, Views & Enclosure

Fig. 48: The view of Glebe Bridge from the northern approach

For the most part, the canal is situated at a slightly lower level than the surrounding townscape. The surrounding topography could be described as 'dished', rising to interface with raised bridges that cross the canal corridor. When descending to the level of the canal, you enter a wholly different place, one set apart from the overpowering noise and activity of the streets and roads above. There is an immediate sense of tranquillity and a slower, less frenetic pace.

Views within and out of the conservation area can be described as mixed in quality.

Within the canal corridor, the surrounding levels combine with the built form and mature vegetation to contain views. Consequently, views within the canal corridor are channelled. By way of reinforcement of character, a good quality view of the bottle kiln from the canal and towpath can be gained at close range within the canal corridor. Glimpsed views of the River Trent can be gained from the canal corridor also, but are obscured by regenerative planting.

Elevated views towards Stoke town (incorporating The Civic Centre, Brook Street and Stoke Minster) and the streetscape of Glebe Street (including the British Telecom Building, Glebe Street, the 6th form college, commercial building fronting Glebe Street and Swann House) are afforded from Glebe Bridge. The A5007 bridge also affords elevated views towards Stoke town.

There are some glimpses between the buildings in places, where the sides of buildings can be viewed which can show interesting items such as historic signwriting, gables and other boundary walls that run ninety degrees to the canal.

Characterful views of the railway arches and retaining walls can be gained from Grant Street and Oldmill Street. A characterful view of the industrial building lining the western side of Lytton Street is also afforded from the junction of Lytton Street with Oldmill Street.

The stark treatment to the public realm within the wharf car park results in a potentially good view towards Stoke town, but this view is marred by the brutal engineering of the A500. Mature vegetation flanking the eastern edge of the car park adjacent to the canal obscures views of the bottle kiln from the Wharf car park.

Views into the conservation area are limited, due to the local topography, but are available from vantage points on Glebe Street bridge and the A5007 bridge, and from tall commercial buildings overlooking the canal, such as The Civic Offices and Swann House.

14.7: Detractors, Neutral Areas & Gap Sites

Car parking and the A500 has replaced much of the traditional built environment associated with Stoke Wharf, and significantly detracts from the area, in terms of severance, noise pollution, lack of enclosure and quality of the built environment. Highways interventions and associated signage reinforce the dominance of transport infrastructure at this juncture of Stoke-on-Trent.

The legacy of the original 1970s highways engineering detracts from the character of the canal, especially in the form of the untreated concrete which is particularly evident on the Glebe Street bridge. This has a negative impact upon the setting of the conservation area and gives an uncompromising, urban feel to Stoke Wharf. Due to the difference in levels, the road is higher than the canal. The elevated nature of the road, combined with the increased activity on this route results in a canal structure that is recessive by comparison.

The British Telecom (Telephone Exchange) building dates from the 1960s. The elevations facing on to the canal are inactive, where there has been little effort to integrate the building with the canal. However, it is built of blue engineering brick which provides a degree of relationship with the canal's built environment, and the building is well proportioned.

Service yards and industrial sites in a state of neglect detract from the visual quality of the canal corridor. These sites have replaced the historic built environment that formerly edged the canal. Inappropriate boundary treatments, insensitive signage and poor quality materials, such as the removal of traditional paving, combine to impact upon the overall quality of the conservation area. Concrete culvert structures and the associated metal grilles further detract from the historic character of Stoke Wharf. Poor quality boundary treatments generally detract from the historic setting of the canal.

14.8: Enhancement and Development Opportunities

Stoke Wharf is a modest geographical area that is further impinged upon by proximity to the busy A500 to the west and to a lesser extent the west coast mainline railway to the east. The shape of the site and the alignment of the canal creates a narrowed pinch point to the north, which throttles the potential for redevelopment due to the narrow block dimensions. These constraints limit the developable area and necessitate a tailored approach to unlocking the full potential of the area.

Development on sites currently used for car parking would help to provide more natural surveillance to the canal corridor, and increase user safety, thereby encouraging greater use by pedestrians and cyclists. Public frontages and human activity facing on to the canal would further enhance natural surveillance. Development generally will help to reduce noise levels generated by vehicles using the A500 by acting as a buffer. Lighting to the canal would further increase user safety during evening hours. Sites bordering the junction between the A5007 and Lytton Street have the potential to create a gateway into Stoke from an eastern approach.

Whilst the character of Stoke Wharf generally requires re-invention, remnants of historic character should be referenced. Historic features could be highlighted during the darker hours through sensitive lighting to elevations fronting on to the canal. Restoration of the original frontage to Swann House would contribute to restoring some of the original character to Stoke Wharf.

Softworks and tree planting should be managed to frame important views towards historic features. Improvements to existing industrial elevations could further enhance the visual quality of Stoke Wharf. A more consistent and co-ordinated approach to public realm treatments that sympathetically enhance the visual quality and historic character of the canal corridor would be appropriate. Traffic signage and associated clutter should be minimised or screened from view.

At the canalside level, a more positive connection needs to be made between this site and the regeneration of the Swann House and Station Approaches site to the north of Glebe Street to create a sinuous, connected waterside area for Stoke. Better pedestrian connection should be secured to link with the Trent valley, the University and the proposed city academy and Fenton Manor Leisure complex to the east. Consequently the site has the potential to become an important green gateway into Stoke and to act as its hub in linking to the wider canal and greenspace network. An increase in the width of the towpath would encourage use of the towpath as a sustainable transport route.

14.9: Pressures & Threats

Further road improvements are a potential threat to the setting of the canal and quality of the public realm associated with it, particularly in respect of works that improve vehicular accesses.

Piecemeal, poor quality development that does not respect the historic context of the canal may also diminish the character of the conservation area further.

Remnants of the historic fabric, such as traditional paving and bollards may be deemed as insignificant and removed entirely.

Poorly maintained historic structures may become dangerous and require demolition.

The location of Stoke Wharf near to the A500, train station and Civic Centre may place pressure on land in this area for more car parking.

14.10: Summary of Special Interest

This section of the conservation area provides an interesting context in terms of industrial archaeology, particularly in the form of the organically laid out industrial buildings and the punctuation provided by the Grade II listed bottle kiln and associated chimneys that lie adjacent to it.

Historic remnants of boundary treatments and paviours along the towpath add to the general setting of the conservation area.

14.11: Recommendations and Proposals

Stoke Wharf needs a clear vision for re-development of the area as a whole that respects the remnants of existing character and builds on that character in a contemporary way. Existing historic features should be emphasised, whilst high quality new development is brought forward to repair in some way the extensive damage to the built fabric in this area. Links between the train station, University Quarter and Stoke town centre should be emphasised, in order to address the severance of Stoke town from Station Road. Links between sustainable transport routes should be emphasised.

15. A500 (SOUTH) CHARACTER AREA

15.1: Introduction

The forlorn appearance of the canal to the south of the A5007 contains the remnants and artefacts of a bygone era. Nevertheless, the historical importance of this area as a transport interchange supporting large scale local industry, combined with the impact this had on the development of industry in Fenton and Longton, cannot be understated.

15.2: History & Archaeology

This area accommodated intensive industrial activity from the mid 19th century. Even before this period several mills located to this area in the 18th century because of the location of the River Trent that lay adjacent to the canal.

On the east bank of the canal, Stoke Basin (now known as the Dolphin Boatyard) was a significant transport interchange, with a horse-drawn tramway initially connecting the canal to Fenton, and the road to Longton. This connection established a link to Fenton and Longton that allowed for the transportation of raw materials and finished goods, supporting the industrial growth of these settlements. At a later period a rail spur connected the Basin to the main railway line, providing an integrated and efficient transport system. Stoke Basin is now filled in but the adjacent wharves are still used by boatbuilders and chandlers.

The east bank of the canal was occupied by a railway works when the main line was constructed in 1848. The railway engine sheds included the “monster engine stable” or Round House. The dimensions of the engine stable boasted a 200 ft (61m) internal diameter and was said to be the largest in the country. The Round House has subsequently been demolished but the other engine sheds remain in use as light engineering workshops and warehouses.

In 1889 the Colonial Pottery of Winkle and Wood was built on the east bank: only the basement levels of the Colonial Pottery remain, forming a brick face to the canal edge.

15.3: Historic and Existing Land Uses

Historic maps dating from 1900 show industrial uses within the area, linked to an intricate network of canal and rail routes. The canal facilitated the import of raw materials and export of finished products at an international level. Interspersed between the industrial sites are the remaining fragments of agricultural land. The Stoke basin would have provided efficiency of loading and unloading to individual industrial sites, whilst preventing congestion on the main route of the canal. A further basin was developed to the south of Whieldon Road, again supporting industrial functions in this area. Residential uses were sparse and where they did occur, were often associated with local industry.

The significant change in land use within this stretch of the canal relates to the development of the transport infrastructure system. Whilst the cessation of industry in the area has resulted in a number of industrial sites becoming disused, other industrial sites have benefitted from the excellent transport links afforded. Former tracts of agricultural land have become land locked and inaccessible, and ecological succession has taken place on these sites. Ironically, the developing rail and transport infrastructure has rendered the canal redundant as a working transport route. Residential land uses still exist within the area, but the rail and highways transport infrastructure severs access from the canal to the surrounding dwellings. The two canal basins have been filled in, and Stoke basin has been built over.

The fishing pools provide valuable wildlife habitat and opportunities for angling by local residents and regenerative tree planting serves as a buffer between industrial sites and the canal.

Fig. 49: Bricked up entrance to the former Stoke Basin

15.4: Character of the Built Form

Listed and Unlisted Buildings of Importance

The original building fabric of the former railway sheds to the south of the A5007 still remains, although adaptation of these buildings to suit light industrial uses has resulted in a degree of alteration to the original architectural aesthetic.
A small historic building defines the towpath edge immediately to the south of Whieldon Road Bridge. The building is constructed of Staffordshire blue brick that has weathered over time.

Only one statutory listed structure is within this section which is a Grade II listed cast iron milepost which is located just to the north of Whieldon Road. It exhibits a circular post with moulded head. Embossed letters on 2 convex tablets read as "Shardlow 55 miles, Preston Brook 37 miles". It is dated "R & D Stone 1819" on the shaft and was probably cast in the foundry of Rangeley and Dixon in Lichfield Street, Stone.

Architectural Character, Materials, Colours and Textures

Surviving remnants of industrial buildings display a utilitarian and functional character, with minimal decoration. The engine shed has a large floor plate, although the height of the building is modest by comparison. The engine shed and industrial building are constructed of Staffordshire blue engineering brick, although red brick is used elsewhere within the walls, bridges and brick faces edging the canal.

Stone setts define former wharf edges, where heavy loading and unloading dictated the use of robust and durable paving materials. The laying bond of the paving combines with the weathered nature to provide a distinctively textured surface.

Fig. 50: The former railway shed adjacent to the canal

Built Form & Massing

The buildings adjacent to the canal edge are industrial in character, possessing large floor plates. Buildings are predominantly single storey in character, with building heights within the conservation area ranging from 4-6 metres. Although outside of the conservation area boundary, the incinerator is the highest building in the area and forms a significant landmark within the city.

The industrial buildings are set back from the canal edge. The modern industrial building elevations fronting onto the canal edge are inactive, with no integration with the canal. The former engine sheds facing onto the canal have the potential to be active if reverted back to their original form, creating interest and vitality against the canal edge, even though they are set back.

Style

This section of the conservation area is informal and piecemeal in character. The canal is somewhat constrained by the adjacent road network.

Some historic industrial buildings and archaeology remain, displaying a utilitarian character, though it is fragmented. Architectural features were designed in response to the need for functionality, rather than decoration. Materials were selected on the basis of cost, taking advantage of economies of scale. Over time, they have been adapted to suit modern industrial uses. Roofs have been modernised and former openings have been bricked up.

The former railway engine shed has a significant impact on the canal. Commercial units front the canal where much of the activity is placed. The distinct arches show the use of rhythm within the architectural elevation, which helps to define the building, although sub-division of the building has resulted in varying treatments to the bricking up of arches.

External Walls and Facades

The facades have generally been altered over time which has diluted the character of the conservation area.

This section of the conservation area is dominated by highways interventions. Impenetrable concrete retaining walls along the A500 face directly onto the canal edge and severely detract from the visual quality of the conservation area. The A50 intersection is built in blue engineering and buff brick. The buff brick is not a characteristic material within Stoke-on-Trent.

The elevation of the former engine railway shed facing onto the canal shows a series of archways that have now been bricked up. In the original form, the rhythmical arrangement of archways would have conveyed a strong sense of proportion, possessing a quiet sense of stature to the canal edge. Staffordshire blue engineering bricks were used during the original construction, but the consistent use of materials has been eroded through the use of red bricks within the apertures of the arches. A string course above the arches emphasises the length of this elevation further.

The walls that defined the former entrance to the Stoke Basin are comprised of red brick and stone. The bricked up archway that formed the entrance to the Basin is constructed of stone. Repairs to the brickwork have been undertaken, and the combination of brickwork repair and the use of brick to block the basin entrance has reduced the quality of this elevation from its former stature. Stainless steel work cut to the shape of dolphins, fixed to the wall forms a decorative detail.

The former Winkle and Wood Pottery building was a former imposing building on the conservation area. The boundary treatment of the former Colonial Pottery is of interest, showing the rhythm and proportion of former window apertures (now bricked up) that historically faced onto the canal edge. Since demolition, only the ground floor brick face remains, serving as a retaining wall. Further south, the canal edge changes into concrete which has a negative but honest impact on the conservation area.

Fig. 51: Winkle & Wood's Colonial Pottery prior to demolition

Fig. 52: The remaining elevational fragments of the former Colonial Pottery

Roofs

The significance of the roofscape in this section of the canal is evident within the general form and pitch of roofs. The buildings have varying orientations which means that the gables sometime face onwards or sideways onto the canal, but the variation adds general interest to the informal character of the conservation. Many of the roofs on the historic industrial buildings have been replaced with modern metal substitutes such as calzip, diluting the conservation interest.

Windows

Few of the buildings have active frontages, so structures with windows are generally rare. The brick face of the former Winkle and Wood pottery factory shows some segmented headed windows on the remaining ground floor. These windows have all been blocked up with brick, though the openings are still obvious. The dimensions of the windows all vary slightly, which adds visual interest.

Details and Features

The bridges that serve the former canal arms to the north and south of Whieldon Road are of particular note. The bridge that served a former canal arm just to the south of Whieldon Road (opposite the former Winkle and Wood Pottery factory) has substantial blue engineering brick piers with moulded bull-nose copers. The span is a simple iron girder with black and white railings. Imprinted Staffordshire blue paviours are used on the pedestrian bridge ramps, with timber decking to the bridge crossing. The Staffordshire blue paviours add to its significance. The humped back bridge leading to the former Stoke Basin is of a greater age and constructed in red brick. The span has been bricked up but it still has some architectural significance and contributes to the character and history of the conservation area. This former canal junction now acts as a small wharf, accommodating a congregation of boats. In this way, the canal still performs a functional role at this juncture.

Groundscape & Public Realm

There is an interesting example of granite sett paving at the Dolphin Boatyard. It is only evident from the elevated position of Whieldon Road, as most of the paving is screened from view by corrugated hoardings and narrowboats, but the setts clearly define the location and character of the former wharf area of this section. The extent of the paving suggests the space that was required for handling a large volume of good and materials at this junction.

Fig. 53: Stone sett paving defines the former Stoke Basin Wharf

The towing path is predominantly constructed of resin bonded paving, reflecting the green character on this stretch, with clay paving to the underside of bridge structures.

Edge treatments to the canal structure are mixed in quality. Many of the original stone and brick edging treatments are still in situ at the former Stoke Basin on the eastern bank. Further south, sheet piling has replaced the traditional canal edge where modern development has taken place. On the eastern bank further south, the canal edge is defined in a more naturalistic manner, to a 45 degree angle, providing ease of access to the water's edge for small mammals. The traditional hard and soft edges should be retained, or replaced, like for like.

Mature regenerative tree planting lines the southern stretch of the canal corridor, creating seasonal structure that encloses the canal from spring to autumn, partially screening modern industrial buildings from site. Mature tree planting creates a green character that reinforces the urban peripheral edge of the city, and at the same time masks many of the industrial uses surrounding the canal. The quality of the ground canopy could be improved, to further enhance biodiversity in the area.

Public access to the canal is severely restricted, owing to the large industrial sites flanking the canal edge and the severance resulting from vehicular and rail transport infrastructure. Access can be gained from the A5007 bridge and the A50 bridge. A smaller bridge to the south of the A50 also provides access to the canal. Due to the absence of active frontages, natural surveillance is poor, due to inactive building frontages and mature tree planting.

Boundary and wall treatments are varied. The mix of industrial sites and green spaces result in a mix of hard and soft treatments that relate to the adjacent land use. Boundary

treatments in the southern section are predominantly soft in character, with native hedge and tree planting lining the canal corridor. The character of boundaries changes to a harder urban character on the approach to Stoke north of the pedestrian bridge.

Further south of the former Colonial Pottery, an old, weathered concrete wall forms a distinctive urban feature, indicating the transition from rural to urban on the southern approach by narrowboat. A series of concrete loading bays between these two boundaries indicate the historic working character of the canal. Also of note is the definition of the canal edge formed by the arrangement of narrowboats at the Dolphin Boatyard. This arrangement creates a distinct sense of place at a particular point along the canal route. Other hard boundary treatments typically relate to industry and transport infrastructure, comprising palisade fencing, brick and breeze block walls and aggregate and chip clad concrete walls.

Fig. 54: Concrete walling to the south of the former Colonial Pottery

Orientation and interpretation signage is minimal along the canal towpath, although interpretation boards occur at Old Whieldon Road and Sideways. Likewise, lighting along the towpath is minimal. Little is provided in the way of spillout lighting from adjacent buildings. The provision of seating is minimal, but the industrial concept informing the design of seating at the most southern point of the A500 stretch creates visual interest and helps to convey the former industrial character of the canal.

Public art creates further visual interest on this stretch, as can be seen from the former colliery wheel embedded into the towpath at the Incinerator, and the silver dolphins leaping on the former entrance of the branch arm at Dolphin Boatyard.

Litter is a problem within this stretch of the canal, detracting significantly from the visual quality of the canal corridor.

15.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

Regenerative tree and shrub cover lines the edge of the canal structure, including Birch, Willow, Alder, Elder, Hawthorn and Bramble.

The Sideway fishing pools provide a habitat for wildlife, with sightings of damselflies and dragonflies occurring at this location. The former Colonial Pottery site situated to the north of the Sideway fishing pools has become colonised by opportunistic plant species. The man-made substrate of redundant bricks encourages many flowering plants. The occurrence of these flowering species provide rich nectar sources for many invertebrates.

The retention of natural edges to the eastern bank further south of Old Whieldon Road supports the movement of animals in and out of the canal.

15.6: Topography, Views & Enclosure

The waterway is enclosed for much of its length by regenerative tree planting and industrial buildings. Levels to the east of the canal tend to be slightly higher than the canal edge, and levels to the west of the canal tend to be lower, with the exception of raised inclines due to transport infrastructure leading to large roundabouts.

For the most part, views within the canal corridor are channelled along the length of the canal, due to the enclosure by tree planting and buildings. Historic views on this stretch of the canal corridor are absent, although the potential exists for the re-instatement of a historic view through the renovation of the former railway sheds. The scale of existing industrial buildings and activities associated with industry results in distinctive focal points. The excessive height of the Incinerator building and Brittania stadium, situated on a plateau above the canal results makes these buildings highly visible along this stretch of the canal, forming landmark views from both approaches on the canal. The cluster of buildings, narrowboats, and public art at Dolphin Boatyard creates visual interest, creating a local landmark on approach from the towpath. Glimpsed views of Stoke Minster, Stoke Wharf warehouse and the modern 6th form college are visible on the southern approach from Dolphin Boatyard towards the A5007 bridge.

Further south of the former Colonial Pottery, views of the A500 and the roundabout joining with the A50 do not complement the historic character of the Trent & Mersey Canal.

Views into the conservation area are for the most part screened due to the surrounding topography, industrial buildings, tree planting and restricted access. Views into the conservation area can be gained from the elevated vantage points on the bridges.

15.7: Detractors & Gap Sites

Litter significantly detracts from the visual quality of this stretch of the Trent & Mersey canal. Much of the litter appears to have been generated from surrounding industrial activities, such as plastic wrappings and wooden palettes. This problem is particularly evident on the bank of the canal edging the former engine sheds, south of the A5007 bridge.

Some boundary treatments on this stretch also detract from the character of the canal, in particular the clad walling adjoining the A500 and breeze block wall to the north of Dolphin Boatyard.

Steel railings to the edge of the pedestrian bridge south of Whieldon Road detract from the visual quality of this charming historic structure.

South of the pedestrian bridge, partially demolished industrial buildings detract from the historic character of the canal.
The large expanse of car parking abutting the eastern canal edge, to the north of the A500/A50 roundabout also serves to detract from the historic character of the canal.

To the south of the A500/A50 roundabout and adjacent to the Incinerator, extensive use of blue metal railing emphasises the heavily engineered solutions adjacent to the canal. The use of high railings to the edge of the canal underneath the A500/A50 bridge is uncharacteristic. The spatial experience of the pedestrian adjacent to the water is interrupted.

15.8: Enhancement and Development Opportunities

Full development of this stretch is restricted, due to the land locked nature of sites adjoining the canal, situated between the railway line and A500. Access arrangements are restricted. Re-activation of vacant industrial sites would benefit the area significantly. Industrial land uses are suitable for this area, intermixed with landscape buffers offering opportunities for biodiversity.

The brickface of the former Colonial Pottery Works could be incorporated within development proposals to bring this site forward, in order to retain the historic narrative that this brick face presents. Visual interest could be created by exposing the internal workings of industry to the users of the canal, or integrating the form of the building with the landscape, such as can be seen by the examples within the Chatterley Valley.

A more consistent treatment to public realm treatments could involve the re-painting of metalwork to co-ordinate with the British Waterways black and white treatment, giving consistency along the length of the Trent & Mersey.

Ecological enhancements to the fishing pools to the east of the Incinerator would enhance the habitat value of the area further. Selective felling of trees would help to open up views of the fishing pools from the canal and establish aquatic planting. Land locked areas that are difficult to develop may provide opportunities for allotments in the future.

Generally, the green character of the canal to the south of the former Colonial Pottery Works should be retained, with future development set back from the canal. The hard urban approach to Stoke needs to be retained to the north of the former Colonial Pottery, in order to articulate the southern approach to the urban environment.

15.9: Pressures & Threats

The former engine shed is of historic interest. Industrial modernisation may result in proposals for demolition. This structure should be retained in its current form, and adapted to suit future uses.

References to the historic working character of the canal need to be retained, such as the stone setts to the former Stoke Basin wharf, concrete loading bays and proximity of brick faces to the canal edge. Original edge treatments to the canal also need to be protected and preserved.

There is a risk that large floor plate industrial premises and associated service yards and car parks will replace wildlife habitats in this area, reducing biodiversity, character and visual interest. Bespoke industrial architecture should be promoted, rather than template industrial architecture, with careful mitigation of habitat loss. Sustainable urban drainage should be incorporated within future proposals for developments, and tree planting should be incorporated south of the former Colonial Pottery Works to emphasise the existing green character.

15.10: Summary of Special Interest

Whilst much of the historic character of this stretch has been lost, industrial uses are still situated adjacent to the canal edge. The elevation of the former railway shed testifies to the intention for an integrated transport system, combining canal and rail links.

The stone setts delineating the former wharf of Stoke Basin, and the bricked up humped back bridge references the historic importance of this juncture for the development of industry in Fenton and Longton.

The structure and setting of the pedestrian bridge to the south of Whieldon Road is considerably intact in comparison to former bridges in the locale and is vernacular in its style.

The uninterrupted length of the brick face of the former Colonial Pottery retains the historic narrative of large scale industry adjacent to the canal edge.

15.11: Recommendations and Proposals

The former engine works should be retained. Likewise, fragments of historic structures, such as the brick face of the former Winkle & Wood Pottery, bricked in humped back bridge, sett paving and edge treatments and concrete loading bays need to be protected and preserved.

The interesting mix of industry and ecology needs to be retained and further enhanced through ecological enhancements. Future proposals for development should include proposals for bespoke architecture that interacts with the canal in some way, or is screened from view altogether.

The open access to the water's edge from the canal edge should be protected and preserved, in order to preserve the spatial experience of the pedestrian and narrowboat user.

There should be a concerted effort to remove and reduce litter in this area.

16. SIDEWAY CHARACTER AREA

16.1: Introduction

The transformation of Sideway from rural character to urban character is still slowly evolving, in contrast to other stretches of the Trent & Mersey, where former industrial sites now lie redundant. The excellent transport links to the A500 and A50 are attractive to industries reliant on highways infrastructure for commerce. Industrial development in this area will undoubtedly impinge on the historic character of this stretch in the future.

16.2: History & Archaeology

When the canal was built in the 1770's it cut through an agricultural landscape. From 1879 Sideway Farm remained located next to the canal at Sideway Bridge but over time became encroached upon by Stoke Corporation's sewage works, including sludge beds and filter beds. The farmhouse and outbuildings remained relatively intact until demolition in or around 2000. The mainline railway ran along the east bank from the 1840s.

16.3: Historic and Existing Land Uses and Function

Small pockets of industry are evident from the 1900 historic map to the north of bridge 108. The historic character of the canal would have been predominantly rural, supporting livestock grazing, due to the nature of the flood plain of Chillings Brook.

More recently, large scale industrial uses have encroached on the higher slopes of this area, to the east of the railway line. The 'A frame' of Hem Heath colliery formed a significant local landmark that was visible from the canal before it was demolished in 1997. The lower flood plains have remained in pastoral use in part. Future plans for this site suggest that this area will be re-developed for commercial purposes.

16.4: Character of the Built Form

Listed and Unlisted Buildings and Structures of Importance

The Railway Cottages are not listed. The cottages contribute to the setting of the conservation area by virtue of their modest scale, particularly when contrasted against the bulk form of other surrounding industrial premises. They are an attractive semi-detached pair of cottages, displaying a vernacular character. They are constructed of red brick and segmented brick heads finish the window apertures.

A cast iron mile post is situated to the south of the former viaduct at Sideway. It is grade II listed and exhibits a circular post with moulded head and embossed letters on 2 convex tablets spelling "Shardlow 54 miles, Preston Brook 38 miles". The post is dated "R &: D Stone 1819" on the shaft and was probably cast in the foundry of Rangeley and Dixon in Lichfield Street, Stone.

Built Form & Massing

There is little in the way of built form within this area of the conservation area, aside from the isolated and small scale railway cottages, as mentioned above. However the large floor plate commercial buildings within close proximity to the canal make an impact on the setting of the conservation area due to their large and imposing scale.

Style

The style of the railway cottages reflects the local vernacular of the industrial period with varying gabled frontages that face sideways and onto the canal.

Roofs & Windows

The roof of the Railway Cottages is covered in plain clay tiles. The windows of the Railway Cottages are segmented headed with contrasting brick. The windows themselves have been replaced with modern timber units and UPVC.

Details and Features

Bridge 108 (Sideways Bridge) is similar to bridges around Westport, where they are of a simple construction with blue engineering brick abutments with the bridge span constructed with steel girders topped with black and white painted railings. The bridge makes a positive contribution to the conservation area.

Groundscape & Public Realm

The area possesses a rustic charm. The public realm is predominantly functional in character, providing for sustainable transport routes from the surrounding housing estates to Stoke on Trent and Stone. Natural surveillance is poor, due to the absence of built form in this area. Points of public access are restricted due to the close proximity of the railway line to the eastern edge of the canal. However, access can be obtained from Bridge 108 and the steps leading from the rural public right of way.

Boundary treatments within the conservation area at Trentham are predominantly soft. Mature tree planting and hedging characteristically defines the canal edge boundary within this area. Little remains on the traditional canal edge, with sheet piling and concrete replacing original materials. A short section on the eastern bank to the south of bridge 108 has retained a shallow earth batter, supporting biodiversity.

Resin bonded surfacing with concrete edging occurs in this area, with feature paving at key nodal points (Staffordshire blue clay paviours). Although this treatment is modern in character, it reinforces the green character of this stretch. Sett paving can be found to the base of the interpretation signage at the junction of the canal and rural public footpath leading to Hanford. The sign itself explains the deep coal mining history of this area, and is consistent in design with other interpretation signage structures along the canal edge.

Due to the rural character of this stretch of the canal, there is no lighting within this stretch of the canal corridor. There is an absence of street furniture along the towpath. Consequently, general views along the canal are maintained due to the lack of clutter. The environment is generally litter free.

Fig. 55: Sett paving marks the junction of the towpath with the public footpath to Hanford

16.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation. Bats have been sighted in this area.

Although the rural agricultural land to the western edge of the canal is not situated within the conservation area boundary, it retains the old field patterns and hedgerows and provides an important setting for the heritage asset. Species within the hedgerows include Midland Hawthorn, Hawthorn and Blackthorn. There are many ponds scattered throughout this area, which are of great importance to amphibians and wetland birds, such as snipe. The Chillings Brook passes through the area, providing running freshwater and associated habitat. Much of this area is grazed by horses.

16.6: Topography, Views & Enclosure

The topography to the west of the canal is situated at a lower or similar level to the canal, functioning as the flood plain for Chillings Brook. Panoramic views from an elevated position on the canal result, where vegetation is sparse, over the rural flood plain towards Stoke town in the north and the green backdrop of the Trentham estate to the south. Views of Stoke town are marred by large scale industrial buildings situated in the foreground of these views. The industrial scale of the building elevations detract from the rural character.

The railway embankment and development plateaus for the industrial estate result in raised topography to the east of the canal. The embankments and tree planting screen long distance views, but large scale industrial buildings occupy elevated positions in relation to the canal. These buildings are visible from the canal towpath and serve as detractors.

Regenerative tree and scrub planting lines both edges of the canal on this section, providing a sense of enclosure to the canal, particularly during summer and autumn months. The straight course of the canal structure, combined with the enclosure provided by the trees, channels views along the canal in a linear fashion.

Fig. 56: Trees and hedges enclose the waterway

16.7: Detractors & Gap Sites

Large scale industrial buildings to the north and east of the Sideways canal corridor have a negative impact on the setting of the canal conservation area. Future commercial development needs to mitigate for the negative visual impacts on the canal conservation area.

16.8: Enhancement and Development Opportunities

Development opportunities immediately to the east of the canal structure are precluded due to the close proximity of the railway line. However, it is recognised that opportunities for employment and industrial development will be brought forward to the east and west of the canal and railway line in the future (please refer to Trentham Lakes Masterplan and planning application reference 45732 consequent to City Plan Proposal for E1).

The Trentham Lakes masterplan promotes a landscape framework from which a distinctive high quality setting for business is intended to thrive. The masterplan advocates the creation of large areas of open green space which will include features like community forests, lakes, recreational facilities and an integrated network of paths and routeways to support employment opportunities, sustainable transport and ecology. The development of housing, business and industry in this area is likely in the long term. Future development needs to take into account the line of the Chillings Brook, and provide sensitive design solutions to retain the floodplain character of this water channel. There is also a need to recognise and mitigate for the loss of visual quality on the canal conservation area setting. The Blue Planet development in Chatterley Valley serves as a precedent example of appropriate sustainable development in this area, serving as a model for future development of carbon positive commercial uses along the length of theTrent & Mersey canal within the north Staffordshire conurbation.

16.9: Pressures & Threats

The Sideways stretch possesses a rustic charm that supports biodiversity and affords rural views towards the Trentham estate. Future commercial development proposals are likely to erode this charm. Any future development needs to respect the rural setting and wildlife habitat. As mentioned previously, the Blue Planet model of commercial development within the Chatterley Valley is an appropriate model of development for this area.

16.10: Summary of Special Interest

The rural practice of agriculture is still evident within this stretch of the canal. This helps to provide a clear distinction between the urban fabric of Stoke and the suburban character of Trentham. The fine grain of the railway cottages contrasts with the coarse grain of surrounding development.

16.11: Recommendations and Proposals

The perception of rural charm in this area needs to be maintained.

The Railway Cottages should be protected from demolition.

Future development adjacent to the canal should strive to be carbon positive, whilst protecting and enhancing existing habitats in the area. Proposals should aim to enhance the visual quality of the canal corridor rather than detract from it. Where commercial development takes place, the form and function of the building should integrate with the surrounding environment and be inspirational.

17. TRENTHAM CHARACTER AREA

17.1: Introduction

Over recent years, the character of the canal through Trentham has changed from rural to suburban, as land values for residential development have been capitalised, supporting the growth of the north Staffordshire conurbation.

Fig. 57: A narrowboat moors up on the Trentham stretch for the evening

17.2: History & Archaeology

This stretch of the Trent & Mersey canal cut through an entirely rural landscape in the 1770s. Field patterns evident on 19th-century Ordnance Survey maps indicate medieval arable cultivation, and a segment of 19th-century steam-ploughed ridge and furrow remains adjacent to the canal north of Chessington Crescent. The Trentham Park Branch railway line once crossed the canal to join the mainline running parallel to the canal on the east side. Managed woodland in the 'New Park' at Barlaston remains part of the landscape.

In the 20th century, however, suburban residential development has extended along both sides of the canal, occupying most of the former agricultural land by the end of the century. The branch line is now a greenway on the west bank but on the east bank forms the basis for the street pattern of Chessington Crescent, and the bridge over the canal has been truncated.

17.3: Historic and Existing Land Uses

As mentioned previously, historic land uses adjacent to the canal were agricultural. As Stoke-on-Trent has expanded, land values in this area have been realised, with the result that land uses within the area are now predominantly residential, with small pockets of commercial uses at the nodal intersection of Longton Road. The affluence of this area has attracted high retail development selling upmarket products, such as Trentham Lakes. Pockets of executive housing are situated adjacent to the canal.

17.4: Character of the Built Form

Listed and Unlisted Buildings and Structures of Importance

The cast iron milepost situated to the north of limekiln bridge (105) is classified as a grade II listed structure. It is dated "R & D Stone: 1819" on the shaft. It is constructed of cast iron and painted black and white. It has a circular post with a moulded head and embossed letters on 2 convex tablets spell out "Shardlow 52 miles, Preston Brook 40 miles".

A second canal milepost is situated on the western bank to the north of Longton Road. Again, this is a grade II listed structure, dated "R & D Stone: 1819" on the shaft. Of identical construction to the above mile post, the directions are "Shardlow 53 miles, Preston Brook 39 miles".

Canalside Cottage, Longton Road is a mid 19th century brick cottage and outbuildings believed to have been connected with a farm or small holding; the outbuildings may have been used for stabling. It was used for stabling in the 1970's, adjacent to the old gravel wharf situated on the opposite side of the canal. A smithy operated where the petrol station is now situated on Longton Road. The former location of the smithy suggests that there was a trade connection with the canal. It is constructed of painted brickwork, with a plain tiled roof. The historic setting of this cottage has been encroached upon by housing development in recent years.

Built Form & Massing

The built form in Trentham adjacent to the canal conservation area can be described as suburban in character. Cul-de-sac layouts within housing estates bear testimony to residential layouts that are typical of the 1970's and 1980's. The density of buildings is reduced, and large rear gardens are characteristically incorporated within the general arrangement of dwelling plots. Buildings are predominantly two storey in height. Due to the cul-de-sac layout, roofscapes and gable orientations vary. Rear elevations face onto the canal edge, with interesting glimpses into back gardens in some instances, where the topography is level. Differences in level changes in some instances result in housing adjacent to the canal that does not integrate with the canal corridor.

Earl's Road is an exception to the norm, in that it follows a traditional high density terraced linear street layout, with the street adjoining onto the canal perpendicularly.

External Walls and Facades

Being a more rural location, there is generally very little to see in the way of built boundary treatments. Where they occur at Canalside Cottages and the bridges, walls and facing brickwork are constructed primarily of brick. Stone and blue copers finish the walling detail. The elevation of Canalside Cottages facing onto the canal has been painted, suggesting that this building has featured as a functional element adjacent to the canal. The black railings defining the private realm of Canalside Cottages contrast nicely with the white background.

Roofs

Canalside Cottage is tiled in typical blue Staffordshire tiles. Although situated outside of the conservation area, modern suburban housing adjacent to the canal shows with traditional pitches.

Windows

The windows of Canalside Cottage are timber replacements in a stained finish. The frames and sills have been painted black, to contrast with the white painted wall.

Fig. 58: Side elevation of Canalside Cottage adjacent to the canal

Details and Features

Bridge 105 is a traditional one span round arched structure, constructed of red and blue brick with stone coping to the parapets. It exhibits an interesting example of a segmented brick arch, two bricks deep. Granite sett paving with a raised 6th course shows adaptation of the basic paving surface to suit passage over the humped incline. Some patching of the brickwork has taken place.

The former railway bridge has had the span removed for some time, though the piers remain. They are decoratively dressed with contrasting smooth and pitted finishes which are of a high quality in terms of material and workmanship.

Bridge 106 is a relatively recent intervention, showing a mixture of materials such as concrete, red brick and buff brick. The concrete has some interesting dressings along the main road deck and gives the surface texture. The design of this bridge contrasts with the style of the more traditional bridges.

The Lock is constructed of Staffordshire blue bricks, stone walling and steps, reflecting the typical use of materials for the period in which the canal was constructed. Interestingly, the weir and overflow are also constructed of traditional materials, including a stone lining to the bottom of the overflow channel, with stone walling to the sides. The inlet to the northeast of the lock may have been a wharf or turning point.

Fig. 59: Limekiln Bridge (105)

Groundscape & Public Realm

North of Longton Road, public access can be gained from cul-de-sacs within housing estates adjoining the canal. Earl's Road is notable, in that it follows a traditional terraced street layout, with the street adjoining onto the canal. This allows access for the majority of users on both sides of the street in a safe and secure environment. Formal access from Longton Road to Burrington Drive is poor, with access from the bridges only. Access to the south of Burrington Drive is still restricted to bridge access points, although desire lines through hedging from a tarmac path located to the rear of the towpath show the need to increase formal access points along this stretch.

The public realm is functional in character, providing for sustainable transport routes from the surrounding housing estates to Stoke on Trent and Stone.

Natural surveillance from adjoining housing fronting the canal is poor. This is due to the orientation of front elevations facing away from the canal. Natural surveillance is further reduced because of mature tree and hedge planting obscuring views of the canal. A setback in some instances increases the distance between the canal and housing, further reducing opportunities for natural surveillance. By way of exception, the access point from Earl's Road is safe and secure because of the street arrangement, with associated lighting.

Boundary treatments within the conservation area at Trentham are predominantly soft. Mature tree planting and hedging characteristically defines the canal edge boundary within this area. Affluent householders maintain their rear garden boundaries to a high standard where they abut the canal. To the northern section of Trentham, some home owners have incorporated rear gates within the rear boundary, in order to gain easy access from their garden. Clipped hedges rise over the gates, in topiary form. In some isolated instances hedging is in need of re-instatement.

Resin bonded surfacing with concrete edging occurs in this area, with feature paving at key nodal points (Staffordshire blue clay paviours and inscribed flags). Although this treatment is

modern in character, it serves to reinforce the green character of the canal in this area. A good example of intact historic paving occurs to both sides of bridge 105, where granite sett paving is raised at every 6th course, to allow for grip whilst crossing the bridge. Other incidences of sett paving occur to the base of interpretation signage, incorporating timber sleepers in some instances.

The amount of street furniture along the towpath is minimal. Consequently, general views along the canal are maintained due to the lack of clutter. Seating occurs at Trentham Lock, constructed of Staffordshire blue brick bases, with timber seats. This reflects the selection of materials used within the lock structure, whilst recognising the rural character through the use of timber. The seats are crude, but appropriate to their setting. Some repair is required to the brick base. Lighting fixtures located within the canal corridor are sparse. Due to the orientation of housing away from the canal, there is no incidental light spilling out into the canal conservation area.

Interpretation signage occurs at key access points, such as Longton Road bridge, using a consistent design. Graffiti detracts from the visual quality of interpretation signage at Longton Road. Orientation signage is sparse, but inscribed paviours identify places at key access points in a sympathetic manner. A sign at Longton Road bridge signals the way to the Trentham Estate. Gladstone Pottery is not signalled.

The environment is generally litter free, further contributing to the high quality of the public realm in this area, although litter does collect around the steps from Longton Road. A bin could be situated here to reduce this problem.

17.5: Ecology and Landscape Designations

The canal corridor is designated as a wildlife corridor, providing for the movement of wildlife through the conurbation.

There are two Local Wildlife Sites adjacent to the canal to the south of Wellbury Close. These two sites combine to form a species-rich area of grassland and woodland, providing habitat diversity in the area.

Kingfishers utilise the linear water features in the area, including the canal and Longton Brook. Informally arranged native tree planting lines both edges of the canal, attracting bats.

17.6: Topography, Views & Enclosure

The topography north of Chessington Crescent is level with the canal to the east, but lower lying to the west. Long distance views across medieval field patterns towards the railway line are high in quality. Roofscape views occur to the west above boundary hedgerows.

Between Chessington Crescent and Longton Road, the canal towpath is level with the surrounding topography. Views looking to the west are screened by rear garden boundaries and mature hedging and trees. Views to the east allow for a series of voyeuristic glimpses into private and well tended gardens that reinforce the green and affluent character of the area. The mature vegetation and built form enclose the space.

The topography between Longton Road and Jonathan Road rises on both sides above the level of the canal. The canal has cut through the historic undulating landscape at a lower level. Mature trees and vegetation line the canal corridor, further enclosing the space and screening views out of the corridor. This results in channelled linear views along the canal corridor, reminiscent of a scene from Oxford or Cambridge. Within this pleasant green corridor, Limekiln Bridge stands out as a historic landmark feature. Limekiln Bridge affords views over the canal from an elevated position.

South of Jonathan Road, land levels return to meet the level of the canal, with interesting views of rear gardens located on Wellbury Close. These gardens form the visual interface between the suburban landscape of Trentham and the rural landscape further south.

There is a significant level change at Trentham Lock resulting in an elevated aspect at this point. Established tree planting within Newpark Plantation restricts views to the east, but more sporadic hedgerow trees defining the western boundary allow long distance views across rural fields towards the Trentham Estate. The Trentham Lock forms an important focal point on entry to Stoke-on-Trent by narrowboat.

Fig. 60: Rear gardens adjacent to the conservation area

17.7: Detractors & Gap Sites

Large scale industrial buildings to the west of Stanley Matthews Way have a negative impact on the setting of the canal conservation area. Future development of these buildings should mitigate the visual impacts on the canal conservation area. Rear garden boundary treatments could be upgraded in occasional instances, to reflect the green character of Trentham generally.

17.8: Enhancement and Development Opportunities

Clearance of vegetative growth from the walled surfaces of Trentham Lock would enhance the visual impact of this hard structure within the green landscape setting, and also protect it from structural decay.

Ecological enhancements to ground flora habitats, with some thinning of middle storey canopies to facilitate the successful integration of the above mentioned habitats would enhance the quality of this green corridor further. Suggested species might include native bluebells, snowdrops, ferns, roses and honeysuckles. Native wetland planting to inlets, such as water lilies and flag irises, would further enhance the biodiversity value that this area can offer, creating an attractive southern gateway to the City.

Re-instatement of hedgerow boundaries that have been partially removed would also reinforce the green character of this stretch.

Improved linkages for cyclists and mobility impaired pedestrians to surrounding housing estates from the canal would further facilitate use of the canal corridor as a sustainable transport link. Informal desire lines from housing to the canal should be identified and formalised. British Waterways has identified Burrington Drive, Mount Sorrel Close, Peachhaven Grove, Longton Brook Path and the disused rail line as points of access that would enhance linkages to the canal.

A welcome sign and information box for narrowboat users should be installed at the Trentham lock.

Graffitti should be removed from interpretation signage and from the underside of bridges. Repairs to seating should also be undertaken.

17.9: Pressures & Threats

As land prices increase in this affluent area, development pressures are likely to be brought upon agricultural land adjacent to the canal that has not yet been developed in this area. The green character of this area needs to be recognised and incorporated within any future proposals.

Historic structures, including Canalside Cottage, Limekiln Bridge (105) and Trentham Lock need to be maintained in the future, in order to preserve their historic interest for future generations.

Informal access points to the canal may be blocked up by residents, to prevent access by the general public to affluent housing areas.

17.10: Summary of Special Interest

The historic field pattern situated to the north of Chessington Crescent references the original agricultural uses in this area before the existence of the canal.

Limekiln Bridge (105) and Canalside Cottage remain in situ as additional historical references to the routing of the Trent & Mersey through a traditionally rural context that has now become a suburban context.

Trentham Lock provides evidence of the technical prowess of industrial engineers during the 18th century.

17.11: Recommendations and Proposals

Limekiln Bridge (105), Trentham Lock, Canalside Cottage and the cast iron mile posts need to be preserved and protected, in order to better convey the historical narrative of this area.

The green character of the canal needs to be recognised, and measures taken to preserve and enhance this character further.

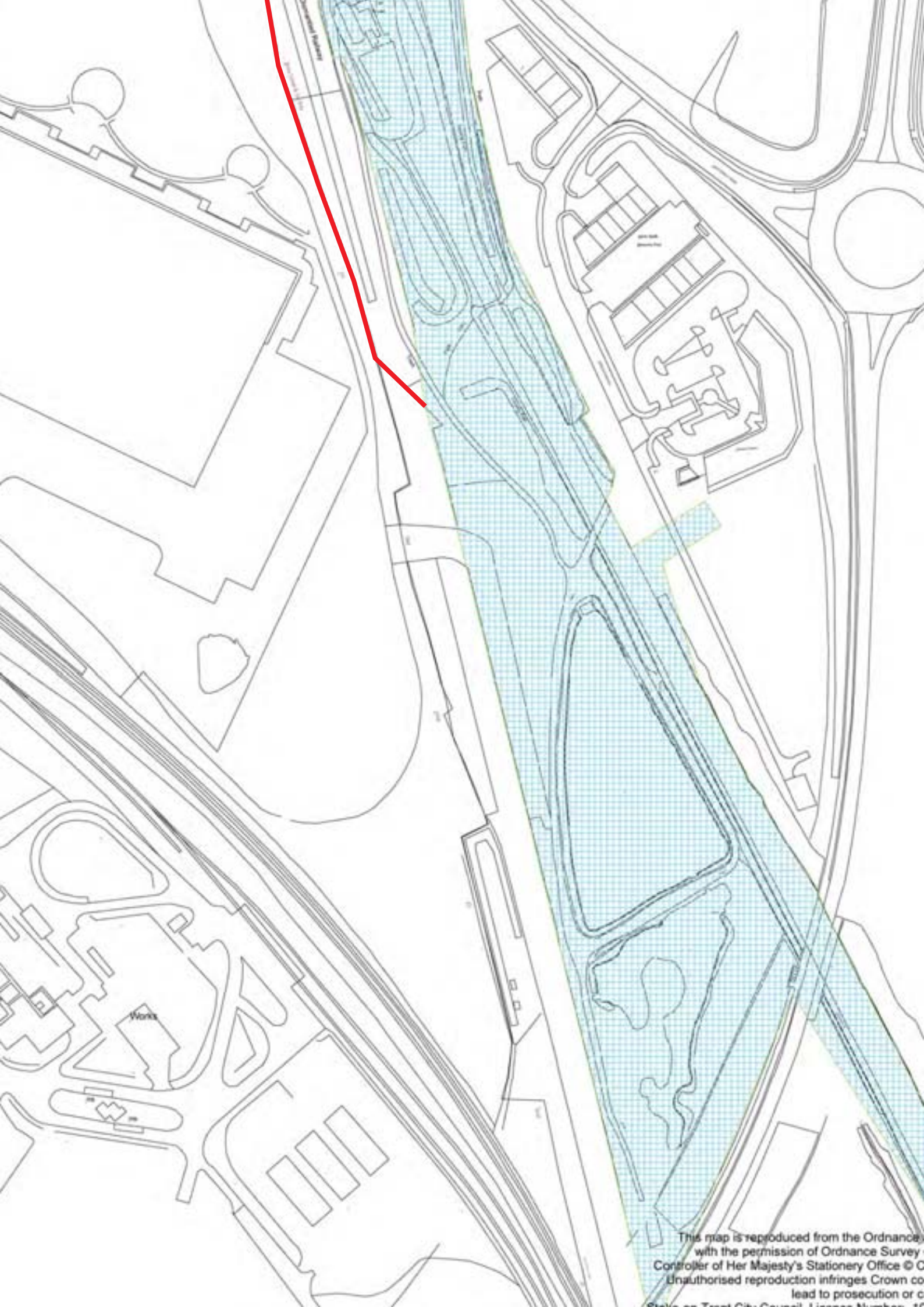
Fig. 61: A narrowboat enters Trentham Lock from the southern approach

TRENT & MERSEY CANAL CONSERVATION AREA APPRAISAL

APPENDIX 1

MAPS 1-19 TO SHOW CONSERVATION AREA BOUNDARY REVISIONS

Plan 3: Location Plan to show the Locations of Maps 1-19 along the Trent & Mersey Canal

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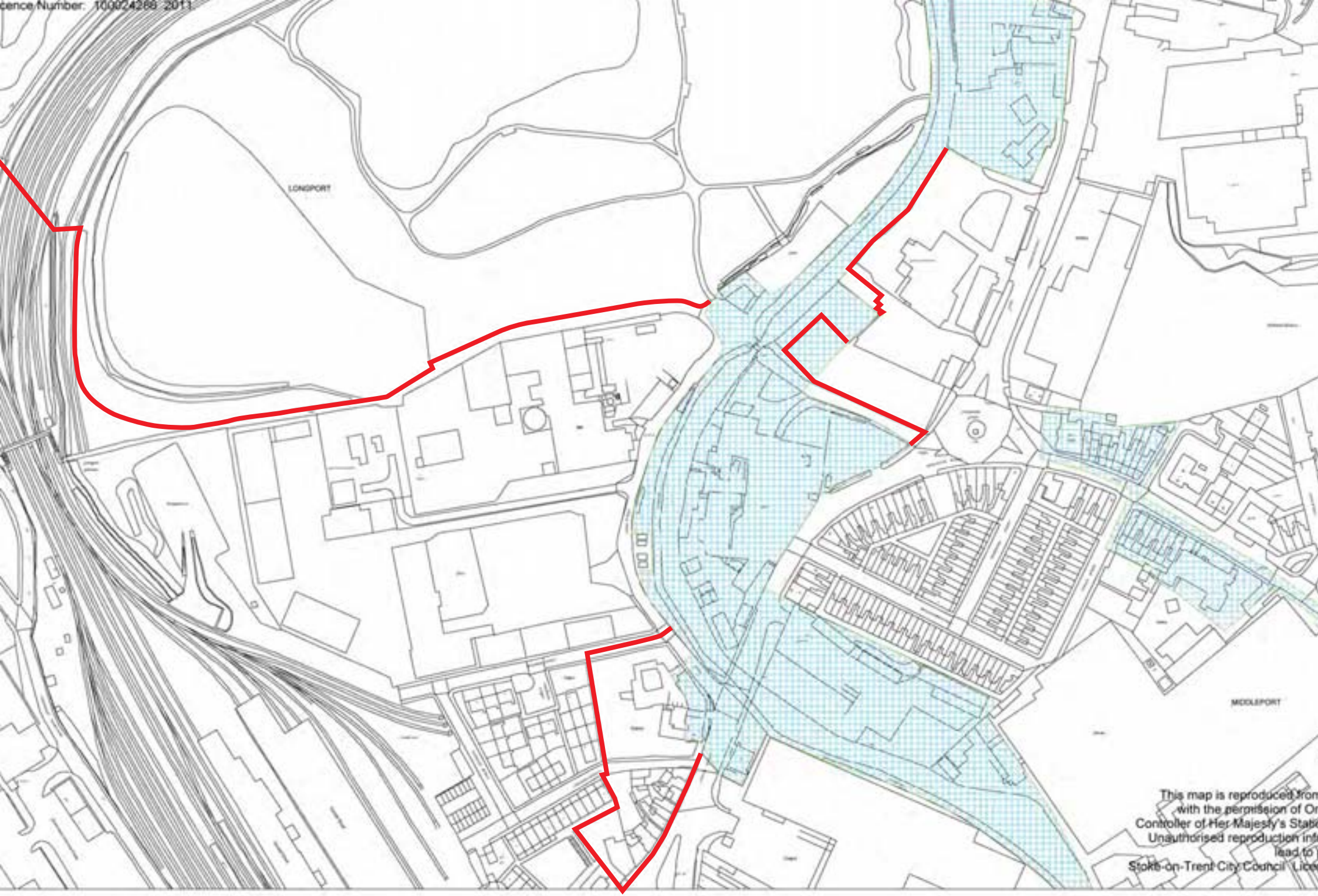
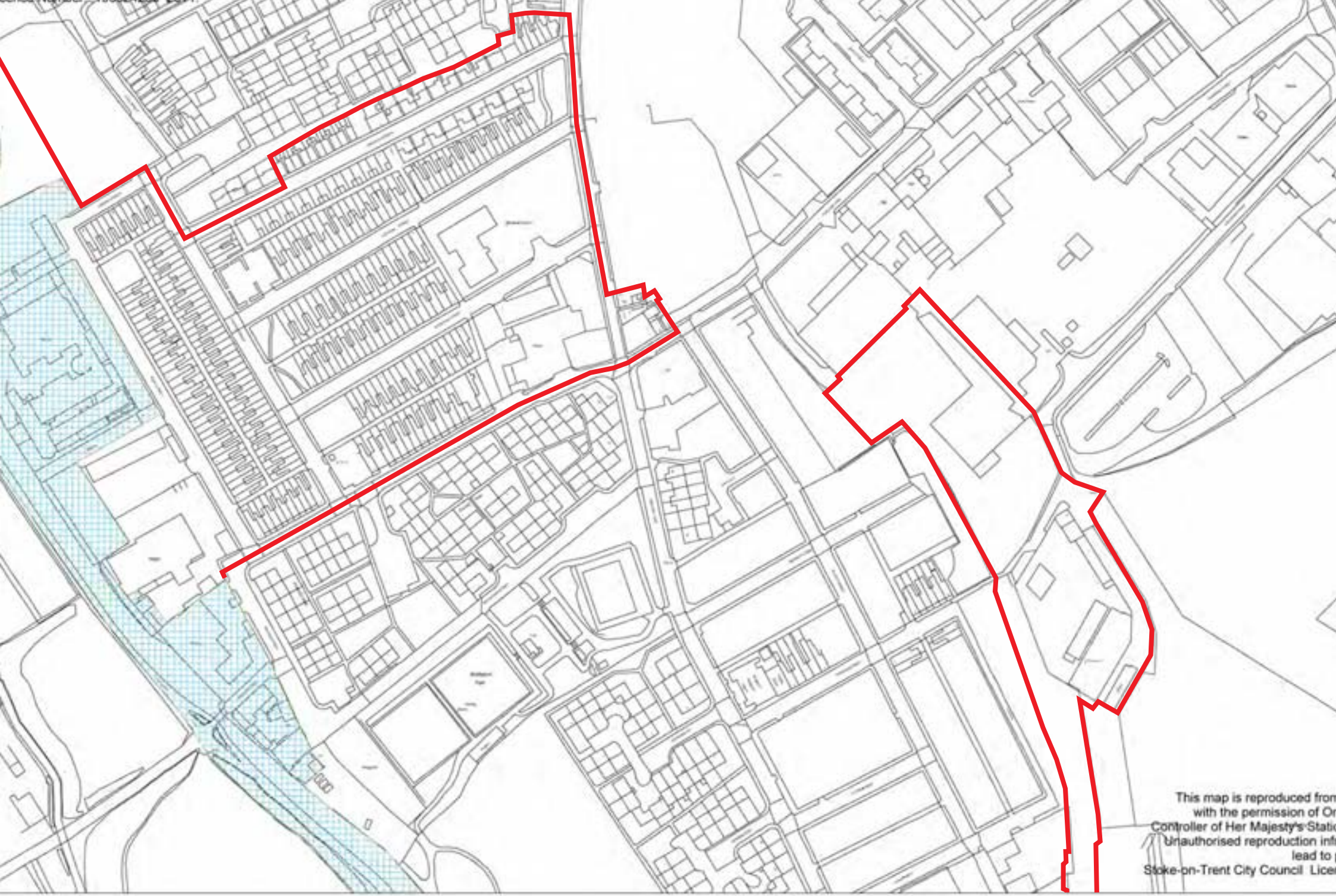
Lake Existing and Proposed Conservation Area Boundaries

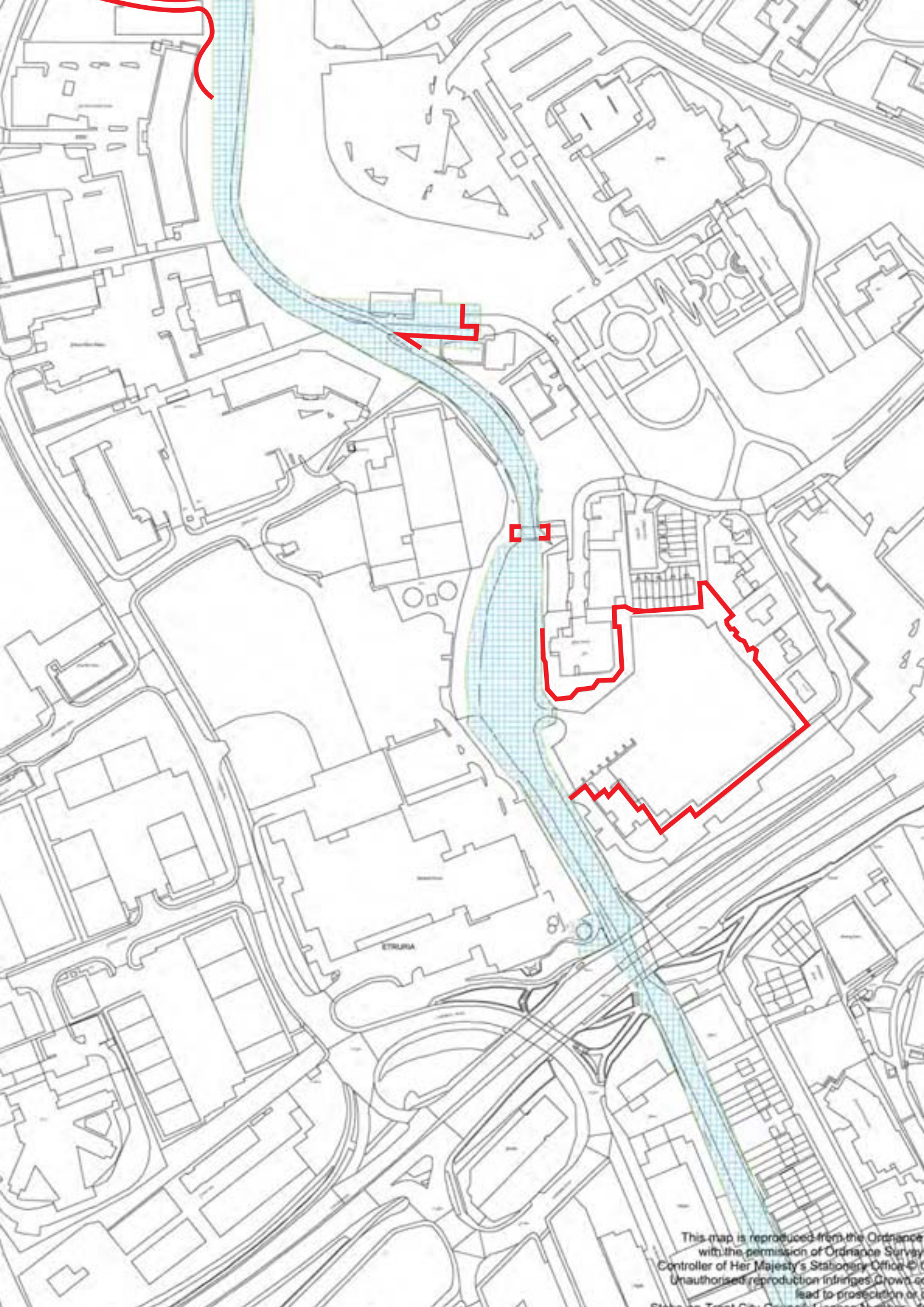


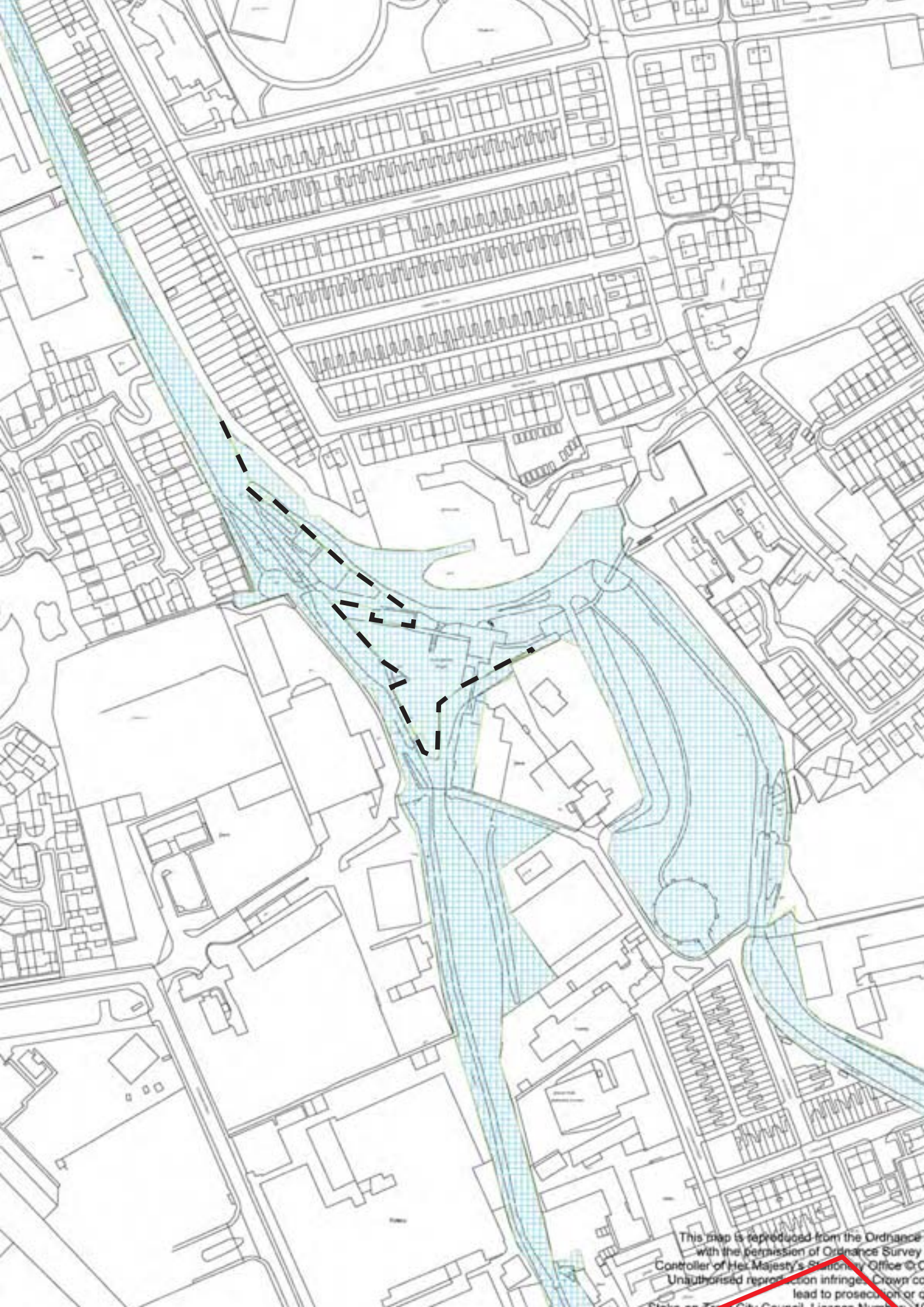
Lake and Longport Wharf Existing and Proposed Conservation Area Boundaries



rt and Burleigh Pottery Existing and Proposed Conservation Area Boundaries

rt and Olivers Mill Existing and Proposed Conservation Area Boundaries

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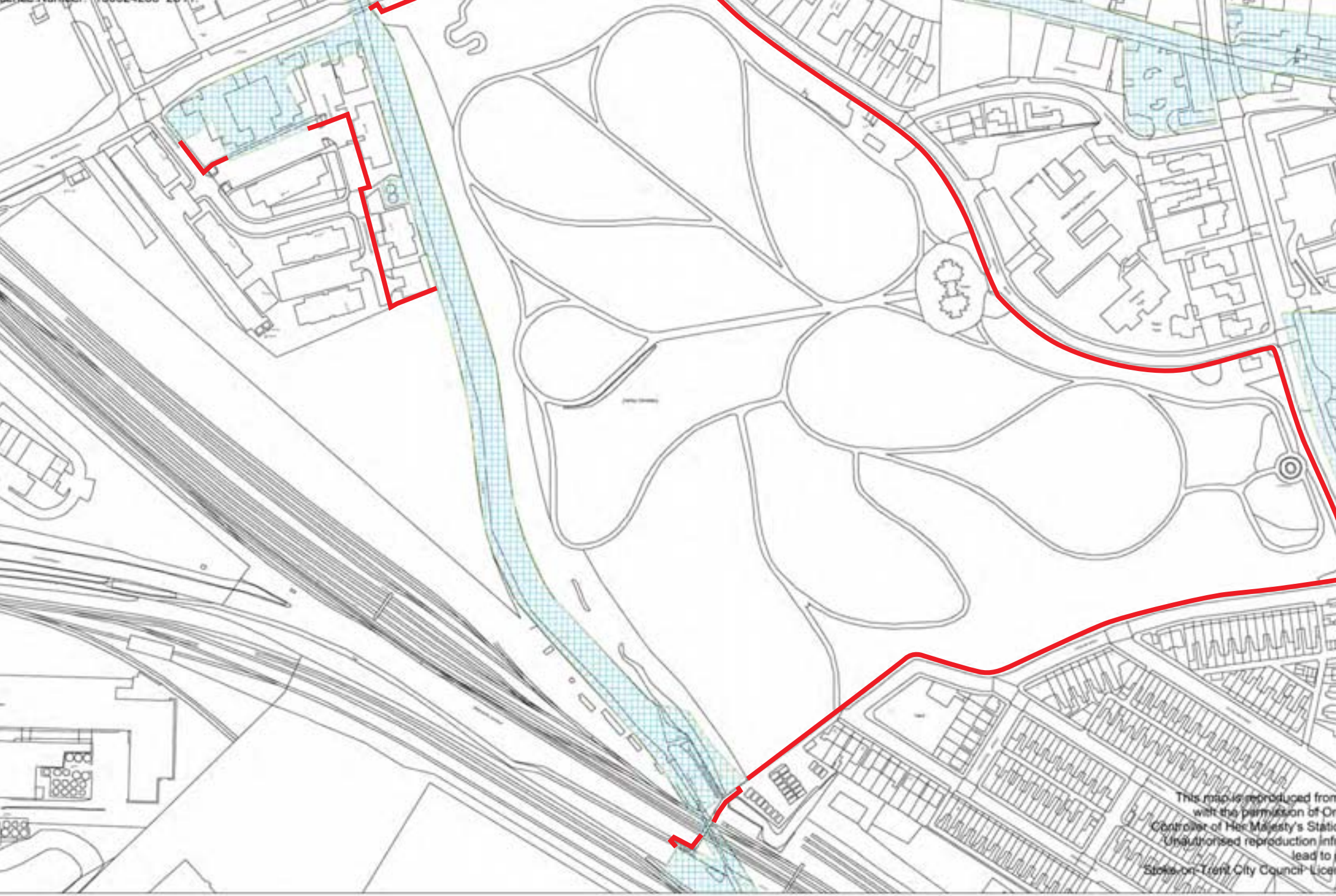
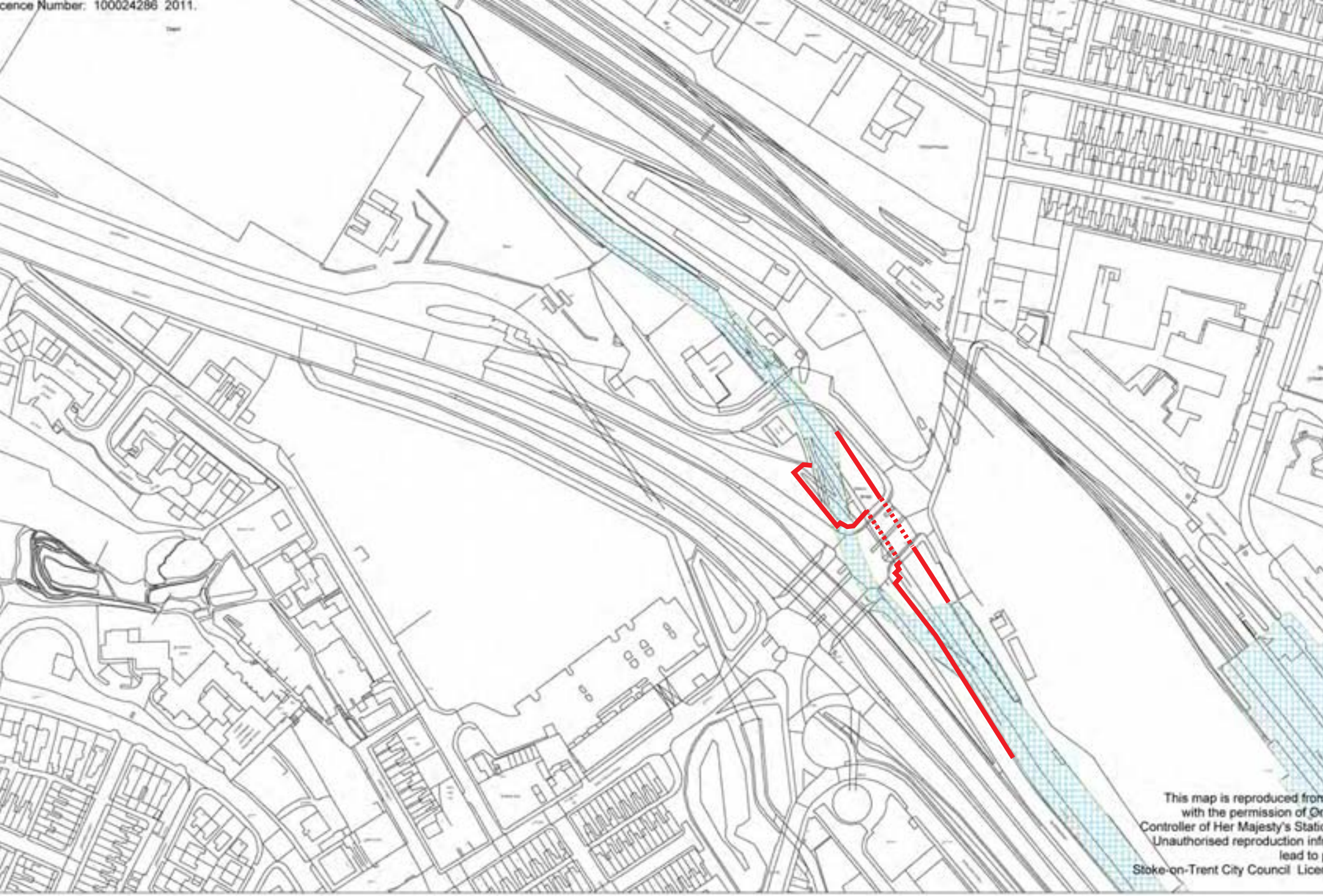
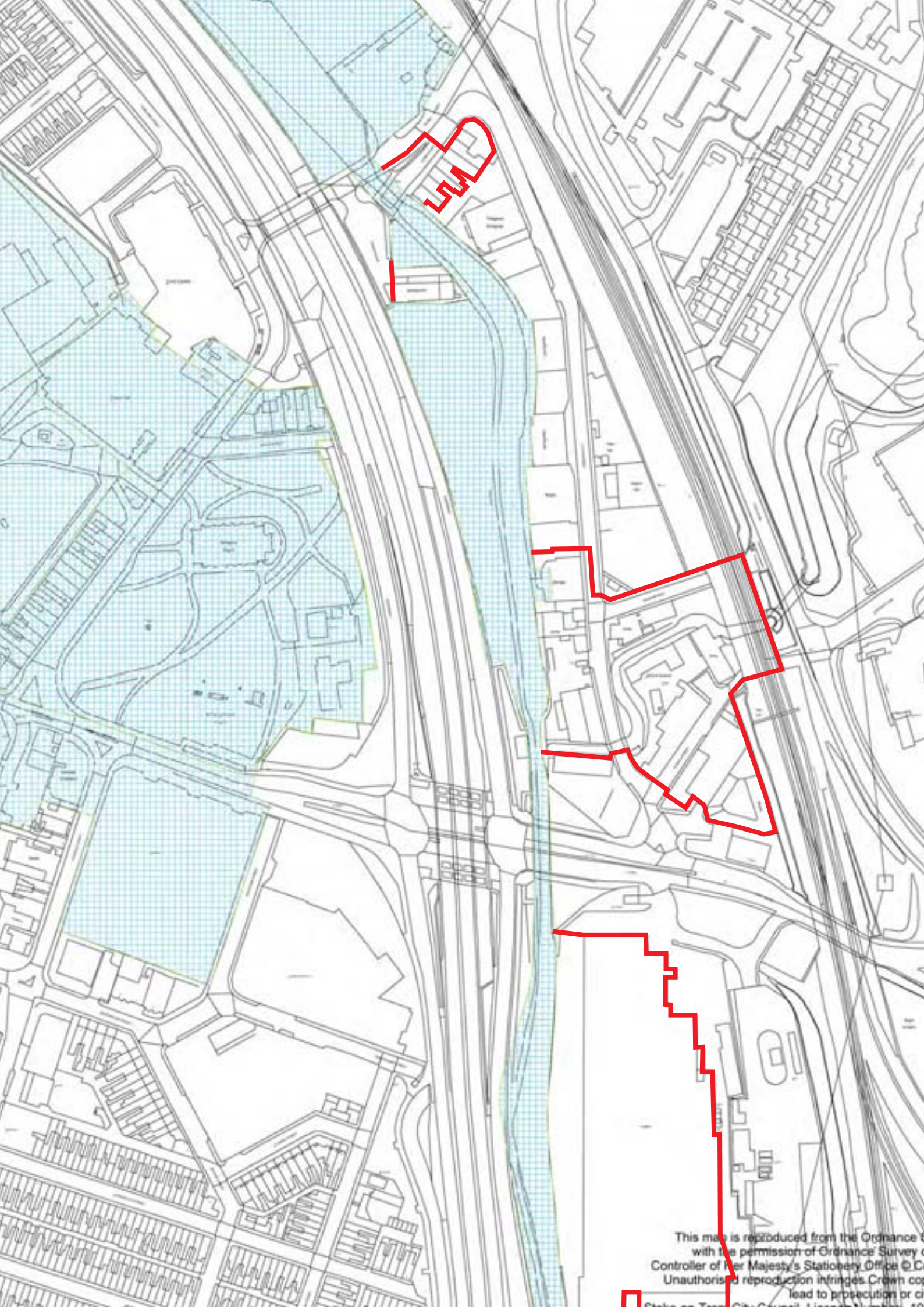


and Hanley Cemetery Existing and Proposed Conservation Area Boundaries



orth) Existing and Proposed Conservation Area Boundaries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MOUNT PLEASANT


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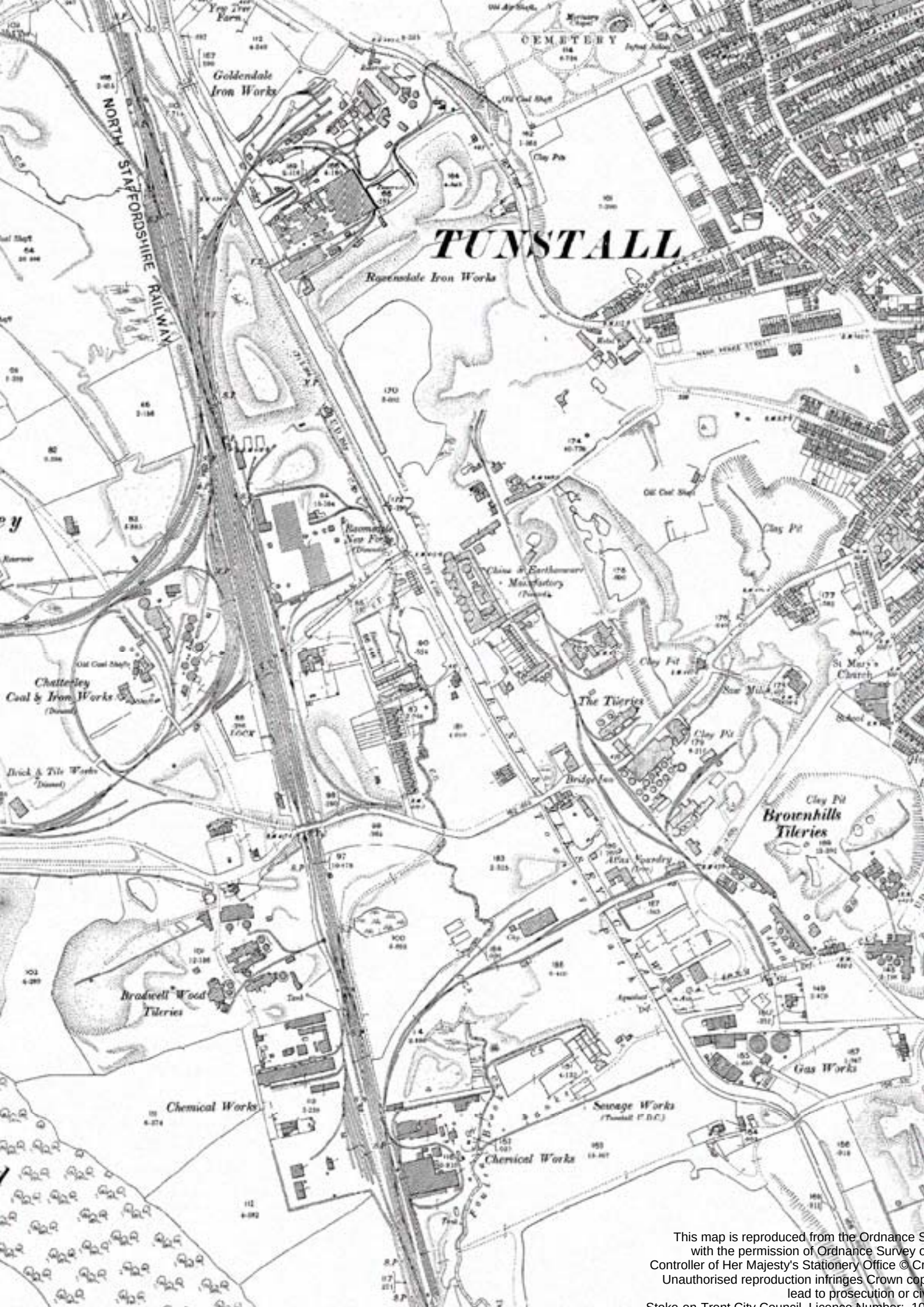
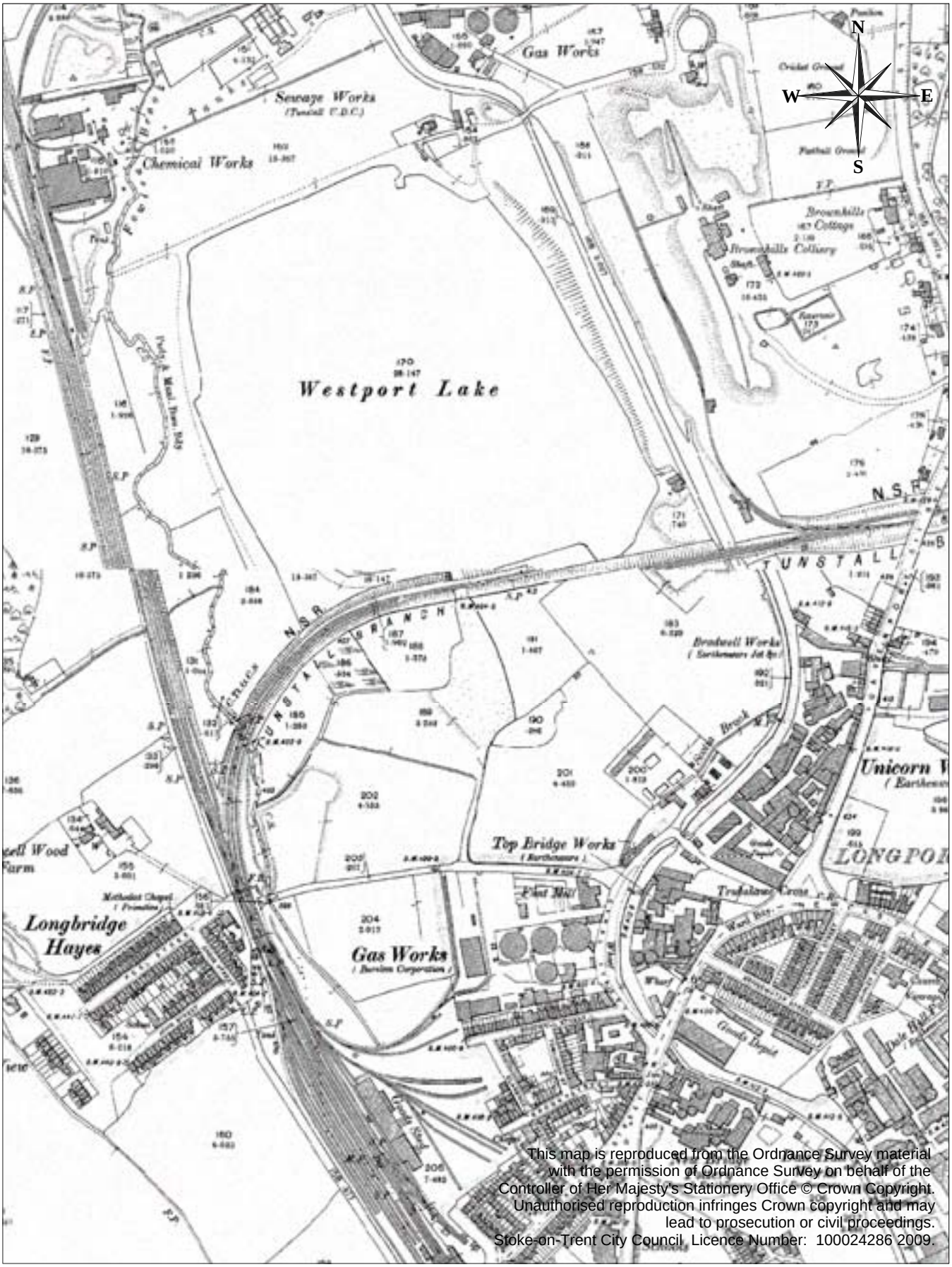
APPENDIX 2

HISTORIC MAPS





1900 Map of Westport Lake

city of stoke-on-trent

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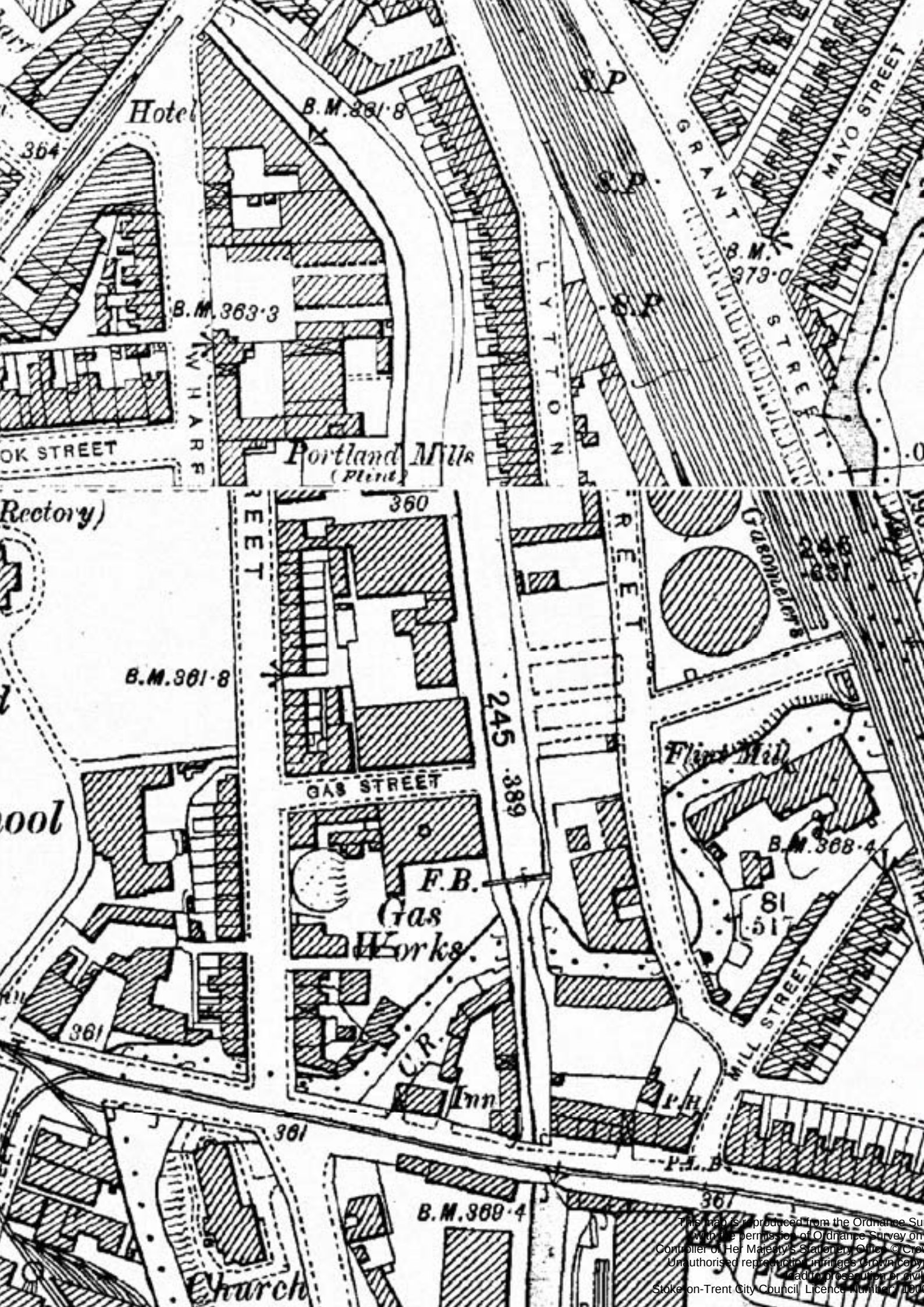
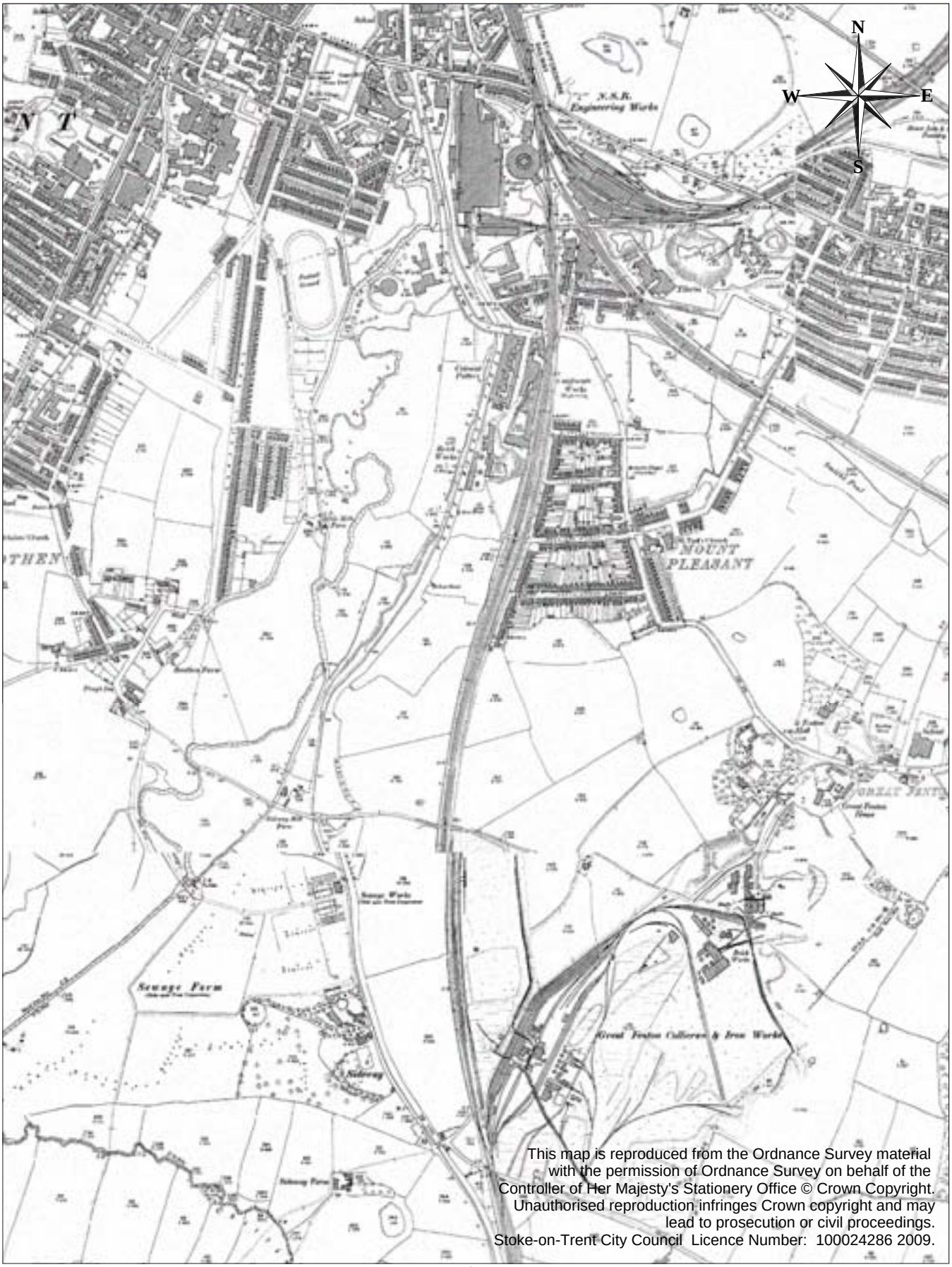
Scale	Scale: 1:5000
Date	25 Nov 2010
Drawn By	
Drawing Ref	
Revision	





1900 Map of A500 (South)

city of stoke-on-trent

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Drawing Ref	
Revision