An aerial photograph of Sheffield City Centre, showing a dense urban layout with a grid of streets, numerous buildings, and a winding river (the Don) cutting through the center. The image is in a light blue monochrome palette.

SHEFFIELD CITY CENTRE

Urban Design Compendium

Part 1: Introduction

Part 1 introduces the Compendium, describing its aims and aspirations and outlining the process undertaken to produce a document that will be of real benefit to all those who use it.

This section also establishes the key design themes explored throughout the Compendium that have been drawn from the analysis of Sheffield's city centre, the current policy context and best practice guidance

Aspirations of the Compendium

The production of the Compendium presents a once-in-a-lifetime opportunity to create a step change in the quality of future development and public space design in the Sheffield city centre. A five-to-ten year window of opportunity has been identified in which to bring about this change while the planning, design, development and delivery of the strategic projects stemming from the Masterplan take place.

The Compendium involves both process, including interaction with a wide range of stakeholders to ensure consensus and ownership, and product, in the form of design guidance and strategic recommendations.

Building on the overall vision of the Masterplan, the Compendium provides the detailed design guidance required to raise the quality of Sheffield's built environment, and ensure cohesion in the urban form and public space of the city centre. As an essential part of this aim, the Compendium has been developed to provide clarity for those who play a key role in the process of making decisions about the urban environment - designers, Council officers, politicians and the citizens of Sheffield.

The importance of each of these groups having ownership of the document was identified at the outset of preparing the Compendium, acknowledging that its success was reliant on those who must apply the principles and guidance contained within. The wealth of knowledge and range of perspectives of those who live and work within Sheffield has provided the foundations of the Compendium.

The key to the success of the Compendium is in achieving balanced and clear design guidance that does not prescribe or pre-empt an outcome. In developing the strategic and quarter specific guidance in this document, every attempt has been made to capture the essence of Sheffield's distinct characteristics and to establish a framework within which design innovation and excellence can flourish.

Who is it for?

The Compendium has been prepared for a wide range of people who work, live or wish to invest in the city centre:

- Developers
 - offering certainty in what is expected in terms of design quality and function;
- Institutions
 - defining a clear direction for development in the city centre;
- Politicians
 - providing guidance to inform decision making;
- Council officers
 - Development Control and Highways;
 - providing guidance in the approval process, as an advisory tool or in the specification of materials;
- Local practitioners
 - surveyors and designers;
 - as a vehicle to raise the quality of development - precluding the mediocre design response while facilitating the visionary and innovative.
- Public
 - providing guidance to encourage developments which will improve legibility, permeability and quality of life.

How to use this Compendium

The Sheffield Urban Design Compendium has been designed to provide clear design guidance at a number of different levels. It includes a wealth of background information for designers and decision makers; sets out strategic information at a citywide level; and provides guidance relating to the specific parts of the city, for both the built form and public realm.

To assist the many readers who will want to 'dip into' the Compendium, rather than read it cover to cover, there are frequent cross-references and a clear table of contents.

The structure of the Compendium:

Parts 1 and 2: Introduction and City Centre

Provides background information and detailed analysis of the city's history, environment and current influences.

Part 3: Strategic Guidance

Strategic analysis and guidance set out at a citywide level for the built form and public realm.

Part 4: Quarter Guidance

Examines the City Centre quarters in detail, identifying specific qualities, and setting down clear principles for design.

Part 5: Public Realm Design Guidelines

Provides specific guidance for the public realm, complementing the Quarter Guidance work. Clear summaries provided for public realm specifications in different parts of the city.

Part 6: Tools and Applications

Identifies some of the mechanisms that can assist the procurement of higher quality development in Sheffield.

Status of the document

The Sheffield Urban Design Compendium is a Policy Background Document that will inform the new City Plan (a proposed development plan document in the forthcoming Sheffield Development Framework) City Centre Design Guide (a supplementary planning document also proposed to be part of the Sheffield Development Framework). It is an innovative document that informs emerging policy rather than derives from existing policy.

Following extensive consultation, and Sheffield Cabinet endorsement in September 2004, it will be used by the City Council to guide future development in the City Centre. It is intended that the document will:

- Provide helpful guidance to those preparing planning applications;
- Be taken into account as a consideration when determining planning applications;
- Provide the main guiding principles for design of development within the City Centre;
- Provide confidence and a clear vision for private investors in the City;
- Form a background policy document for the new City Plan;
- Form the basis for a new City Centre Design Guide that will become a supplementary planning document in the forthcoming Sheffield Development Framework;
- Provide a clear strategy for the repair and enhancement of the City's public realm;
- Guide improvements to the public realm brought about through redevelopment of adjacent sites.

Whilst the Compendium has been primarily designed for the City Centre, much of the design guidance is relevant throughout the rest of the city.

Methodology

Throughout the preparation of the Compendium a series of meetings and workshops was held with key groups, which informed and guided the development of the document:

- the client group of Sheffield City Council and Sheffield One;
- an advisory group comprising Sheffield's Universities, Yorkshire Forward, English Heritage and Cabi;
- a stakeholder group including Councillors, representatives from Council departments and other relevant groups such as the Cultural Industries Agency.

In addition, separate smaller meetings were held with:

- interested members of the Council and their boards;
- Streelforce and City Centre Management;
- the Principal Landscape Architects and Urban Designers of Sheffield City Council.

The production of the Compendium followed a six stage work programme:

1. Scoping the work
2. Analysis
3. Preparation of the guidance
4. Exhibition and consultation
5. Finalisation and publication

Scoping commenced with a review of existing sources of background and historical information, as well as the current policy context and relevant best practice design guidance. The status of the various strategic projects recently completed, underway or proposed was also established.

The analysis stage focused on developing an understanding of the history of the city and the evolution of its urban form, and the influence of each of the strategic projects. An analysis of the city centre was undertaken using the principles of Kevin Lynch (landmarks, edges, nodes, paths and districts) and Gordon Cullen (views, vistas, serial vision). Pedestrian movements and the use and perception of the city were mapped, and an urban design analysis of each quarter was completed.

This process of scoping and analysis allowed us to identify gaps in information or strategic guidance and define more clearly the new work to be generated. This emerged in the following areas:

- supporting a new knowledge or high technology based economy;
- creating a vibrant city centre as a focus of learning, culture, living, working and recreation;
- improving accessibility to the city centre by all modes of transport;
- nurturing quality in built form and celebrating the public realm.

The key findings of the scoping and analysis provided the basis for the design guidance which was then prepared for strategic city wide issues and for the individual quarters. As the guidance was developed, it was played back to the separate groups in order to gain input and consensus.

Public consultation on the draft Urban Design Compendium was carried out throughout September and October 2003. Valuable feedback from the wider Sheffield community was taken on board wherever possible and necessary amendments were made to the draft document to reach this final stage.

Literature Review

The Government's urban renaissance agenda is supported by a broad policy environment and a range of best practice urban design literature. The key references are listed below:

Government Strategy

'Towards an Urban Renaissance' Final Report of the Urban Task Force

Policy Statements

PPG1: General Policy and Principles (3rd Edition);

PPG3: Housing (3rd Edition);

PPG4: Town Centres and Retail Developments (3rd Edition);

PPG12: Development Plans and Regional Planning Guidance (2nd Edition);

PPG13: Transport (2nd Edition);

PPG15: Planning and the Historic Environment.

Best Practice Advice

Urban Design Compendium, English Partnerships, Llewelyn-Davis, August 2000;

Urban Design Guidance: Urban Design Frameworks, Development Briefs and Masterplans, Urban Design Group, 2002;

The Value of Urban Design, CABE & DETR, 2001;

By Design: Urban Design in the Planning System: toward better practice, CABE/DETR, 2000;

By Design: Better Places to Live, CABE/DTLR, 2001.



Example of current guidance

Themes of the Compendium

Throughout the process of preparing the Compendium, and in light of the review of current UK policy and guidance, key themes which should underpin the transformation of Sheffield to a competitive national and European city have emerged.

These themes inform the strategies and guidance contained within the Compendium, and will compliment and build upon the success of recent and proposed developments in the city centre, such as the award winning Peace Gardens.

It is the intention that these themes, and the strategies and guidelines borne from them, will be integrated into the design and implementation of any new development. This will ensure a holistic approach to the repair and reinvention of Sheffield city centre and achieve long-term sustainability for the city.

1. Identity and Diversification

Sheffield has the opportunity to create a new and unique identity through promotion of the city's culture, creativity and growing knowledge economy. A vibrant city centre will result from encouraging a range of compatible yet diverse land uses that will enhance the character of the city, respond to local needs and contribute to economic growth. Extension of this diversification to housing tenure within the city centre will see its re-population and help to sustain an evening economy and safe night time environment.

2. Respect of Existing, and Creation of New, Character Areas

The maintenance and enhancement of the existing character areas of high quality within the city is vital. This can be achieved by encouraging development which responds to the context of the city centre and the local distinctiveness of each quarter. At the same time contemporary, positive and innovative design solutions are required from new development that will see the creation of a new design image for the city.

3. Integrated Movement Network

A movement framework integrating pedestrian, vehicular, public transport and cycling networks will improve connectivity and permeability both within the city centre and to surrounding suburbs. This will contribute to the creation of a more socially inclusive city, improved permeability and greater use of sustainable transport options.

4. Robust Built Form

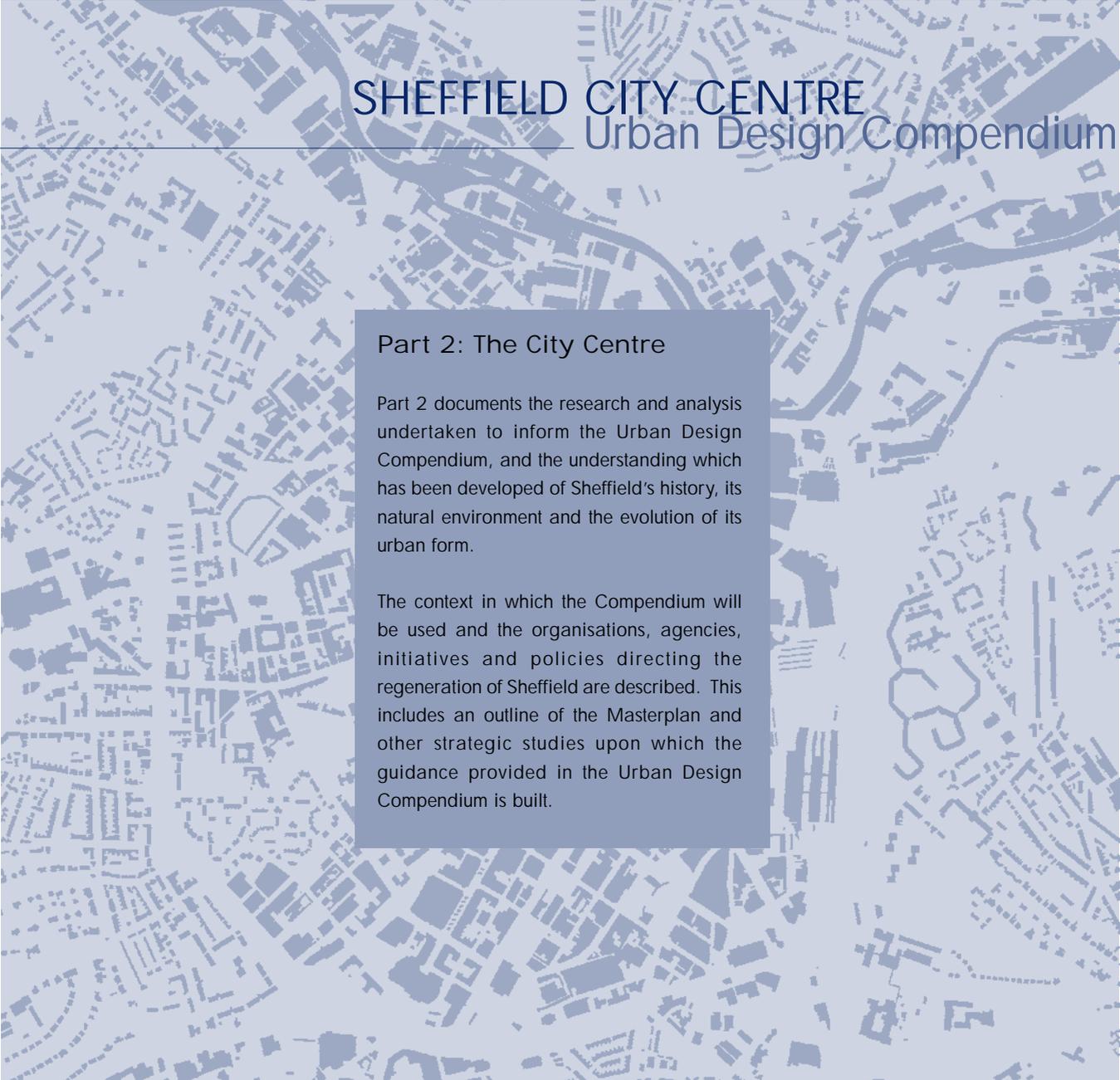
New developments should display innovation in design which sees them capable of adapting to future change or needs, whilst respecting their context. Recycling of existing buildings and reclamation of brownfield sites within the existing urban pattern will provide a continuity of urban form and improved legibility which is currently lacking in many quarters.

5. Sense of Place

The creation of an urban environment which is safe, attractive, functional and conducive to street life and pedestrian activity is paramount. Simple and uncluttered streetscape design will provide a more inclusive and accessible public realm.

6. Implementation

Many opportunities exist to implement improved standards of design and enhance the quality of Sheffield's urban environment. This includes broadening the range of design input, engaging the public in the design process and the preparation of masterplans or design briefs for key sites and areas. It is essential that a rigorous decision making process insisting on quality of product is in place, as well as care and maintenance programs. Marketing and promotion of the city's wide variety of offerings will see the benefit of quality design shared by many and become a part of the city's identity.

An aerial photograph of Sheffield City Centre, showing a dense urban layout with a grid of streets, numerous buildings, and a winding river (the Sheffield Canal) cutting through the center. The image is overlaid with a semi-transparent blue layer.

SHEFFIELD CITY CENTRE

Urban Design Compendium

Part 2: The City Centre

Part 2 documents the research and analysis undertaken to inform the Urban Design Compendium, and the understanding which has been developed of Sheffield's history, its natural environment and the evolution of its urban form.

The context in which the Compendium will be used and the organisations, agencies, initiatives and policies directing the regeneration of Sheffield are described. This includes an outline of the Masterplan and other strategic studies upon which the guidance provided in the Urban Design Compendium is built.

2.1 The Inherited City



Introduction

The relationship of the city with the surrounding topography, waterways and green spaces has provided the foundation of its urban form and the basis of its development as an industrial centre. Likewise, the historic growth and recent decline of Sheffield's industry, wartime bombing and post war reconstruction have all played their part in the development of the city's urban pattern and built form.

Historical Events and Their Impact on Urban Form

The city's first settlement developed at the confluence of the Rivers Don and Sheaf, around the 12th century. Since the time of settlement Sheffield profited from its location near the waterways, with the earliest water powered mill dating from the 12th century. Sheffield was also developed as a market town at this time and both of these functions have continued to shape the city to the present day.

Since the middle ages, Sheffield's access to abundant natural resources has made it an ideal centre for a thriving iron and steel industry. By the late 14th century Sheffield was famous for its metal knives and its role in this industry strengthened through the ensuing centuries. The prosperity of these early trades and subsequent growth and expansion of the city meant that by the late 18th century all available sites on the rivers were developed.

The growing industrial reputation of the town was strengthened by major engineering works throughout the 19th century, the advent of the railways and the development of its transport network. Sheffield became the principal location in Britain for large steel works and saw Sheffield achieve City status in 1893.

The city's success also created hardship for many living in overcrowded conditions. However, in an attempt to control the city's congestion and continuing expansion, a report by Abercrombie containing many far reaching proposals was published in 1924 and aimed to comprehensively review the city planning of Sheffield. However, only the new City Hall (1932) and Central Library were built.

Air raids during World War II had a devastating impact on

the urban form of the city with over 3,000 houses and shops destroyed and thousands more badly damaged. In addition to the physical damage, nearly 600 of Sheffield's residents lost their lives during the blitz. The economic and social stability of the city was significantly undermined as a result.

Post war rebuilding saw the redevelopment of individual city sites as well as large scale civic planning and road development schemes. In many cases these developments have had a negative impact on the city's urban form. Most notably, the post-war road network fragmented much of the city and the slum clearances in the 1950s resulted in the loss of much of the original grid street pattern which has effected the legibility and permeability of the city.

The decline of the steel industry in the 1980s further changed the character of the city blighting the urban landscape by leaving redundant industrial buildings and vacant sites.

The 1990s saw major public realm improvements to the city centre with projects such as the pedestrianisation of Barker's Pool and Tudor Square which have injected life back into the city centre.

The Urban Pattern



Fairbank's 1771 Plan.



1905 OS Plan of Sheffield city centre.

The different street patterns and massing of its urban blocks are a result of the city centre's development and evolution since its medieval beginnings. Different periods of development can be identified, as follows:

- Remnants of the medieval heart of Sheffield are still apparent in the street patterns around Fargate, High Street and Waingate areas. Although many of these areas were redeveloped in the Victorian era, there is evidence of the original land ownerships in the form of burgage plots running back to narrow lanes and back streets.
- The urban form in the Cathedral Quarter is dense, and fine grain due to its original residential use. Built speculatively for merchant housing in the mid 18th century, the area was laid out on a grid with streets running north down the slope toward the Don Valley. Building footprints align consistently along the streets, providing a distinct street pattern.
- The grid pattern of streets evident in the CIQ is the result of the planned development of the Duke of Norfolk's land. The dense built form is a characteristic of the industrial and residential land uses which dominated the area. Much of this character has disappeared replaced by modern development. The street pattern, however, has remained fairly intact despite some late 20th century development cutting across the grid.
- The legible urban pattern of the gridded street layout continues in the Devonshire Quarter, developed in the early nineteenth century following the building of the new Glossop Turnpike Road (now West Street). The area was developed for terraced housing, workshops and factories and had a dense urban form with consistent block sizes and street enclosure. Today, the urban blocks are less dense and cohesive as a result of war damage, slum clearance, factory closures and piecemeal development. Despite this, the strong alignment of the streets remains

particularly evident at West Street, Division Street and Rockingham Street. This provides a clear structure and definition to the area. The erratic urban pattern of the residential area around Gell Street is incongruous with the rest of the Devonshire Quarter and has more in common in terms of built form, use and character with the areas to the west of the Ring Road.

- The strong grid of the Moor aligns with the streets in the CIQ, and the Moor (formerly South Street), provides a strong axis toward the Heart of the City. Redeveloped after its total destruction during the war, large footprints were created to define the blocks.
- The different alignments of the street grids of the Devonshire Quarter and the CIQ/Moor meet along Charter Row, which by its width and design severs connections between these two areas.
- The Scotland Street area is typified by smaller building footprints reflecting the industrial workshops in this area. Riverside, particularly around Kelham Island, is characterised by the larger footprints of factories aligned along the River Don.
- Both the Townhead Street and Edward Street flats have distinctive footprints, with the buildings wrapping around a central private space and aligning with the streets. The Parkhill flats to the east of the centre are also very distinctive - in their plan set in open green space, as well as their built form on elevated ground.
- The Ring Road provides an obvious delineation between the west and south of the city centre with the railway lines and the Parkhill flats defining the eastern edge. The River currently forms the centre's northern. However this area will be reconfigured with the completion of the Inner Relief Road.
- While the River Don and the Sheffield to Tinsley Canal are intact and important components of the city's urban form, the River Sheaf and sections of the Porter Brook are culverted resulting in the loss important characteristics of the town.



2003 Figure Ground of Sheffield City Centre.

- The 1994 City Centre Strategy identified two main axes which have emerged in the city centre: the retail spine stretching from Victoria Quays to the Moor, and the east-west axis between the universities. These intersect in the core area of the city, around the Town Hall. To an extent the activities at the end of these axes - the markets and Victoria Quays - have been isolated from the city centre.

The piecemeal development of Sheffield and intervention in the post-war period have created very distinct character areas within the city. This is generally a positive feature but there is currently no relationship or coherence between these character areas which has a negative impact on the overall legibility and permeability of the city centre.



Topography Plan – the hills and valleys of the city centre.



The natural topography of the city.



The green city.

Topography

The city of Sheffield sits on seven hills, with its city centre perched like a citadel on a spur jutting out into the Valley of the Rivers Don and Sheaf and the Porter Brook.

The medieval settlement expanded up the hill from its beginnings at the confluence of the rivers, extending along the ridge to the west. The industry was concentrated in the river valleys while the key civic buildings such as the Cathedral were established on higher ground to give them visual presence.

The topography of Sheffield city centre affords dramatic views of the city skyline from vantage points around the centre, and framed vistas along its streets to the surrounding green hills. The skyline of Sheffield is composed of a mixture of landmarks from the spires of historic buildings to the monolithic slab forms of modern developments. Unfortunately many of the later developments have undermined the prominence of the historic landmarks and have been sited with no regard for the city's topography. This has in effect served to mask the city's topography and flatten the skyline.

The Green City

Sheffield is one of the greenest cities in Britain with its remnants of ancient woodland, legacies of past estates, extensive parkland and leafy residential suburbs. Many views from the city look out to distant green hills. However, within the city centre there are only limited pockets of greenery and planting to soften the hard urban form. The Peace Gardens, Devonshire Green, the grounds of the Cathedral and other religious buildings are the most significant green spaces within the city centre. The city centre's largest green space located in front of the Park Hill flats is at present underutilised.

The Peace Gardens is the primary green space within the city centre. Based on the concept of a contemporary arts and crafts garden, the design promotes the highest standards of applied arts. The other well utilised city space is Devonshire Green which is an informal green space at the heart of the Devonshire Quarter.

Geographical Location: "The Pennine City"

Sheffield rests on the eastern flank of the Pennines, within the catchment of the River Don. The geographical location of Sheffield and steep topography made communications difficult prior to the advent of the railways, isolating the city from the main trade routes. This isolation promoted a strong identity within the city which has remained to this day. The opening of water transport and the advent of rail in the 1830s established strong connections to the rest of the country.

Sheffield's region has a unique and specific geology, with the Pennines being one of the most important sources of building materials and stone paving in the country. The Pennine Gritstone and sandstones, from quarries such as Stokehall at Grindleford and Johnson Wellfield near Huddersfield, are utilised in Sheffield city centre's key civic buildings, such as the Town Hall and City Hall. It is also used on the streets, reinforcing a strong local character.



The City Hall – fine civic buildings in sandstone.



Details of carved sandstone in The Peace Gardens (S.C.C Photographic Unit).

The Rivers and the City

The fast flowing water of the Rivers Don and Sheaf were harnessed for production and industry at the time of Sheffield's first settlement.

From the development of the earliest water powered mills, such as the corn mill at Beauchief Abbey founded in the 12th century, the number of mills along Sheffield's river banks steadily grew. By the late 18th century all of the available mill sites were taken until there were over 100 water powered sites - the greatest concentration anywhere in the UK.

A complex system of interlinked goits and dams was established in an effort to produce maximum power to the numerous mills they had to supply.

The Don Valley was the choice location for many large steelworks, due partly to the improved connections offered by the opening of the Sheffield to Tinsley Canal in 1819 and the Sheffield to Rotherham railway in 1838. However, with the advent of steam power in the mid 19th century the number of water mills in active use decreased and the trend of abandonment of the Don began. This culminated in the 1980s with the decline of the Sheffield steel industry whereby the river lost its traditional function and became a forgotten part of the city.

The courses of the Sheaf and Porter were successively altered with the introduction of the water powered mills, until they were finally culverted in the 1860s to make way for the construction of the Midland Railway Station and the Sheffield to London railway line. The river which had given Sheffield its name was relegated to an underground pipe.

Today it is evident that the greatest natural assets of Sheffield have been neglected. The Don is cut off from the city centre by roads or tracts of industrial wasteland. The combined Porter and Sheaf now flow into the Don through a network of tunnels, emerging only occasionally to be hidden amongst derelict industrial buildings.

However, the river's remaining weirs, goits and dams are an important legacy of the historic industrial infrastructure for which Sheffield is renowned. Kelham Island and its Museum, for example, are nationally significant reminders of the country's industrial past.

River corridors in west Sheffield were developed as unique green corridors and parks in the early 20th century. Since the 1980s, attempts have been made to extend these features to the Lower Don and the canal corridors. In the past few years development has returned to the riverbanks for the first time in over a century, allowing for their reintegration into the city which they created. It is essential that this reconnection with the rivers continues to be fostered and their role in the history of the city celebrated.



1832 OS map highlighting the watercourses and mills (source: Green, J).



One of the many weirs on the River Don.



The River Sheaf disappearing into culverts.



Kelham Island (source: One Big Workshop).



Industrial Heritage (source: One Big Workshop).

Industrial Heritage of the City

Sheffield is described as the 'Great Industrial Powerhouse', known for its dual economy of heavy steel industry and the cutlery and silver trades established in the Middle Ages. This economy was facilitated by its natural assets - the plentiful local supplies of iron ore, coal and good sandstone for grindstones, the fast flowing rivers and the hilly topography which harnessed power and made Sheffield the best location for a variety of mills and forges.

From its early success as the centre of metal working in the 16th century Sheffield emerged as a leader in the growing cutlery industry during the 17th century. This new craft was formalised by the formation in 1624 of the Company of Cutlers (now in Church Street). These industries produced a highly skilled metal industries workforce, and as a result the term 'Made in Sheffield' became synonymous with quality and craftsmanship. The steel industry in Sheffield was spurred by the inventions of crucible steel (Benjamin Huntsman, 1742) and the technique of bulk steel production in converters (Henry Bessemer, 1856). The heavy trades became the primary sources of employment in the city from the late 19th century and their collapse in the 1980s had a devastating effect.

The legacy of the steel and cutlery trades expresses itself in the physical landscape of the city – the large steel factories and plants located outside the centre and small cutlery workshops on the hills around and within the city centre. Indeed, a number of workshops still operate in the more industrial quarters around the CIQ and St. Vincent's. Building style generally took the form of metal clad sheds with ranges of brick offices facing directly onto the street. However, more domestic scaled factories and workshops also developed around yards and courts, which sometimes took the appearance of a Derbyshire country house such as Globe Works.

The significant remnants of industrial heritage must be protected, not only for the role they play in the city's history but as important parts of the 'Sheffielders' identity - a familiar local culture. Likewise, the city's association with quality craftsmanship must be retained, possibly to be reinvented as a part of the creative industries or in the design of the city environment.

Conclusions

- There is a need to conserve and enhance Sheffield's industrial heritage and to celebrate its history of craftsmanship.
- Post-war redevelopment generally had little or no respect for the original street pattern and urban character of the city's quarters.
- The waterways were key to the city's development but since the demise of the steel industry have become a forgotten and under-utilised part of the city.
- In the past the location of tall buildings seems to have had little respect for the historic skyline and topography of Sheffield.
- The geographical location of the city centre affords it spectacular views out to the surrounding natural landscape, an attribute which is rarely used to benefit the outlook from public spaces and key landmark buildings within the city.
- There is a lack of strong, attractive pedestrian and cycle routes between the various public spaces in the city centre.
- At present Sheffield does not fully celebrate its distinctive industrial character as a part of its urban identity.

2.2 Sheffield Today



Sheffield Today

Just as historical events have shaped the urban form of Sheffield's city centre, there is a variety of initiatives which are currently facilitating and guiding its regeneration.

The Compendium aims to build upon these initiatives by offering strategic design guidance, both at the city wide level and specific to each quarter. This guidance has been informed by the current local policy context, the key strategic documents which have set the framework for growth and change, and the many development proposals which are currently underway. The most influential of these have been outlined in this section.

Sheffield One

The driving force behind Sheffield's regeneration is Sheffield One, a partnership organisation of Sheffield City Council, English Partnerships and Yorkshire Forward, the Regional Development Agency for Yorkshire and Humber. Sheffield One is one of the first three pilot urban regeneration companies established by the Central Government to deliver the recommendations of Richard Rogers Urban Task Force Report, *Towards an Urban Renaissance*.

Sheffield One has been charged with the leadership of the regeneration of the Sheffield city centre. Bringing together national, regional and local agencies, Sheffield One's principal task is to work with partners to develop an economically strong and sustainable city centre as the focus for the region. Under their direction, all the issues that affect the city centre are being systematically tackled, including economic factors, transport, property, planning and the environment.

The work of Sheffield One and its partnership organisations will establish the conditions for the future growth of the city and ensure that all local communities have access to new opportunities created. A substantial funding package has been secured to deliver a program of investment in the city's infrastructure and urban environment, recognising the strategic importance of the Sheffield city centre as an economic driver for the region.

A key strategic objective of Sheffield One's delivery program has been the preparation of a Masterplan and the implementation of its recommendations to guide the future regeneration of the city centre.



Axonometric of city (source: Koetter Kim masterplan).

sheffield one



English Partnerships





The city centre masterplan (source: Koetter Kim masterplan).

Sheffield City Centre Masterplan 2000

The Masterplan, prepared by Koetter Kim and Associates in 2000, sets out 'a clear and unambiguous strategy for Sheffield to regain its status as one of Europe's leading cities'. It was underpinned by a series of separate studies including a baseline study, an economic study, a land-use and property market study of the city centre retail environment and a strategy for transport and movement in the city centre.

Based on these studies the Masterplan offered a comprehensive strategy for change which maps out the economic, physical, social and cultural conditions required to provide the basis for sustainable investment and growth over the next 10-15 years. It also proposes a programme for the strategic and systematic improvement of the public realm and civic spaces and the development of principles for the neighbourhoods and specific sites within a coherent framework.

There are 4 underlying objectives at the core of the Masterplan:

- Building a new high technology based economy;
- Creating a vibrant city as a centre for learning, culture, retail, business, leisure and living;
- Improving accessibility to the city centre by all modes of transport;
- Celebrating the public realm.

The document identifies a variety of key strategic projects (refer to P.37) which should be implemented to ensure the successful regeneration of the city:

- Sheaf Valley E-campus;
- New Retail Quarter;
- Heart of the City Project;
- Castlegate, Victoria Quays and Riverside;
- City Hall/Barkers Pool;
- Railway Station Gateway & Sheaf Square;
- Integrated Transport Strategy;
- Celebration of the Public Realm;
- Park Hill Flats.

These projects will help Sheffield achieve its fundamental objective – the creation of a vibrant city economy - which would be sustained by ensuring that Sheffield remains a step ahead of its competitors and anticipates future trends.

Sheffield City Centre Masterplan Transport Improvements: Strategy Document

The Strategy Document, produced in May 2002 by Faber Maunsell, brings together the work undertaken by Sheffield City Council, South Yorkshire PTE and Sheffield One on transport improvements.

The primary transportation objective is 'to enhance significantly the quality of all aspects of the transport system serving the city centre and to improve integration between all modes of travel, thereby enhancing accessibility and driving the economic regeneration of the City'.

The Strategy builds upon the recommendations from the Masterplan with outline proposals for access loops, car parking, public highway improvements, public transport enhancements and Connect Sheffield's way finding and signing system to aid in the legibility of the city.

The Transport Masterplan identifies a number of schemes key to creating an integrated movement network:

- Public Highway Schemes – completion of the Inner Relief Road, downgrading of Charter Row and creation of a gateway feature, redesign of Eyre Street, redesign of Furnival Square to create a gateway, plus a variety of traffic management schemes to improve access to the city centre.
- Car Parking – car parking strategy to rationalise or improve existing parking and create 2000 new spaces within the city centre.
- Public Realm Schemes – extension of the Peace Gardens, redesign Tudor Square and the City Hall precinct, new public space at Howard Street, major upgrading of Devonshire Green and Division Street and the development of a network of spaces improving connectivity in the city.
- Public Transport Schemes – midi and mini interchanges to improve public transport facilities which will trigger redevelopment of the bus station and improvement of all other transport stops.
- Improvements to Railway Station and Sheaf Square.
- Connect Sheffield, way-finding and mapping strategy for the city for all modes of travel in partnership with the universities, SYPTE, NCP etc.



The existing ring road - Netherthorpe.



The supertram (source: Sheffield 1).

Inner Relief Road

The transport initiative that will have the most significant impact on the development of the city centre is the completion of the Inner Relief Road (North). This project provides the opportunity to integrate the northern inner city area with the rest of Sheffield. The creation of a green boulevard along the route will provide a high quality environment for all user groups. It also provides the opportunity to link the riverside with the city, thus encouraging the regeneration of this area to create a new and distinctive place in Sheffield. The project description has been broken down into 3 sections – the Ring Road, the Built Form and Access:

- The Ring Road
The second phase of the Inner Relief Road will be developed as a tree lined boulevard, incorporating a network of landmark features at key junctions to signify entry into the city centre. A new riverside terrace will be created on the north of the river, and the existing walkway will be extended to the west, to promote the integration and regeneration of the Riverside Quarter. The built form will have frontages to the road and an element of mixed use so that the IRR becomes an attractive streetscape. To encourage pedestrian activity several crossing points have been provided at important junctions and intermittently along the route.



Proposals for Inner Relief Road (source: Sheffield City Council).

- The Built Form
Buildings will have frontages to the road and river to establish a coherent and legible urban form. Blocks will be consolidated to provide a continuous frontage, reinforcing the urban character of the IRR as a 'street' rather than a 'road'. The re-use of existing buildings is encouraged along the riverside and the creation of architectural landmarks at important corners is promoted to improve legibility and signify entrances to the city centre.

Opportunities for public realm improvements are highlighted along the riverside. These include continuous walk/cycle routes, the creation of pocket parks, the provision of recreational facilities and improved landscaped open space and play areas.

- Access
Main vehicular access will be provided by the IRR with various secondary routes branching from it to help improve traffic management in the city centre. Vehicular access will not be provided on the riverside walkways except to access buildings. Vehicular access to each courtyard will be provided from the street.

Various improvements will be made with regard to pedestrian activity including high quality pedestrian walkways and traffic calming measures. The urban design framework for the IRR also recommends that a cycle network be provided on the IRR route and continue along the major axes branching from the IRR and the riverside walkways.

This project offers the opportunity to integrate the north of the city centre with the rest of Sheffield and open up the riverside which will act as a catalyst to the wider regeneration of the area. To encourage this integration, the Inner Relief Road will be integrated with its surroundings to ensure that it becomes a functional streetscape in its own right rather than just a traffic carrier.

Connect Sheffield

'Connect Sheffield' is an access and legibility strategy for the city centre, with its foundation in the Koetter Kim Masterplan. It is one of the recommendations of the Masterplan Transport Improvements Strategy, which includes public transport schemes (bus routes and mini-midi interchanges to create a user focused system), access loops, car parks and their management, and public realm improvements associated with the above.

Connect Sheffield is 'an organising concept to develop a world class design identity and delivery framework for information, communication and movement projects within the public realm'. With an emphasis on 'user centred design and world class quality' it will help set Sheffield apart from its competitors, while retaining its industrial heritage. The 'Building Blocks' of this study are:

- **Way Finding, Signing and Information Strategy**
A city wide signing strategy focussing on all forms of vehicular movement. The Strategy will give priority to improving information for vehicular users on key radial routes, the inner ring road, access loops and links to car parks incorporating V.M.S for parking availability and congestion warnings. The city centre has been subdivided into 4 'districts', which are the City Centre, Sheaf Valley, Don Riverside and the West End (which extends across the IRR to include the University and Hospital Campus). Once within these districts, information will be provided relating to the quarters – their attractions, destinations and car parks. A consistent nomenclature schedule has been developed. A new pedestrian signing system is proposed which replaces existing signposts by new volumetric 'hubs' capable of carrying more information as well as audio and digital equipment inside.
- **Sheffield Map Suite**
An up-to-date and consistent map suite for Sheffield City Centre, as an information design resource.
- **Product Design Strategy**
A bespoke, identifiable range of pedestrian signs/bus posts which will go hand in hand with the Connect Sheffield way finding and information graphic elements.
- **Brand and Identity Strategy**
A unique graphic and information kit of parts, including a new Sheffield Sans' font, iconography, colour palette, mapping concepts and an image bank specifically for Sheffield.
- **Urban Design Projects**
Several 'early opportunity' projects have been identified by Connect Sheffield. These include:
 - Updating the maps displayed in the JC Decaux public information units, to ensure a more pedestrian focused information system.
 - Creating a clear printed city centre map primarily for pedestrians.
 - Redesigning the content of the Display Information Units (DIU) at the supertram stops, with emphasis on stop-specific information.
 - Upgrading Arundel Gate NCP to improve the pedestrian environment experience, and way finding systems.
 - Introducing Variable Message Signing (VMS) serving Charter Row car parks as a demonstration project.
 - Rationalising and removing street furniture as a pilot project in the Cathedral Quarter, to promote a clutter free pedestrian environment.
 - Developing a 'digital gateway' to Sheffield, with a Public Dataweb, and 'Interface and Location Strategy' for kiosks in the city centre.
 - Exploring the concept of themed trails, to encourage people to explore and stay longer in the city centre.
 - Sheaf Square/Howard Street/Heart of the City/Barkers Pool as a critical sequence of pedestrian signing.

Sheffield Environment Strategy Action Plan Summary

This document presents a holistic vision for the city which encourages a strategic approach to future development that integrates environmental, social and economic concerns to ensure that city has a sustainable future.

The strategy identifies six key challenges which should be addressed in the pursuit of Sheffield's sustainable development:

- Re-establish Sheffield as a recycling city and stimulate renewable resource use;
- Substantially reduce environmental impacts of travel and transportation;
- Create clean, attractive and safe streets and neighbourhoods;
- Enhance and safeguard our distinctive green and built heritage;
- Achieving the ecological transformation of industrial areas and water corridors for their economic and amenity potential.

Sheffield's City Centre Strategy, 1994

The 1994 strategy was the precursor to the masterplan, introducing a number of key principles:

- the vision for Sheffield as a centre for knowledge based industries with a strong sense of place;
- the notion of the city centre comprising distinct quarters;
- the two main spines of the city centre - the retail spine stretching from Victoria Quays to the Moor, and the new east-west axis between the universities;
- the point of intersection of these spines, at the core area in the Heart of the City, as a particular city focus.

Quarter Action Plans

Quarter Action Plans have been prepared for:

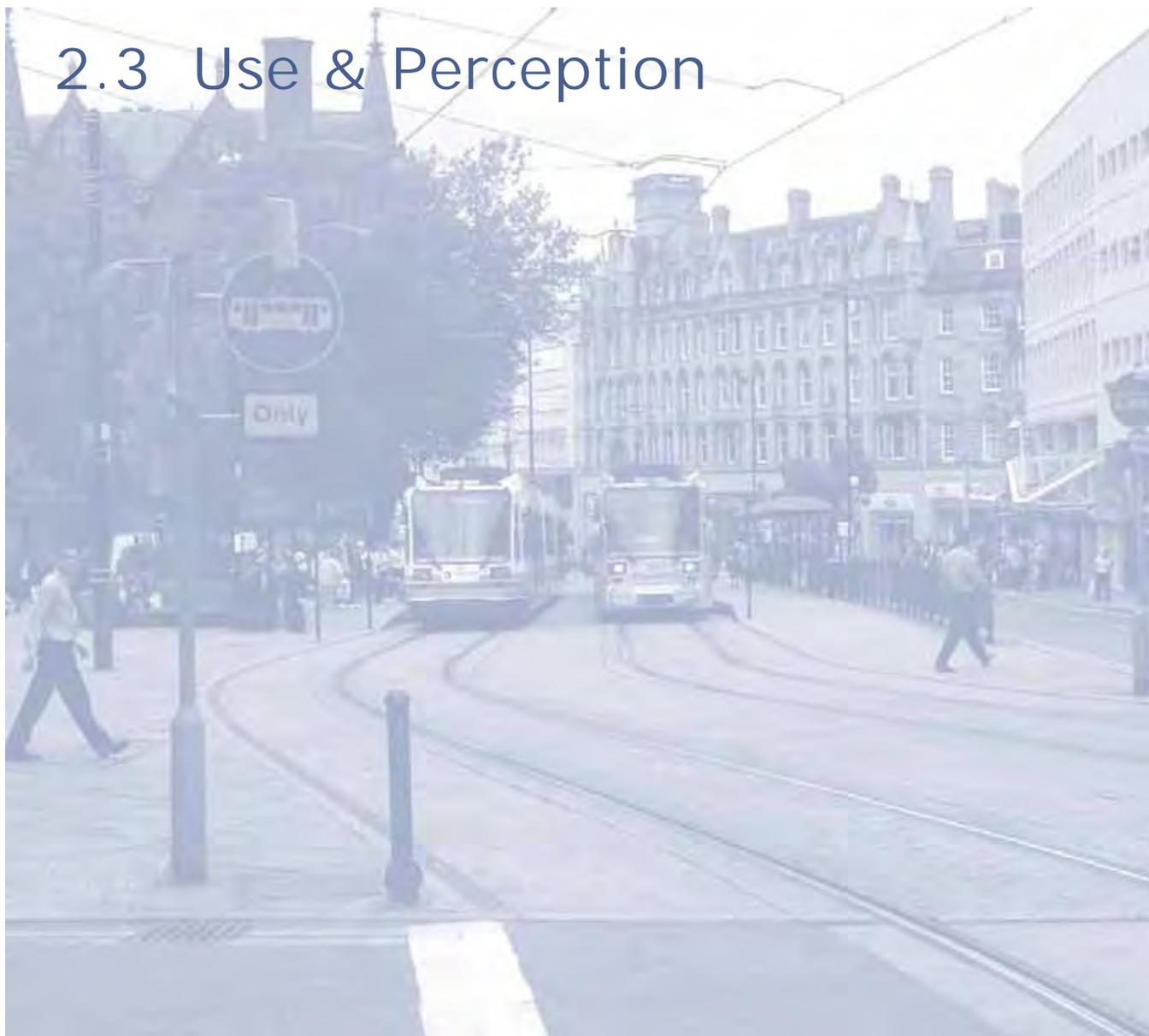
- The Cultural Industries Quarter;
- The Devonshire Quarter.

These Action Plans illustrate how the City Centre Strategy, 'A New City' (1994) and the Council's UDP policies should be implemented within particular quarters of the city. These action plans offer long-term visions for the quarters, and offer proposals and guidance which, if adhered to, will allow these visions to be realised. The guidance contained within these documents and the potential impacts of their proposals have been considered in the compilation of the Compendium and incorporated into the relevant chapters. Other projects and initiatives are included within the quarter specific guidance in Part 4.

Conclusions

- Strategic projects set out in the Masterplan are currently being realised and will shape the form of the city and drive its regeneration.
- A significant number of urban design opportunities will be presented by the completion of the IRR.
- The Connect Sheffield initiatives aim to create a legible and navigable urban environment and a positive image for the city centre.
- The Quarter Action Plans will guide development in the CIQ and Devonshire Quarter. Quarter Action Plans are to be prepared for the remaining quarters including Castlegate, Cathedral, St. Vincent's and Nursery Street/Wicker.

2.3 Use & Perception

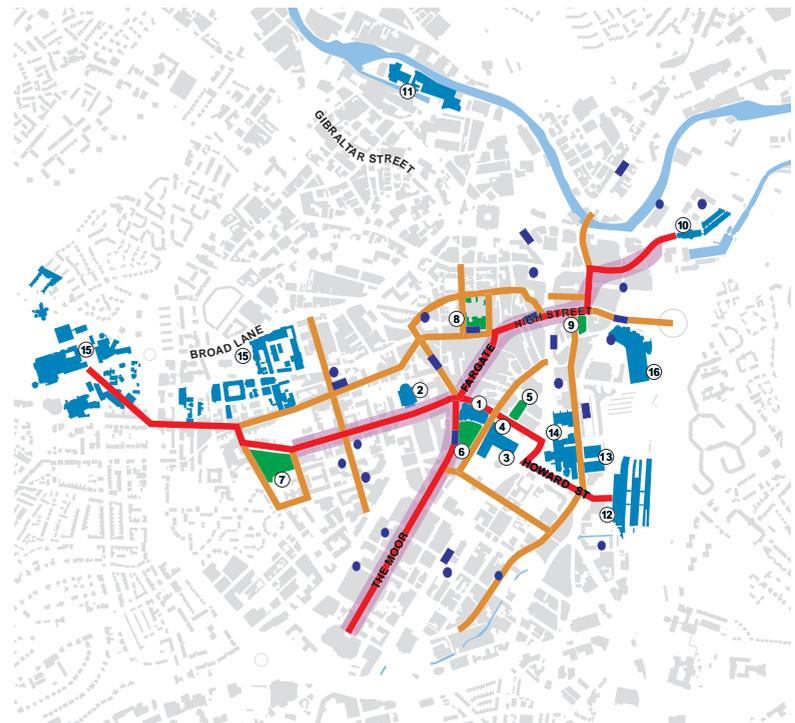
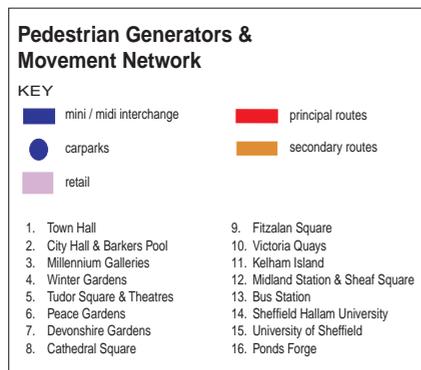


Introduction

Our use and perception of a city is largely based upon our experience as a pedestrian in that place. Pedestrians need to understand and feel safe in their environment and enjoy the experience of its spaces. There are several factors which, perhaps subconsciously, affect the way people use and perceive an urban area. These include:

- Legibility – the ability to understand a city and develop a ‘mental map’ of a place;
- The quality of the pedestrian experience in terms of the environment and ease of movement;
- The design and location of public spaces throughout the city; and
- Land uses which generate and encourage pedestrian movement and activity throughout the day, or night.

The map on this page shows the key pedestrian generators in Sheffield city centre, and the movement networks which connect them.



Legibility

The spires and towers of the key buildings such as the prominent Arts Tower are visual orientation tools within the city. The strong grid pattern or axiality of some streets affords framed views to landmark buildings, focal points or green spaces outside of the city centre, thereby assisting in way finding. The Parkhill flats provide an important landmark on the centre's edge from many vantage points in the city, as do the residential tower blocks which step up and accentuate the slopes of the city.

Although there is a certain degree of legibility within the city, its overall clarity is undermined by a number of factors:

- In many cases the distinctive towers and spires of the religious and civic buildings of the city are obscured along the skyline by the tall buildings of slab like forms which step up the hill.
- The postwar road network has greatly reduced the legibility of the city, fragmenting the urban form and severing pedestrian routes through and out of the city. Poorly designed pedestrian crossings and junctions add to this lack of permeability by creating barriers to pedestrian movement which exacerbates this severance of connection.
- The lack of clear visual and physical connections between the valleys and the heart of the city centre, caused partially by the distinct changes of level along key pedestrian routes and partially by the siting of monolithic impermeable buildings, reduce the connectivity between the quarters. An example of this occurs upon arrival by train where the route to the city centre is convoluted and unclear, with a vast change in level. This problem will be rectified by the forthcoming Railway Station Project and Howard Street link upgrade.
- There is a lack of consistency and coherence in the public realm along many of the key pedestrian routes or within the quarters. In the majority of the city's streets, different materials have been used along the footways. Street furniture and signage is ad-hoc in its layout and design. These factors combine to visually detract from the continuity of routes and identity of character areas.

- The confusing signing system in the city is not well integrated into the streetscape nor is it easily understood, by pedestrian or vehicular users. This is being addressed as part of the Connect Sheffield project.
- Some quarters have gap sites and empty buildings which undermine their character and the user's ability to develop a mental map of the area.



Tall buildings obscure Sheffield's historic skyline.



Unattractive overpasses combat the lack of permeability created by the road network.

Quality of Connections: the Pedestrian Experience

A high quality pedestrian environment encourages increased street activity creating a more vibrant city.

Over the last twenty years, streetscape works throughout Sheffield city centre have seen significant improvements to the public realm which promote quality environments that benefit pedestrian movement and public life. These include: Fargate, which was closed to traffic in 1971 and refurbished in 1997/98; Orchard Square, which opened in 1987; Chapel Walk; Town Hall Square and the Peace Gardens completed 2000; Surrey Street; and the spaces en route to the Railway Station such as Hallam Square.

Further public realm improvements are ongoing, with a particular focus on Division Street and the connections to the railway station. In addition, the strategic projects currently proposed or underway include high quality streets and spaces that will facilitate movement through the city centre and make it a more attractive environment.

Despite these improvements, much of the existing public realm within the Sheffield city centre detracts from the positive pedestrian experience, such as:

- The many elements in the street including street furniture, signing poles, gateway elements, advertising boards, planters and trees that create clutter and impede pedestrian movement.
- Difficulty in negotiating the vast changes in level between key pedestrian generators, such as the stations and retail areas, and lack of clear and direct connections.
- Less accessible walking surfaces such as setted areas that have been introduced to accommodate vehicle overrun. These create an uneven walking surface, which is not suitable for wheelchair users or buggies.

- Key pedestrian routes often cross heavily trafficked roads such as Sheaf Street, where there are particular problems in finding safe and convenient crossing points. In addition, the volume of traffic within the city centre causes hazards and discomfort to the pedestrian, in terms of pollution, safety and permeability.
- A lack of consistency of paving materials in footways along key pedestrian routes.
- Some routes are intimidating due to blank facades, hidden spaces, underpasses, lack of surveillance and narrow corridors of passage. Many of the underpasses have now been filled in, and are being replaced with at-grade crossings.
- In addition, some streets such as Waingate, Haymarket and to an extent, West Street, are dominated by buses and trams respectively, which creates a congested and unpleasant environment for the pedestrian.



Orchard Square.



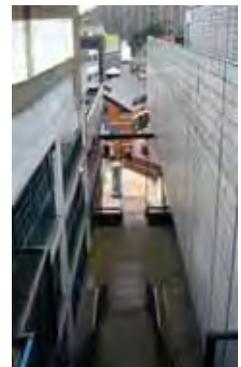
Fargate.



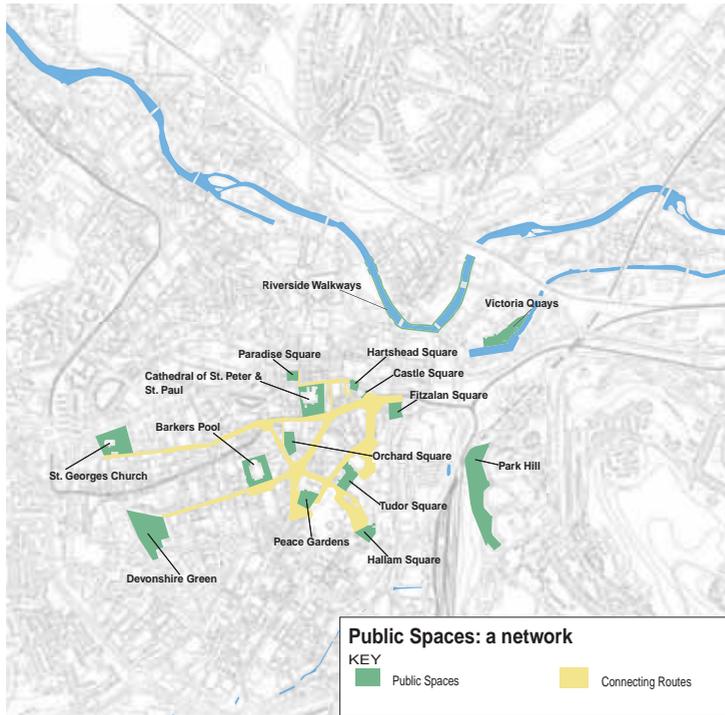
Blank facades.



Graffiti and closed facades create unattractive routes.



Difficult pedestrian routes created by vast changes in level.



Public Spaces: a network

Public spaces offer the opportunity for people to spend time in the city - a place to relax and watch the world go by, or a refuge from the city centre's busy streets.

Sheffield has a number of public spaces of diverse character and function ranging from civic use to informal recreation. The last twenty years has witnessed the reclamation of public space from car parks (for example Tudor Square and Devonshire Green) and the improvement, indeed the transformation in some cases, of the environmental quality of many of the key public spaces in the city centre.

The Peace Gardens is an example of a highly successful civic space, and illustrates the positive impact that investment in quality design and construction can have on the public life of both citizens and visitors to Sheffield.

The Masterplan promoted the development of a public space network, consisting of a 'fine - grained network of smaller spaces' which are each central to the character and use of the distinct areas of the city centre. There are a variety of committed projects currently under construction such as those within the Heart of the City. Many more are nearing the final design or implementation stage, including the re-design of Sheaf Square as a major arrival gateway to the city centre.



Peace Gardens



Devonshire Green.



Sheaf Square.

Activity on the Street

Active uses at the ground floor of buildings can help promote life at street level. When a connection is made between internal and external spaces within a city, and there is a flow of activity, a more animated street scene is the result.

Blank facades do not contribute to the appearance or activity of the street and create potentially unsafe and intimidating pedestrian environments. Well designed shop window displays can make a positive contribution to streets during the day and also at night, throwing out light and creating visual interest.

Most of the shop fronts in the key retail streets of Sheffield city centre have display windows to exhibit goods and merchandise which adds interest to the street. However, many streets outside these retail areas are characterised by blank facades as a result of their industrial nature. Often the 1960s developments make no connection with the street and present monolithic blank facades facing onto to major traffic routes, creating a hostile pedestrian environment.

Where feasible it may be possible in the redevelopment, refurbishment and conversion of some areas of the city centre to create active facades at ground level facades at ground level to promote connections between internal spaces and the street.

The use of the city centre's streets and spaces, and the pedestrian routes taken, are different during the evening and night to those of the daytime. A city centre should offer its citizens and visitors a lively and safe environment at all times. Within the city centre, there are some "no go" or deserted areas at night which are bustling during the day. The retail areas of The Moor, Fargate and Orchard Square are practically deserted after the close of shops at 5.30pm, aside from people en-route between car parks and evening venues.

There are certain areas in the city which have strong daytime flows and remain well utilised throughout the evening. This includes Division Street, with its mix of restaurants, cafes and bars, and the "West Street run", with its line of pubs. The Cultural Industries Quarter contains many late night venues, including restaurants, bars, cafes and clubs, making it a popular evening destination.

The pedestrian connections between these different chains of activities and the links to public transport, taxi ranks or parking facilities need to be made safe and secure at all times of the day and night.

There is a selection of outdoor cafes and markets located in Sheffield city centre. The markets are located at the two ends of the retail spine along Exchange Street, in the form of the enclosed Castle Market in Castlegate and more informal stalls housed under permanent pavilions in the Moor. These are thriving commercial areas, however the outdoor spaces at both markets require public realm improvements to provide a comfortable environment for sellers and consumers throughout the year and renew of their vitality and attractions to ensure they do not slowly decline.



King Street Outdoor Market.



Outdoor cafe at Orchard Square.



Niche nightclub in CIQ.

Conclusions

- The siting of modern tall buildings has resulted in landmarks such as church spires being obscured and many key viewlines into and out of the city obstructed.
- There is currently a poor sense of arrival into the city, and key gateways lack definition.
- There is a wide range of materials used in the built form and the public realm of the city centre which creates an urban character that lacks consistency and continuity.
- Post-war road developments have created a pedestrian environment which is hostile and lacks permeability.
- There is a need to better integrate the various quarters of the city centre, whilst retaining and enhancing the local character that each has developed.
- Many buildings have blank facades at ground level and do not integrate well with the activity of the street as a result.

2.4 Key Findings



Key Findings

From the background analysis of Part 2, key findings have emerged. These raise issues and prompt questions which must be addressed as a part of the strategic guidance for the city centre:

- Can the remnants of Sheffield's industrial heritage be feasibly retained?
- How can the city's history of craftsmanship be celebrated and allowed to flourish?
- How can a connection with the waterways of the city be re-established?
- Could the city build upon the success of the Peace Gardens by encouraging the reintroduction of water in the city centre?
- What is the most effective way to maximise the potential impact of the topography and the 3-dimensional aspect of Sheffield?
- How can the image of, and sense of the arrival to, the city centre be improved?
- Would the encouragement of a local palette of materials create a consistency in the urban form or result in a loss of character?
- How can the severance caused by the post-war road network be resolved?
- Can the various quarters of the city centre be better integrated whilst retaining and enhancing their local distinctiveness?
- Can the streets be re-invigorated by creating active frontages to connect the land-uses to the street?
- Will the implementation of the masterplan's key strategic projects help to maximise development opportunities in other areas of the city?

SHEFFIELD CITY CENTRE

Urban Design Compendium

Part 3: Strategic Guidance

There is an increased awareness of how the quality of our environment directly affects the quality of our lives. People today expect more in the design of the urban environment, having travelled and experienced many different types of cities. The quality of pedestrian experience, legibility and accessibility that citizens and visitors now expect of a city centre must be achieved in Sheffield if it is to become a 'destination of choice'.

Recent projects in Sheffield have accomplished high standards of design, however this has occurred in isolated pockets. Every effort should be made to ensure that these achievements are used as a spring-board for the city's comprehensive redevelopment.

In view of this, the aspirations of the Strategic Guidance are to:

- Provide a framework for design innovation and excellence;
- Demonstrate the city's commitment to design quality that is of a standard commensurate with or superior to, its national and international counterparts;
- Achieve a consistency and coherence in built form and spaces throughout the city centre, whilst maintaining the identity of its various character areas;

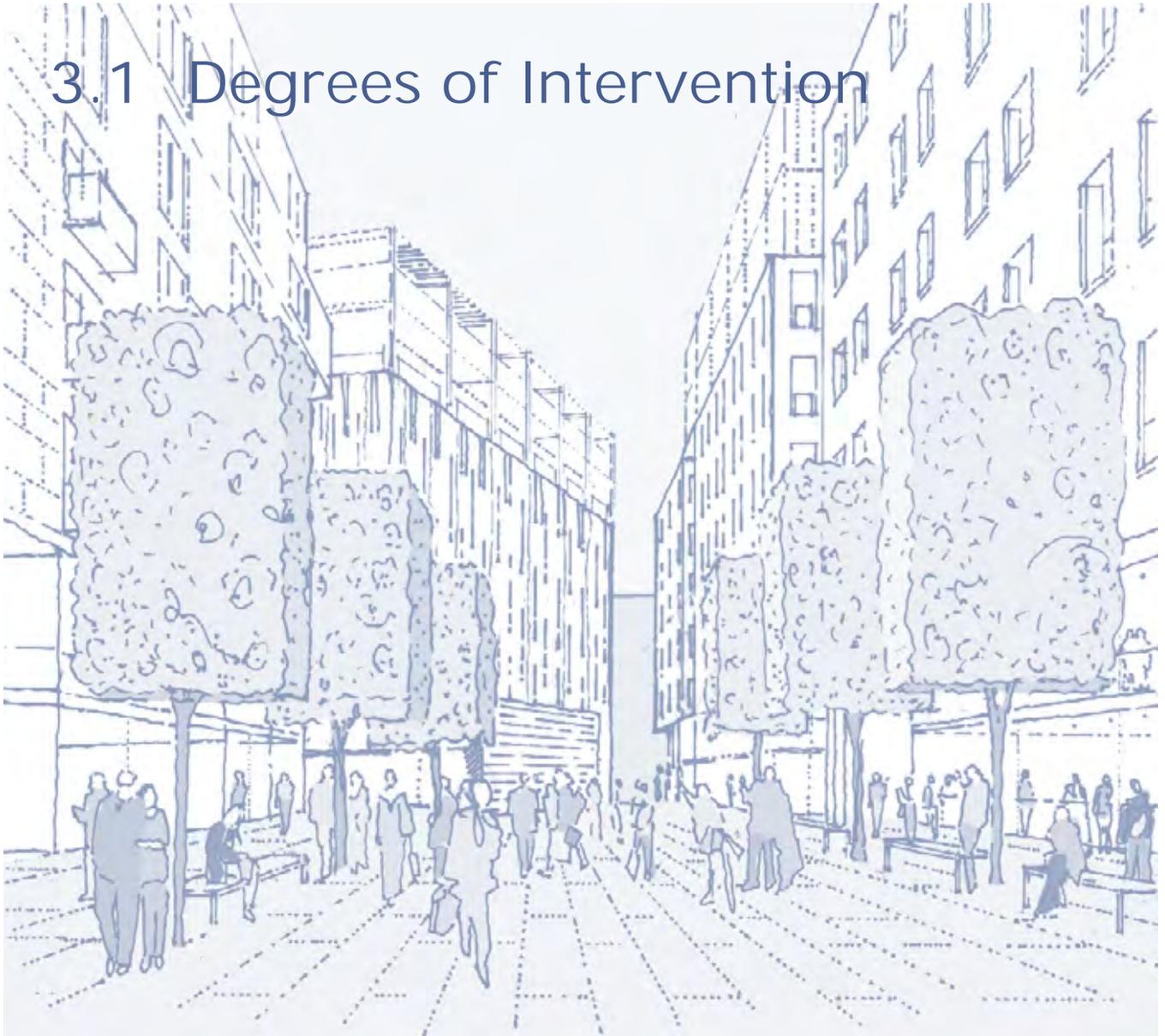
- Enhance user comfort and convenience throughout the streets, spaces and lanes of the city centre;
- Underpin the economic health and vibrancy of the city centre;
- Raise the quality of the environment as a whole, including wider issues such as public safety and air quality;
- Create a balance between all modes of transport;
- Safeguard and enhance an urban environment that is distinctive to Sheffield and reflects its identity;
- Promote a positive image for Sheffield as a confident and progressive city;
- Create a safe and pleasant environment for public interaction and personal contact;
- Foster a sense of inspiration, celebration and joy in the day to day experience of the city.

These aspirations promote a holistic approach to development which if successfully implemented will make a positive contribution to the long-term sustainability of Sheffield.

From the detailed analysis of Sheffield's urban environment, guidance has been developed for elements which are key to the achievement of these aspirations:

- Degrees of Intervention.
- Urban Form and City Skyline.
- The Public Realm.

3.1 Degrees of Intervention



Urban Analysis

The purpose of the Urban Design Compendium is to provide guidance on strategic issues which affect the entire city centre and to offer design guidance for the city's character areas, based on detailed analysis of each component part of the city.

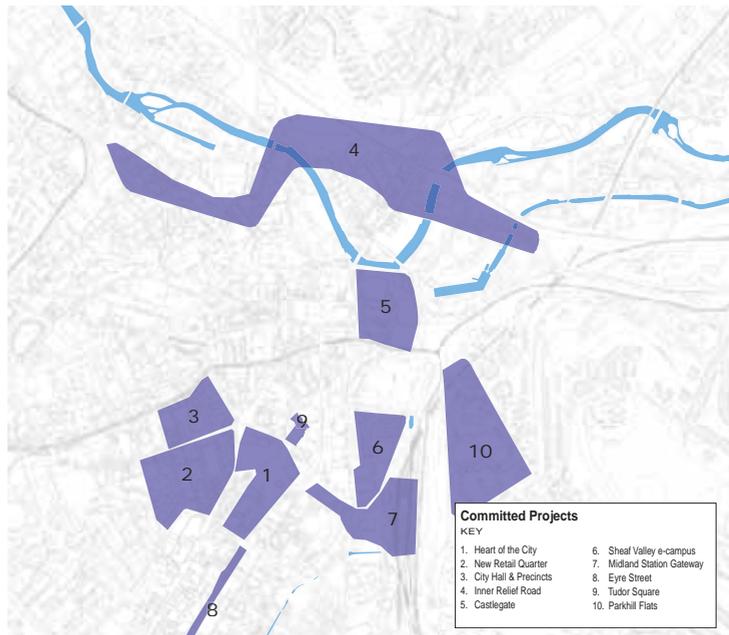
Using the Koetter Kim masterplan as a starting point, the compendium offers additional propositions which will allow the successful regeneration of Sheffield city centre. To ensure that achievable propositions were recommended, a detailed analysis of the city's urban form was undertaken. This analysis considers the current situation and committed interventions contained within the masterplan and quarter action plans.

The urban analysis of the city centre outlines the current situation and depicts the key defining features of the cityscape. It includes:

- an analysis of the topography – its hills and valleys;
- the city centre boundary as defined by the existing ring road and the proposed extension;
- arterial cross routes and other transport links;
- the River Don and its crossings;
- significant landmark /tall buildings and an appraisal of their visual appropriateness;
- major pedestrian generators and public open spaces and consequent desire lines; and
- key vistas from within the city and important vantage points outside the city.

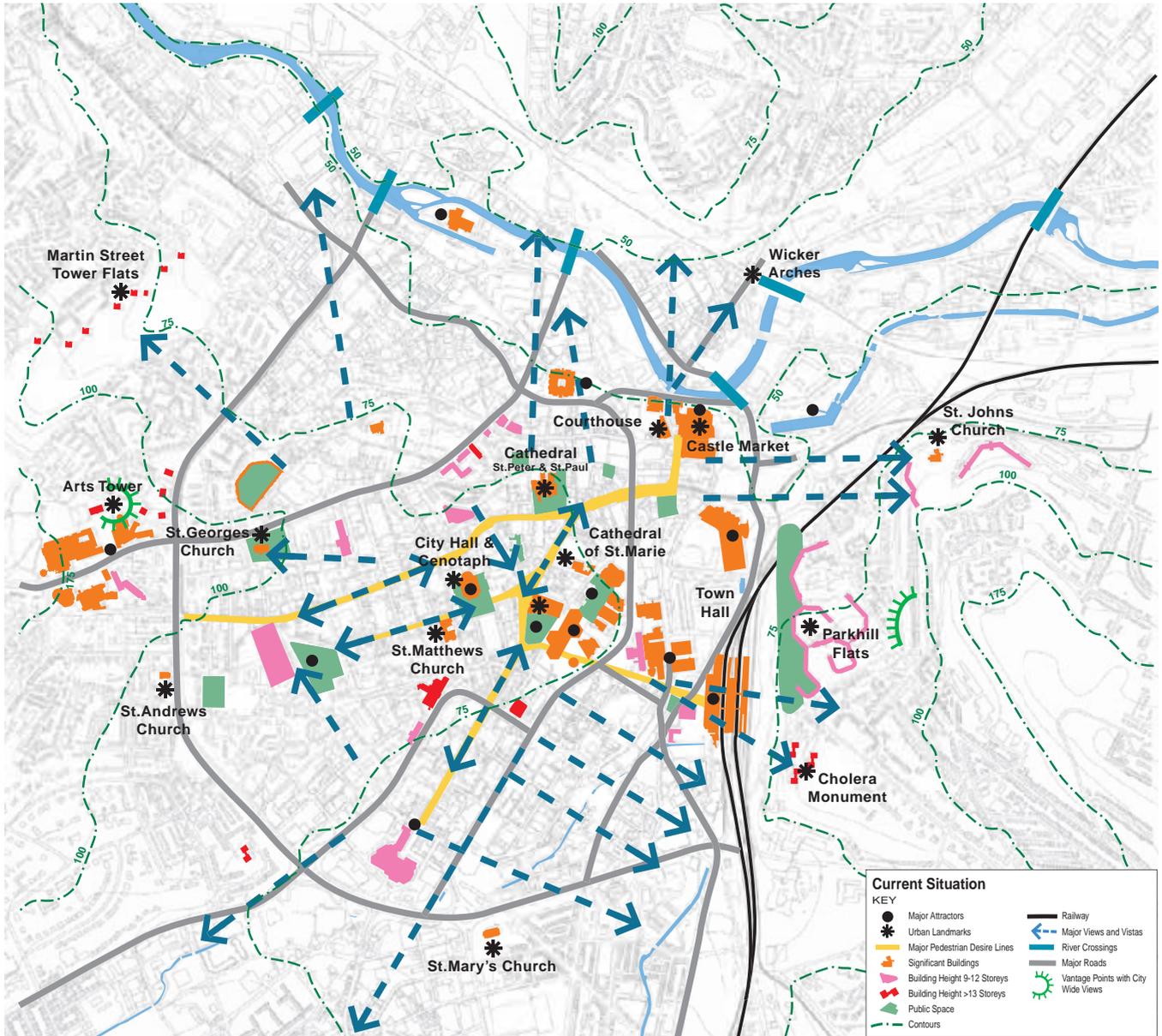
In addition to the elements of the urban analysis, committed projects have also been considered in the development of strategic and quarter specific guidance. These projects have already begun to reshape the urban realm. Developments such as those in the Heart of the City offer demonstration projects for the enhancement of the public realm whilst the Inner Relief Road will provide the opportunity to reconfigure and reconnect many of the city quarters. Other committed projects include:

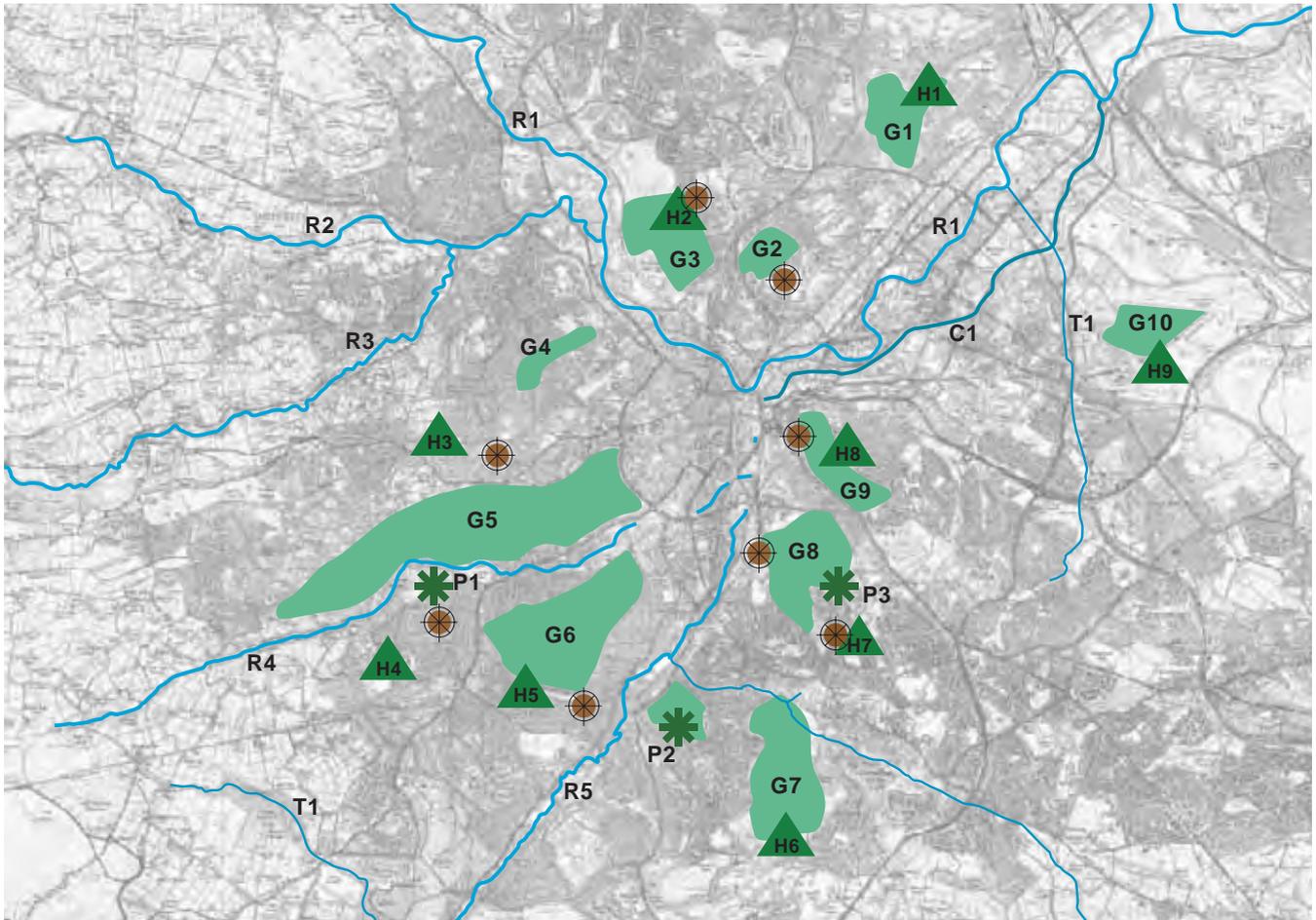
- The Railway Station Gateway to improve the connection between the station and the Heart of the City;
- City Hall and Precincts - enhancement of existing public spaces through public realm improvement and introduction of mixed use schemes;
- New Retail Quarter to improve the city retail offer to rival competitor cities such as Manchester;
- Sheaf Valley e-campus – development of a high tech. and e-commerce economy;
- Castlegate – creation of a thriving business and commercial gateway;
- Tudor Square – public realm improvement to create a multi- functional space within the Heart of the City;
- Improvements at Park Hill Flats.



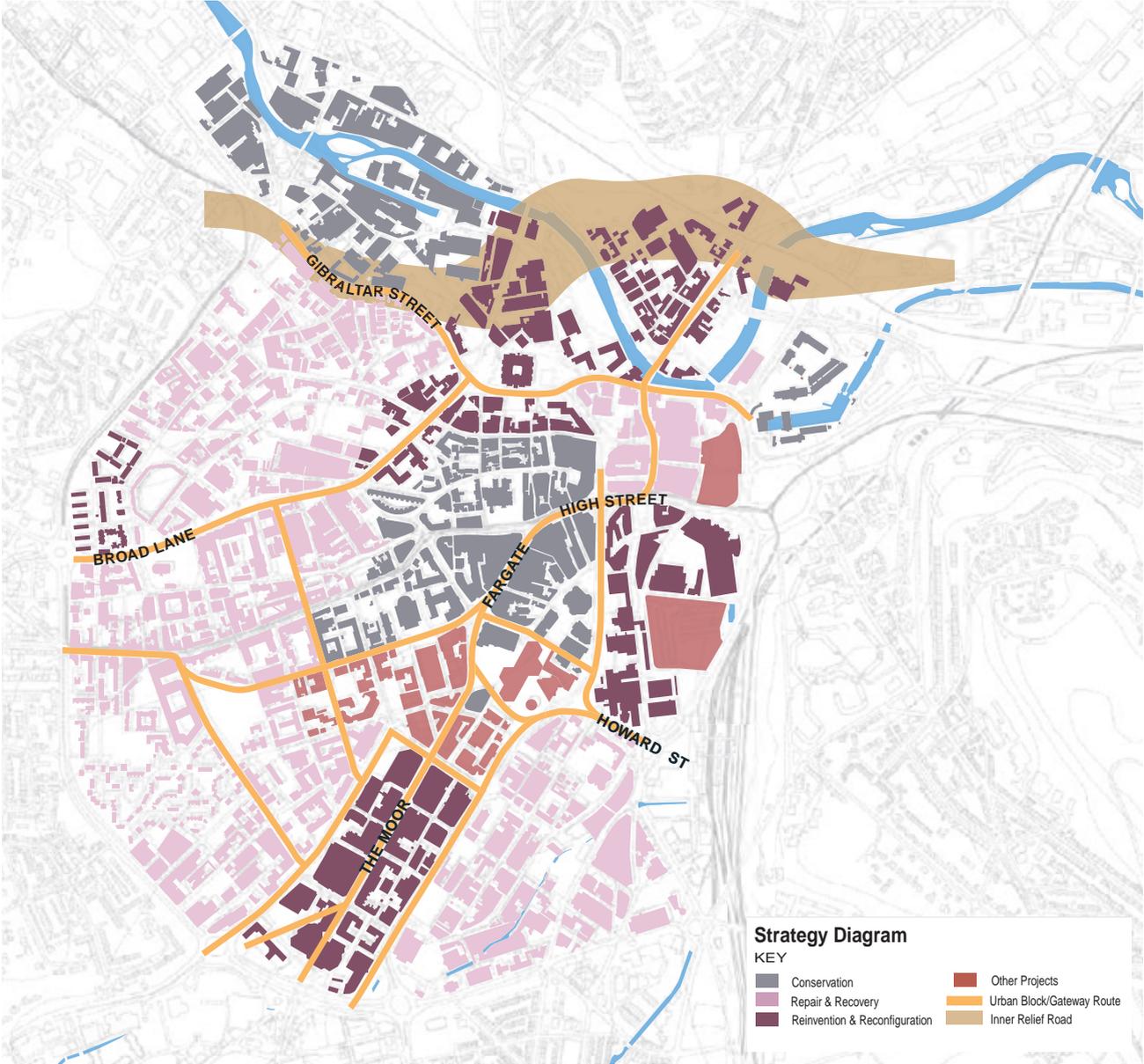
Sheffield City Centre

part 3.1





Landmarks Viewable from City Centre			
	Hills		Green Areas
H1	Wincobank	G1	Wincobank
H2	Parkwood Springs	G2	Pitsmoor
H3	Tapton	G3	Parkwood Springs
H4	Greystones	G4	Birkendale
H5	Brincliffe Edge	G5	Broomhall, Broomhill, Endcliffe, Ranmoor & Fulwood
H6	Leeshall	G6	Sharrow, Nether Edge & Brincliffe
H7	Arbourthorne	G7	Leeshall
H8	Skyedge	G8	Arbourthorne
H9	Tinsley Park	G9	Skyedge
		G10	Tinsley Park
	Parks		Tributaries
P1	Bingham	T1	Limb Brook
P2	Meersbrook	T2	Meers Brook
P3	Norfolk	T3	Car Brook
	River Valleys		C1
R1	Don		Sheffield and Tinsley Canal
R2	Loxley		Viewpoints into the City
R3	Rivelin		
R4	Porter		
R5	Sheaf		



Propositions

Based on the findings of this urban analysis, the Compendium offers a variety of propositions for the continuing evolution of the city centre. These propositions consider varying degrees of intervention and are generally located outwith the areas of committed projects, they include:

- The redefinition of urban blocks to improve legibility and provide recognisable gateways into the city centre;
- The revitalisation of the river as an important element of the city's identity through the development of appropriate regeneration projects along its length;
- The creation of new 'urban villages' in St. Vincent's and Riverside; and
- The promotion of a new identity for Sheffield as a leading knowledge and cultural industries economy.

Degrees of Intervention

To ensure these propositions are achieved, several degrees of intervention have been established to guide the successful rejuvenation of the Sheffield city centre. The level of intervention required for the regeneration of the various character areas of the city are highlighted on the strategy diagram and can be summarised as follows:

Conservation

These areas display a reasonably intact and robust urban form and are generally located in the Conservation Areas of the city centre. They have a variety of useable spaces and buildings of positive distinctive character and quality which tend to be from the Georgian and Victorian eras. Their designation as Conservation Areas means that change within is managed, and ensures a considered approach to any demolition, alterations or new development.

New developments should be governed by the existing urban typology and any changes must respect the context - its character, architectural form and street pattern. However, this does not mean that landmarks cannot be introduced if done in the spirit of the area. Innovative and creative interventions are acceptable to promote the continued reuse of existing buildings in a vibrant way, and modern introductions that fit the existing rhythm and structure of the streetscape should be encouraged where appropriate.

The carefully managed development of these areas will ensure that the distinct character and heritage of Sheffield is retained.

Repair and Recovery

Areas selected for Repair and Recovery will be subject to continued and managed intervention. In some cases a mechanism is in place to direct, promote and oversee the evolution of these places, such as an action plan.

Many of these areas have elements of distinct character and quality which should be retained (for example, the existing street pattern or historic buildings) and these may require a degree of repair. However, there will also be scope for the introduction of innovative and experimental design. New intervention will help to recover aspects of their identity and character.

The managed evolution of these areas will allow for their successful regeneration and enable them to once again thrive as an integral and successful part of Sheffield city centre.

Reinvention and Reconfiguration

These are areas that, in our view, lack a distinctive character and can accommodate a high degree of change in terms of land use and/or urban form.

A new identity will be created for these areas through the implementation of innovative and pioneering projects which have a positive effect on the physical, social and economical foundations of the Sheffield city centre.

The successful reinvention and reconfiguration of these areas will provide the final element required to transform Sheffield into a competitive European city.

Quarter Specific Interventions - Summary

Castlegate

- *Repair and Recovery*
- reinstatement of High Street and Waingate as major thoroughfares
- intervention on eastern edge with major projects

Cathedral Quarter

- *Conservation*
- creation of gateways along Tenter Street and West Bar peripheries

CIQ

- *Repair and Recovery*
- enhance key link routes at Howard Street and Charles Street and develop new focal spaces
- enhancement of Sheaf Square
- creation of gateway route along Eyre Street - Arundel Gate
- opening up of Porter Brook

Devonshire

- *Repair and Recovery*
- extension of pedestrian links through to St. Vincent's Quarter along Rockingham Street

Heart of the City

- *Conservation* within Conservation Area
- otherwise, *Reinvention and Reconfiguration*
- interventions proposed as a part of major projects such as New Retail Quarter

Kelham Island

- *Conservation*
- reinforcement of character of Gibraltar Street on southern edge of the quarter
- creation of stronger connection to the riverside

The Moor

- *Reinvention and Reconfiguration*
- reinforcement of gateway routes of Charter Row, Eyre Street and Furnival Gate
- enhancement of The Moor as a principal pedestrian space

Riverside and Victoria Quays

- *Reinvention and Reconfiguration* in the Riverside quarter
- *Conservation* at Victoria Quays
- development to address the river frontage
- creation of a new riverside urban village
- strengthen connections to the city centre and West Bar

Sheaf Valley

- *Reinvention and Reconfiguration*
- intervention proposed as a part of the e-campus project
- strengthen Arundel Gate as key gateway route

St. George's

- *Repair and Recovery*

St. Vincent's

- *Repair and Recovery*
- *Reinvention and Reconfiguration* at St. George's Close
- foster St. Vincent's as the focus of a new urban village
- reinforcement of Gibraltar Street as a gateway route on the northern edge of the quarter
- introduction of stronger built form to create a gateway route along the Tenter Street and Broad Lane periphery

Sustainability

The Sheffield Environment Strategy Action Plan Summary (discussed in Part 2.2) indicates that the publication of an urban design compendium for the city centre is one of the critical initiatives needed to meet the key challenge of 'high quality, sustainable urban design and construction'. The Compendium recognises the importance of promoting a holistic and coordinated approach to the future development of the city integrating, social, economic and environmental regeneration to ensure the long-term revitalisation of the Sheffield's city centre.

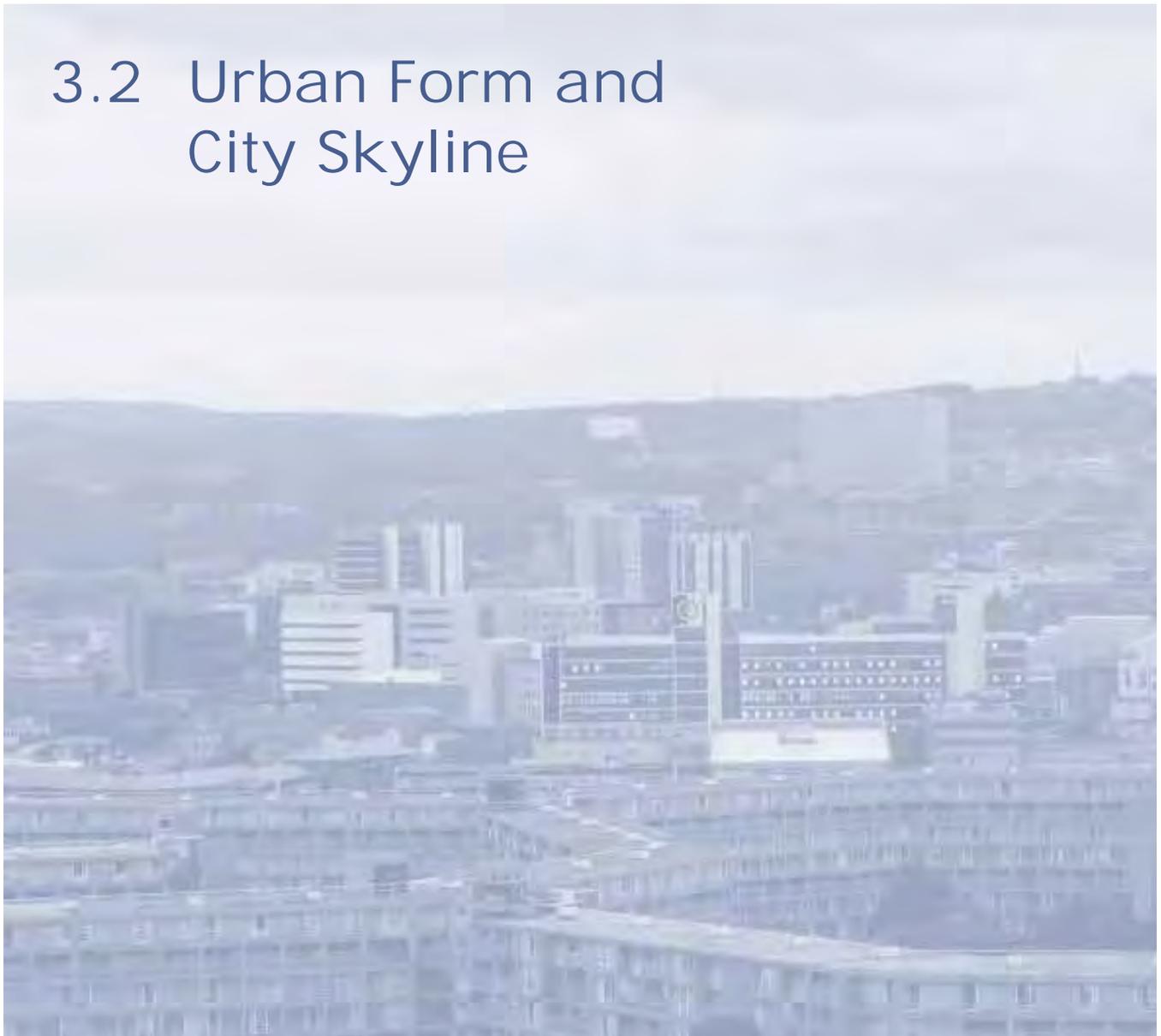
Sustainable development is an integral part of the Compendium and is embedded in the visions and design principles and guidance in the following ways:

- Advocates a holistic approach to the regeneration of the city centre by considering the social, economic and environmental impacts that future development may have on the city;
- Public realm guidance promotes the creation of a strong network of safe and attractive public open spaces and streets;
- The Compendium actively encourages the revitalisation and re-naturalisation of the various watercourses which run through the city to improve biodiversity and reconnect the city with this historic character area;
- Promotes the retention and enhancement of important areas of industrial heritage to ensure Sheffield retains its local distinctiveness and civic pride;
- Advocates the development of a quality built environment which makes efficient use of land;

- Promotes the use of alternative transport modes to reduce congestion and pollution;
- Improve accessibility to make facilities available to all increasing pedestrian activity within the city centre which will benefit the local economy;
- Encourage the prudent and efficient use of energy and natural resources by encouraging the use of locally sourced materials – this will not only contribute to energy and pollution reduction targets it will also improve the locally economy by encouraging developers to use locally companies;
- Creating a competitive and quality environment that will encourage inward investments and economic growth.

The Local Development Framework for Sheffield will include policies which will guide the sustainable development the entire city. However, the Compendium itself is a background policy document and it is the intention that the visions and design principles set out within the Compendium will inform future planning policy.

3.2 Urban Form and City Skyline



Introduction

This part of the Compendium offers strategic guidance on Sheffield's built form.

The quality of a city's built form is a key determinant of how the city will be used and experienced. It will shape a city's image and can be used to create a sense of place and improve legibility in the urban environment.

As a starting point for the development of the guidance, a detailed analysis of the principal defining elements of the city's built form was undertaken. This has included:

- Consideration of the quality of Sheffield's architectural heritage and recent innovations;
- An assessment of Sheffield's tall buildings in terms of their location and design, as well as an analysis of the city's skyline;
- Identification of key landmarks and important views, both within the City Centre and out to the surrounding hills and countryside;
- Mapping of important gateways for both vehicles and pedestrians.

Guidance and recommendations on each of these issues has been set out so that new development will respect and enhance the positive defining features of the city, and embrace opportunities for change where required. The aim of this guidance is to see Sheffield evolve with an interesting, innovative and dynamic built form that clearly reflects its status as a leading UK city.

Sustainability

The Sheffield Environment Strategy Action Plan Summary (discussed in Part 2.2) indicates that the publication of an urban design compendium for the City Centre is one of the critical initiatives needed to meet the key challenge of 'high quality, sustainable urban design and construction'. The Compendium recognises the importance of promoting a holistic and coordinated approach to the future development of the city integrating, social, economic and environmental regeneration to ensure the long-term revitalisation of the Sheffield's City Centre.

Sustainable development is an integral part of the Compendium and is embedded in the visions and design principles and guidance in the following ways:

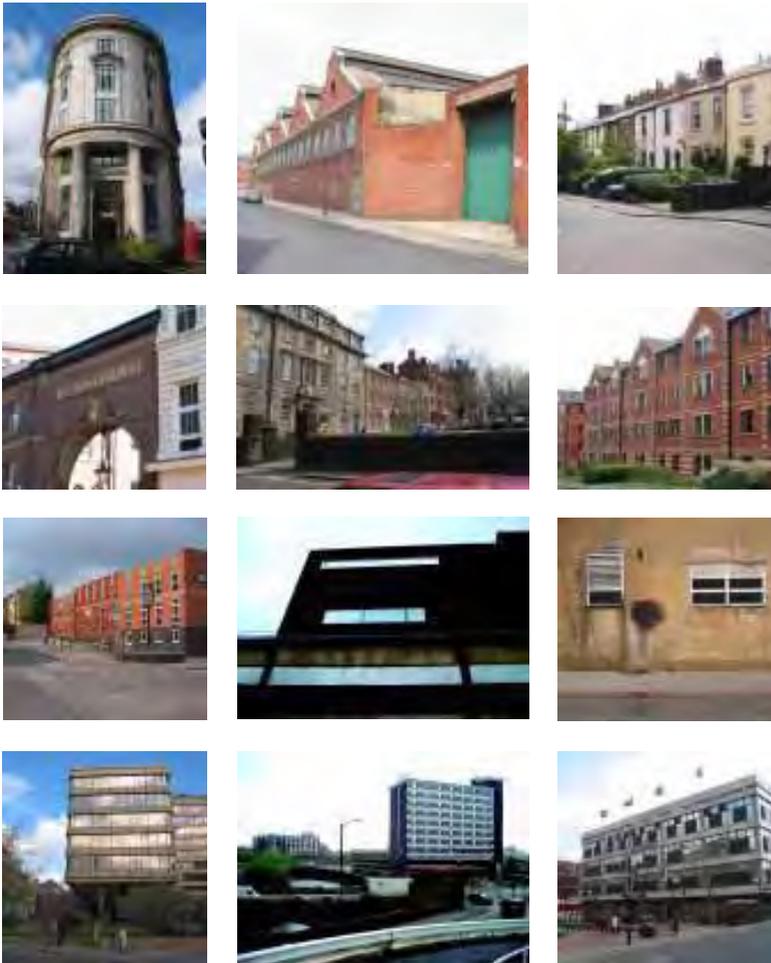
- Advocates a holistic approach to the regeneration of the City Centre by considering the social, economic and environmental impacts that future development may have on the city;
- Public realm guidance promotes the creation of a strong network of safe and attractive public open spaces and streets;
- The Compendium actively encourages the revitalisation and re-naturalisation of the various watercourses which run through the city to improve biodiversity and reconnect the city with this historic character area;
- Promotes the retention and enhancement of important areas of industrial heritage to ensure Sheffield retains its local distinctiveness and civic pride;
- Advocates the development of a quality built environment which makes efficient use of land;

- Promotes the use of alternative transport modes to reduce congestion and pollution;
- Improve accessibility to make facilities available to all increasing pedestrian activity within the City Centre which will benefit the local economy;
- Encourage the prudent and efficient use of energy and natural resources by encouraging the use of locally sourced materials – this will not only contribute to energy and pollution reduction targets it will also improve the locally economy by encouraging developers to use locally companies;
- Creating a competitive and quality environment that will encourage inward investments and economic growth.

The Local Development Framework for Sheffield will include policies which will guide the sustainable development the entire city. However, the Compendium itself is a background policy document and it is the intention that the visions and design principles set out within the Compendium will inform future planning policy.

Sheffield City Centre

part 3.2



Examples of range of architectural styles throughout the City Centre.

Sheffield's Architecture

The street patterns and building forms of Sheffield show the city's history and evolution: the winding, intricate medieval street pattern at the core; the Georgian terraces; the Victorian industrial streets and warehouses; the riverside mills. Fortunately there are many surviving examples of Sheffield's architectural history spread throughout the City Centre.

The value of these buildings as vital components of the city's image and identity has been recognised. Many have benefited from restoration or ongoing maintenance programs. Other significant heritage buildings, such as the factories and warehouses of the Riverside Quarter or Victoria Quays, have been ingeniously brought back to life through adaptive re-use schemes.

However, the architecture that has the greatest visual presence in the city today is the result of twentieth century slum clearance and postwar rebuilding. Many of these schemes have left a legacy of uninspiring buildings that do not respond to their historical or natural context and offer no design innovation.

Throughout the City Centre there are many buildings which are purely utilitarian in their design, meaning that they:

- are block like in plan, form and profile;
- do not respond to the streetscape context in terms of scale, form, height or detailed design;
- do not respond to the street pattern of their locale;
- employ large expanses of grid fenestration and materials of bland colour and texture;
- show an unsympathetic response to the city's heritage, such as the modern buildings along the Tenter Street periphery of the Cathedral Quarter;
- do not make a visual connection with the street or engage with its activity, and do not allow pedestrian permeability;
- are not located or designed to express the city's hills, valleys or watercourses.

Even recent projects could do more to make a positive contribution to the city. Many have not maximised opportunities to connect with their environment – be it the street, the riverside frontage or the activity of adjoining precincts. There are unfortunate examples of new developments that present blank facades to the street, are out of scale with their context, block important viewlines or are bland in their detail.

However, Sheffield has also produced some exemplary new architecture that shows the revitalised city spirit. This is seen in the Millennium Galleries, the Winter Garden (which were opened to widespread acclaim in December 2002), the former National Centre of Popular Music (an innovative and endearingly quirky building) and the very stylish Persistence Works gallery in the CIQ.

These are the world class buildings that symbolise the vision of Sheffield's regeneration, although by their very scale and nature they will remain isolated examples.

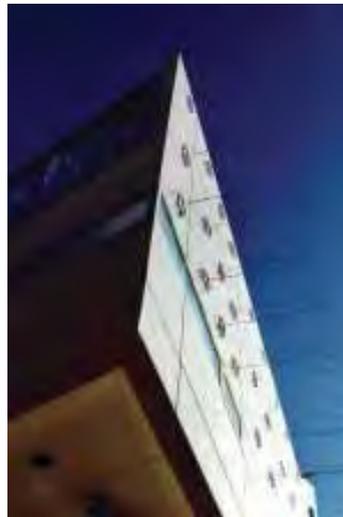
Whilst these buildings show a new architectural awareness which is emerging in Sheffield, there is still an overall impression of poor building design which creates a negative image for the city.

The true and more profound symbol of the city's success and commitment to regeneration will be in an overall improved standard of architectural design throughout. For every development site in the city, whether it be new build or refurbishment, fundamental design standards need to be adopted and applied consistently and rigorously.

As a defining feature of the city, quality in design of the urban environment will assist in making Sheffield a vibrant, interesting and memorable place. The success of recent projects such as the Winter Garden and Millennium Galleries has shown that Sheffield can build a new image as a centre for design, creativity and culture on the quality of its buildings and spaces.



Winter Garden



Persistence Works, CIQ



Public Art at Millennium Galler



Undercroft car parking severs connection with the street.



Multi-storey carpark with refurbished, active ground level. The high contemporary facade complements its heritage context in the Cathedral Quarter.



Adaptive reuse of industrial building for residential at Kelham Island.



Adaptive reuse of industrial heritage buildings for residential and office.

Guidance Architectural Quality

Achieving a high standard of architectural quality must be the goal in all new development. Consistency in the application of architectural standards will achieve this aim and assist in creating a coherent urban form throughout the City Centre. However, these guidelines could be broken if the opportunity to create a landmark building of international significance arose.

At the same time every quarter or precinct within the City Centre needs to have its own unique identity, expressed in its urban form and image. This is detailed in the Quarter Specific Guidance of Part 5. In all new developments (or refurbishment of existing buildings or historic sites) attention must be given to:

Building form, profile, scale and massing

- These are the larger scale design elements which will define the appearance of the building from a distance and influence how it sits within its streetscape context.
- A new development must consider and respond to its context in this regard, particularly in relation to any heritage sites, or buildings and spaces of significance.
- Variations to the many standard block like structures of Sheffield will create greater architectural interest in the City Centre.

Creating a connection with the street

- Active ground floor uses will be encouraged to create vibrancy and life at the ground level and a connection with street activity, particularly along all major pedestrian routes.
- This will foster a sense of neighbourhood and increase the perception of safety throughout the city.
- Mixed use development is to be encouraged as it often helps in bringing activity to the street, such as residential or office developments which accommodate retail uses at ground level.

The design of the space around the building

- A building's curtilage can be productively used to contribute to pedestrian amenity, draw people into the building, provide landscaping or create a new pedestrian link.
- This space should not be dominated by unsightly utilities such as carparking or the storage of rubbish.

Detailing

- Articulation of building facades with projections or recessions in the elevations, or through the use of fenestration, balconies etc. will soften larger building forms, break down the appearance of building mass and provide visual interest.
- Attention must also be paid to detailed design. The incorporation of art or sculptural elements can create a unique image for the building or its context.
- The night time appearance of a building must be considered. Lighting can assist the building to continue its function after dark (for example, landmark structures or sites which maintain their visual prominence through lighting) and can be used to create striking night time compositions.

The use of contemporary styles and materials

- Today's development is potentially the heritage of the future. The spirit and design ethos of the time in which a building is constructed should therefore be embraced as a part of this ongoing design evolution.
- Contemporary buildings, where appropriate, can be striking in their appearance and detail, or suitably elegant and refined. The approach to the design will depend on the streetscape context and the function of the building.
- In all instances, architectural fashion is to be avoided to ensure a timeless and lasting aesthetic.

Contemporary Materials Selection

- Contemporary materials include glass, stainless steel, polished concrete, enamel panels. However, a range of materials are seen in contemporary architecture, both new and traditional. It is the way these materials are used and their composition which will create a contemporary appearance.
- Traditional materials can be moulded into highly contemporary forms if they are used in new and innovative ways. Stone, for example, can take on a dramatically different appearance if it is used for cladding rather than in load bearing walls; structural steel frames could be exposed rather than concealed.
- The most important aspect of material selection is to ensure that the materials used will require minimal maintenance and weather well. Preference should always be given to high quality materials which will last well throughout the building's lifetime.



Active frontages along Chapel Walk, a well used and quality pedestrian connection.

Sustainable Architectural Principles

Cities consume large amounts of energy and resources and are by definition, unsustainable. The current policy climate is trying to minimise the energy consumption and the depletion of natural resources by promoting the creation of robust and adaptable urban environments. Sustainable development is a key theme of the Compendium which is embedded within the guidance and principles contained within it. However, there are several technical issues which must be addressed when dealing with the sustainable architectural design of individual buildings:

- The revised Building Regulations (Part L) 2002 require new developments to address energy efficiency and in particular; heat-loss, energy efficient heating and water systems, energy efficient lighting systems and carbon emissions. All new developments with the City Centre must adhere to these regulations.
- New developments should be assessed using the Building Research Establishment (BRE) environmental assessment and achieve a 'very good' rating in terms of overall energy efficiency.
- Flexibility and adaptability is a key aspect of sustainable architectural design. Buildings which are adaptable and capable of responding to changing social and economic needs are by definition sustainable. In Sheffield many industrial buildings are proving to be sustainable with many examples of adaptive reuse evident in the city such as – the Georgian town houses of Paradise Square which have been renovated from residential to office use. Kelham Island also contains some examples of adaptive reuse with many of the industrial buildings converted for residential, office and design studio use.
- Building facades should be carefully orientated to maximise solar gain. However, it is important that an external glazed area is incorporated to avoid overheating. The potential for natural light and passive solar gain can be optimised by encouraging buildings to be developed on an east-west alignment with a glazed south facing elevation wherever possible. It is also important to ensure that any taller buildings are located on the north side of a building to reduce overshadowing. Additional insulation should be used to control gains and losses.
- The production of construction materials has direct impacts on the environment in terms of natural resources, pollution and energy. It is important therefore to encourage developers to use locally sourced materials from a sustainably managed resource (i.e. timber plantations) and which have low energy consumption during manufacturing. As far as possible construction materials should be selected based on the following criteria:
 - atmospheric impact;
 - water use and pollution;
 - biodiversity and habitat loss;
 - energy efficiency;
 - potential for reuse & durability;
 - affordability.
- Where the demolition of existing building within the city is required consideration should be given to the reuse of construction materials such as brick and stone. This will contribute to the reduction of pollution caused by land infill disposal of materials.

- Where possible Sustainable Urban Drainage Schemes should be considered as part of any development proposal to reduce and delay water runoff from hard surfaces to the public sewers and watercourses, thus reducing the risk of localised flooding, pollution and other environmental damage. This could be achieved through the incorporation of porous paving, local soak-aways or by the use of green roofs. The topography of Sheffield offers the ideal opportunity to incorporate sustainable urban drainage systems which would feed into the city's existing watercourses.
- Improving quality of life by ensuring that residents have private outdoor space whenever possible will also have environmental impacts by increasing the amount of green space within the city. This can take the form of:
 - a private garden;
 - a communal garden;
 - balconies (should be designed to ensure that they do not unnecessarily reduce day light);
 - green roof terraces similar to those developed at West One.
- Where appropriate, mechanisms for harnessing alternative power supplies such as photovoltaic cells and Combined Heating Power Systems (CHP) should be considered as part of the design for new buildings or large-scale renovations to ensure that new developments are more energy efficient. This will have long-term economic benefits whilst making a positive contribution the reduction of the UK's carbon emissions.



Orientation and design of the West One building maximises solar gain and natural light while providing attractive communal and private space (source:SCC)



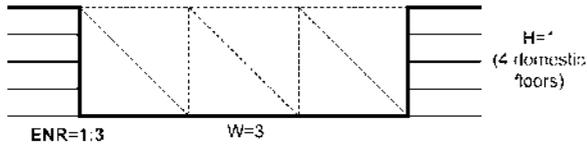
Green Roof at the West One development in Devonshire (source: SCC).



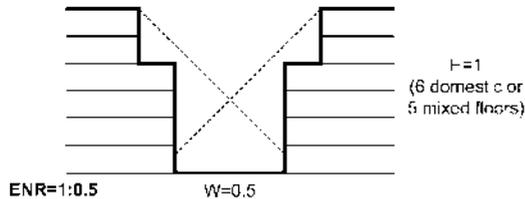
Glazed area at entrance maximises solar gain (source: SCC).

Site Planning

Courtyards

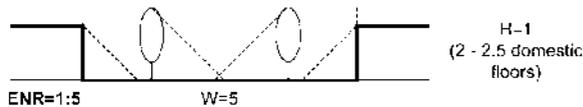


Set back / Recesses

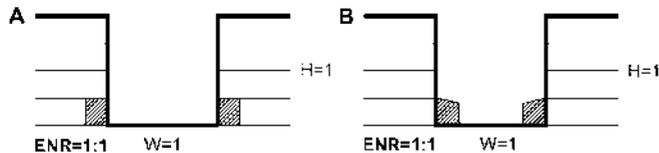


Trees

Trees can help define enclosure



Arcades / Canopies



Note 1: Arcades and canopies not only provide shelter but also help widen (Case A) or enclose (Case B) a space to reach optimum comfort level for the pedestrian.

Creating a sense of enclosure

- An enclosure is defined as the space between buildings. Building elevations and the cross-sections of public spaces should be scaled to foster a sense of enclosure so that streets, squares and parks are defined by appropriately scaled buildings and/or trees fronting onto them. An enclosure ratio is a good guide to check that the resulting space is comfortable.
- Sheffield City Centre is a valley, and hence receives sun at fairly low angles during most of the year. Any new courtyard development should maximise on natural light gain.
- The best streets are generally of similar height as there are rarely big jumps or drops (e.g.: Fargate), except where there is an opportunity for a landmark tall building (e.g.: Moor Head). Narrow fronted buildings like in the Cathedral Quarter give vertical emphasis and rhythm to the streets. Rhythmic breaks should be introduced in a long elevation to add interest to the street scene. Some of the ways to introduce breaks are by
 - Change in building height (but generally not more than 2 storeys)
 - Introducing a corner feature/ landmark
 - Change in window size
 - Multiple entrances at the ground level
- A strong and continuous building line provides definition and enclosure. Facades should be articulated to integrate new build into the street. Varying building line can add variety to the street experience, but care needs to be taken so that the resulting space is usable.

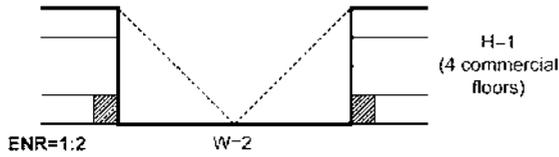


Section Location Plan

Sheffield City Centre

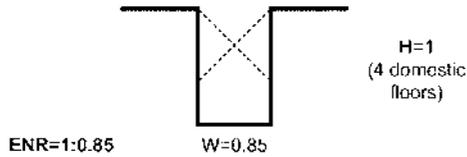
part 3.2

1. The Moor



1. The Moor

2. Paradise Street

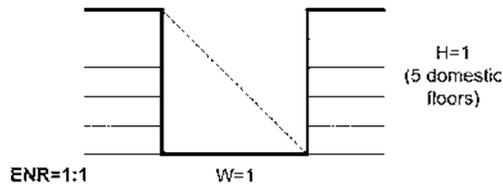


2. Paradise Street



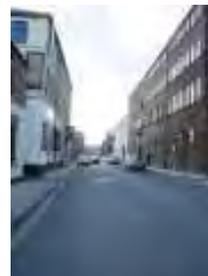
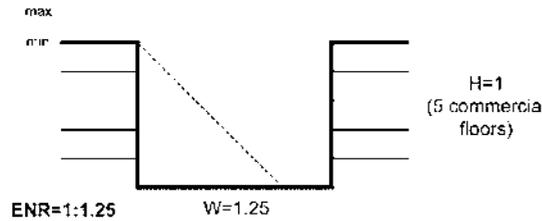
3. Campo Lane

3. Campo Lane /Bank Street



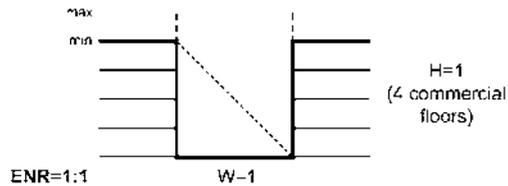
4. West Street

4. West Street / Church Street / Commercial Street



5. Arundel Street

5. Arundel Street





6. Brown Street



7. Charter Row



8. King Street



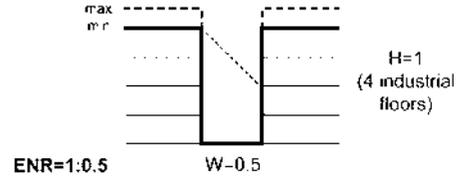
9. Fargate

Note 2: for Sheffield the comfort levels are optimum when the ENR ranges between 1: 0.5 - 1:1.5 anything tighter or wider can lead to canyon effect or a loss in the sense of enclosure

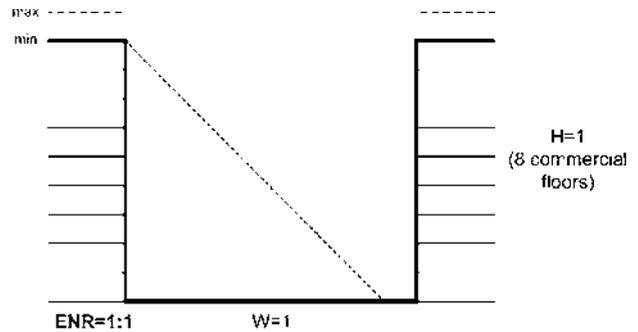
Building use	Corresponding floor heights
Domestic/ Residential	2.85- 3.0 Mts
Industrial	3.75- 4.0 Mts
Commercial	3.75-4.0 Mts
Basement Parking	2.1 Mts

Note 3: Enclosure Ratio (ENR) = Building Height (H) : width of the enclosed space (W)

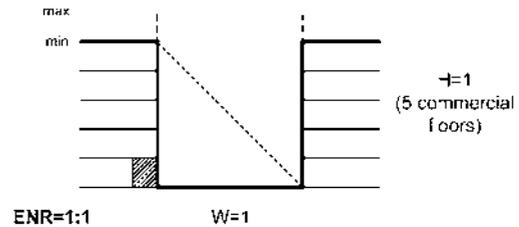
6. Eyre lane / Brown Street



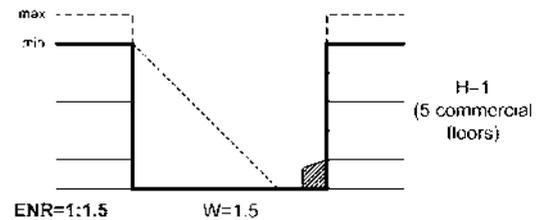
7. Charter Row



8. King Street



9. Fargate



Building Height

- The guidance in Part 4 of the Compendium describes the predominant building heights for each quarter. In most instances, new buildings should adopt a similar height, reflecting the height of existing buildings in the streetscape.
- Exceptions to the predominant building height could be considered if it can be demonstrated that such a building would be a positive addition to the streetscape or locality. For example, a higher building may be appropriate on a corner or gateway site, or where the creation of a new landmark structure is considered desirable.
- Wherever new built form is significantly higher than the prevailing height, it is necessary to show that a comprehensive analysis of the site and context has been undertaken. This should demonstrate how a taller building will benefit the area and what the impact upon the streetscape or amenity of adjoining buildings would be. This will allow thorough and detailed assessment of such proposals.

Respecting Heritage

- Places identified as significant for their architectural or historical value must be preserved for the benefit of future generations.
- Historic buildings are to be conserved with the utmost care. Promotion of grants schemes, where available within Sheffield or from national funding sources, should encourage building owners to contribute to the conservation of the city's heritage, while improving the value of their properties.
- New development within conservation areas or adjacent to heritage buildings must respect their heritage context in terms of form, scale, siting, detail and materials. Where applicable, designated design guidelines will contain the detailed requirements for a particular location.
- Additionally, development in identified character areas must respect and reinforce the unique quality of these environments.



Butler's Wharf, London

Contemporary development complements heritage warehouses. Balconies and a variety of facade treatments articulate the elevations. Ground floor uses give life to the street and provide amenities for the residential levels above.

Vehicular or pedestrian movement

- It is essential that developments are designed to minimise conflict between vehicles, pedestrians and cyclists.
- Vehicular entry points should not dominate street frontage.
- It is preferable that carparking is not located within the frontage setback, rather it is incorporated in the basement or at the rear of the site.
- Larger scale development proposals must take into consideration transport planning issues in their design. This will include siting major developments at transport nodes.
- Where appropriate on-street parking should be considered as an integral design element for any development proposal. This will reduce the visual impact and unauthorised parking.
- Consideration should be given to accommodating parking within the building footprint either in the basement or on upper levels. This will allow retail/commercial uses to be accommodated at ground level to maximise street activity.

Retention of viewlines

- Development should not obstruct focal points within the city, or views out to the surrounding countryside.

Amenity

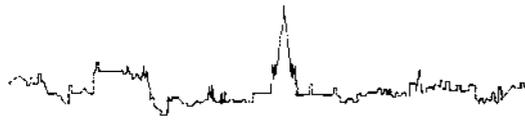
- Developments should be designed to maximise available sunlight, and minimise overshadowing of adjacent properties.
- Whilst creating a mix of uses within a development site or precinct is preferable for many reasons, it must be achieved in such a way that the amenity of sensitive uses is protected.

Mechanisms to achieve design quality

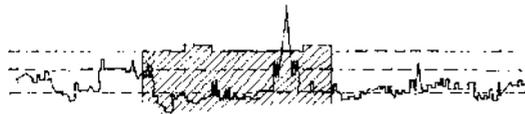
- As a priority, the employment of skilled and experienced architects must be encouraged.
- In addition, there is a range of mechanisms for achieving a greater quality, variety and uniqueness of design outcomes and these are discussed in Part 6. For example, Sheffield's universities have architecture schools that could provide a valuable contribution to the design of the city. Student projects could input innovation and energy into design solutions for redevelopment sites and spaces.

Tall Buildings in Britain

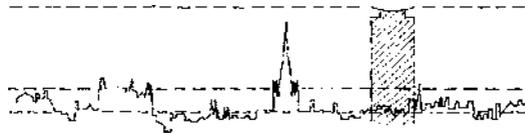
A tall building can be defined as any building that is substantially higher than its context, or one that will shape a city's skyline.



Typical urban silhouette of part of the Sheffield skyline in 1908, showing the then dominance of the parish church as a landmark.



A long squat block flattens the skyline and obscures traditional landmarks.



Tall, slender building form retains landmarks on the skyline.



The various churches and industrial chimneys create positive landmarks for the city's skyline.

Historically, in British cities this included church spires, cathedrals, castles or grand public buildings. These structures were sited and designed with great care. They were used to mark important spaces within the city, create viewing points or act as landmarks. Their siting was often aligned with prominent vistas or main thoroughfares through the city and their silhouette would define the skyline. Later, Victorian mills and factory chimneys in manufacturing centres also became significant features on the skyline of many British cities, particularly in Sheffield.

Up until the postwar era, buildings over 10 storeys in height were rare. Taller buildings emerged in the 1950s and 1960s, facilitated by changes in building regulations, new construction technologies and the influence of American and European modernist philosophy. Tall buildings were also embraced in this era as a solution to widespread housing problems.

However, British cities outside of London did not adopt the slender skyscraper form, clustered in the City Centre, as seen elsewhere. Often taller buildings seen in British cities are elongated slab-like forms, located at random and designed with little respect for context. Buildings over 12 storeys in height have been mostly constructed for housing and tend to be dispersed throughout inner city suburbs, rather than located in the centre.

Tall buildings can often have a negative impact on their surrounding context, both in terms of their immediate locale or in the broader scale city environment. Many do not 'touch the ground' gracefully and present bland ground level facades with a lack of human scale design features. Sometimes transport or parking problems in the immediate area are exacerbated or there are microclimate impacts such as the creation of wind tunnels or overshadowing. Inappropriate siting can block sightlines to city landmarks or view corridors. Inflexible structures and internal layouts of tall buildings mean that they cannot be easily adapted to other uses, and they are often seen as economically inefficient and unsustainable due to frequently poor standards of construction.

CABE and English Heritage Guidance

The publication *Guidance on Tall Buildings*, jointly issued by CABE and English Heritage (March 2003), sets out criteria for the consideration and assessment of proposals for tall buildings in the UK.

This publication advises local authorities to identify suitable locations for tall buildings through a detailed urban design study. Taking into account the historic context of the city's urban form, this study should identify elements that create local character and which will be important features or constraints in the development of proposals for tall buildings. This will include:

- the streetscape – the scale and height of buildings and the urban grain;
- important local views and panoramas;
- the city's skyline;
- the topography;
- landmarks and their settings.

Through this analysis, opportunities where tall buildings might enhance the overall townscape, or where the removal of existing tall buildings could be appropriate, can be mapped. Areas which may be particularly sensitive to larger scale building form will also be identified. This mapping exercise will form the basis of future detailed urban design analysis which will be required for each site under consideration for the development of a tall building.

Today, well sited and designed tall buildings can be seen to bring various advantages to a city. Tall buildings can define a city's image and symbolise its success. Structures which dramatically shape the city's skyline act as landmarks and assist in legibility. Functionally, they can promote an efficient use of space when various land uses are concentrated around transport nodes.

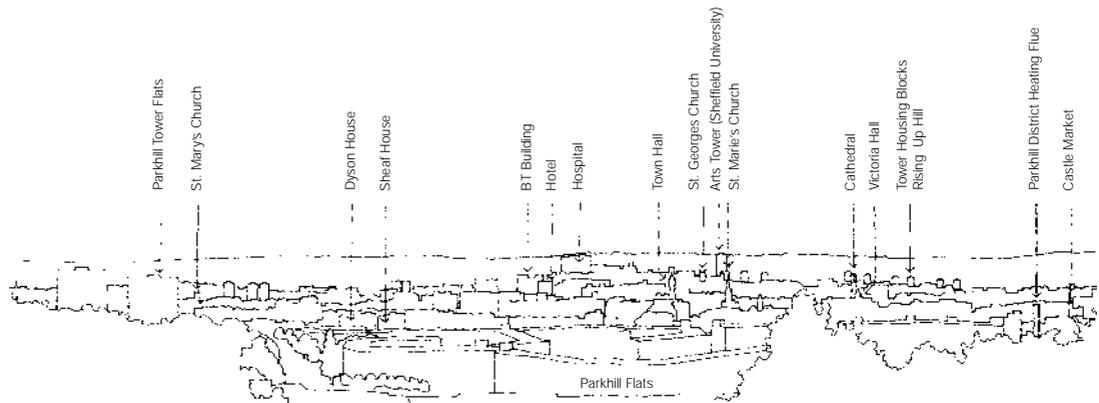
The siting and design of tall buildings is an issue for all major cities in Britain. The last 50 years has seen the construction of many poorly designed tall buildings which have had a detrimental impact upon the urban environment, both visually and functionally.

The impact of ill considered tall buildings is certainly evident in Sheffield, both within the City Centre and the outlying areas. Mistakes from the past must be analysed and understood, and care taken that they are not repeated.

With the rapid changes occurring in Sheffield's City Centre and the emergence of key development sites, it is imperative that proposals for tall buildings and larger structures are rigorously and strategically assessed in terms of their siting, detailed design quality and function.



In many instances tall buildings in Sheffield undermine the prominence of the city's historic skyline.



Panoramic View of Sheffield City Centre looking west from Sk Edge (Elevation 125m) (Gillespies)



Sheffield Skyline

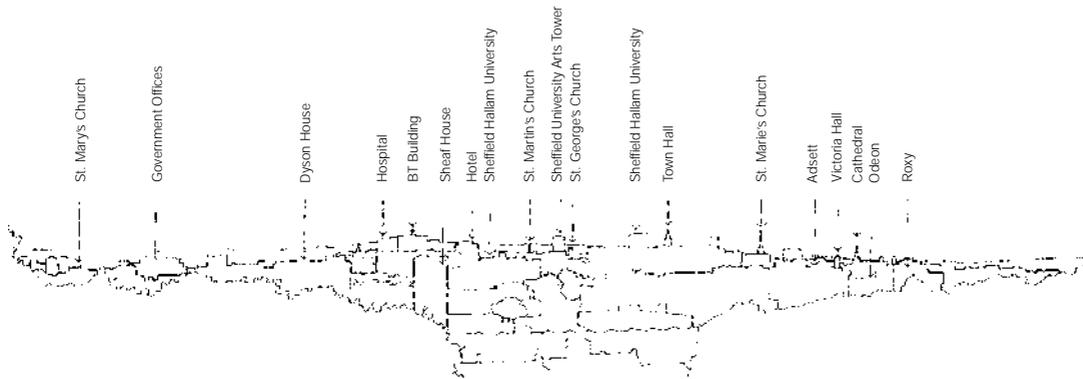
Up until the late 1970s the skyline of Sheffield was dominated by the substantial forms of the mills, warehouses and factory chimneys. The city's many forges and foundries created a forest of chimneys which defined the skyline.

Today only a few historic structures are still evident on Sheffield's skyline, most having been demolished or obscured by later development.

Church spires such as St. Marie's, St. Mary's and the Cathedral of St. Peter and St. Paul are visible, as well as the town hall clock tower. However, these no longer frame or define the skyline.

In the 1950s and 1960s there was a conscious, and controversial, policy of locating tall building slabs and towers on the hilltops immediately around the City Centre, such as Parkhill, Hyde Park and Claywood. Many of these compositions have now been partly or wholly demolished and in some instances replaced with low-rise development.

It is the postwar buildings in Sheffield which now create the city's silhouette. Tall buildings are scattered throughout the City Centre, for offices and some educational use. Housing estate tower blocks have been dotted on the hills around the City Centre.



Panoramic View of Sheffield Cit Centre looking west from Shrewsbur Road (Elevation 75m) (Gillespies)



Unfortunately many of the later developments, including the BT tower and Sheffield Hallam University, have undermined the prominence of the historic towers on the skyline and the legibility of the city.

The Sheffield skyline is now compromised by many different landmarks - there is no single structure, building or cluster of buildings which serve to distinguish the skyline as unique to Sheffield. This is typical of most British cities.

On the eastern edge of the city, the Park Hill flats form a strong image. A massive structure set on an elevated position, it is distinct due to its mass and octagonal plan form.

The view to the west is marked by the Sheffield University Arts Tower, the highest building in the City Centre.

The Hallamshire Hospital, as seen clearly in this study, sits on the highest elevation on the western edge of the city. With its height and bulk, it dominates this part of the skyline.

Tall Buildings in Sheffield

The City Centre contains few buildings which are greater than 13 storeys in height. Most of the buildings this height are housing tower blocks located around the City Centre periphery. Generally these buildings have been designed in a slender skyscraper form. The exception to this is the monolithic form of the Hallamshire Hospital.

Many buildings in the 9-12 storey height range have a large floor plan to height ratio, such as the Government Offices building, the West One development, the Park Hill flats and the Sheffield Hallam University building.

Similarly, those buildings between 5 and 8 storeys, which form the majority of taller structures in the City Centre, also tend to have a high floor plan to height ratio.

Plotting the location and height of taller buildings in Sheffield, on the map opposite, has shown that:

- The extent of the footprint of buildings in the 5-12 storey range is often substantial. In some instances it encompasses most of a city block, such as West One or the Government Offices.
- The building footprints often do not respect the underlying street pattern. This is particularly evident within the Cathedral Quarter where modern structures have consumed large tracts of the intricate medieval street network.
- Most of the tall structures plotted are located above the 75m contour level.
- Tall structures have not been clustered within a confined section of the City Centre. Rather, they are randomly dispersed throughout the City Centre and outlying suburbs.

Full advantage has not been taken of the city's dramatic topography when considering the siting and design of tall buildings. The clustering of tall buildings within the lowest points of the city has served to flatten its silhouette and diminish its defining topographical features.

Potentially, tall buildings could be used to highlight the unique topography of Sheffield.

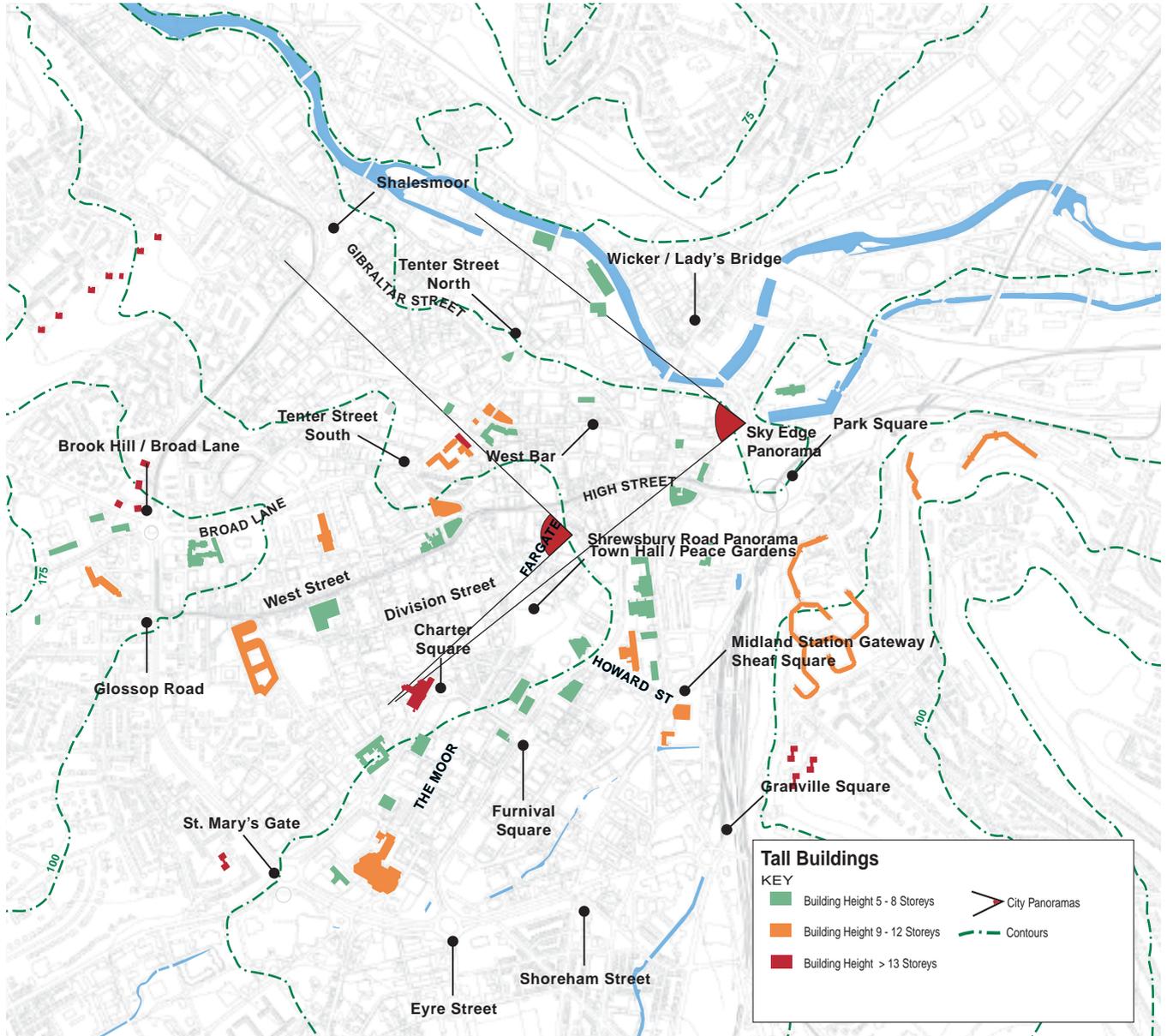
This can be seen in the siting of the Martin Street flats. Here the building forms are tall and slender and their arrangement sees them stepping down the hill as a group of related structures. As the only tall structures in the vicinity, they stand out and define the topography.

The buildings which dominate Sheffield's skyline are uniform in design and appearance. Most are of a typically nondescript utilitarian design - block form, square profile and grid fenestration. Many have been designed as elongated, slab like forms, with a profile that is squat, rather than tall. Services such as lift overruns or antennas are often visible on the roofs.

These larger buildings do not always integrate well with the surrounding context. Ground floor uses do not engage street level activity and in some instances blank facades are presented to pedestrians. Design forms and detail at the base of buildings is often not in keeping with the pedestrian scale environment.

In addition to the location, height, scale and mass of a building, other factors will have a significant influence on its potential impact, principally:

- its use, and how this relates to other uses in the locality;
- how the building 'touches the ground';
- the architectural quality of the building.



Recommendations on Tall Buildings for Sheffield

The recommendations for tall buildings in Sheffield address the location and design of new tall buildings, as well as the removal or re-use of existing tall buildings. These recommendations have been informed by the detailed urban design analysis of Sheffield undertaken for the Compendium and the CABE and English Heritage *Guidance on Tall Buildings*.

City wide considerations

- Proposals for tall buildings must be considered on a city-wide basis. This will require assessment in terms of the impact that may result upon the City Centre as a whole, as well as individual site conditions.
- Additional tall buildings in Sheffield must be introduced selectively. This will maximise opportunities to create new landmark structures and make a positive contribution to the city's urban form and image.
- The advantages of tall buildings, such as concentrating activity within a specific area, need to be considered against broader regeneration objectives for the City Centre. Refurbishing and reusing the existing vacant space could enable the positive flow-on effects of regeneration to be spread more evenly throughout the City Centre.
- Detailed urban design analysis must be undertaken for each proposal or development site which is under consideration for a tall building. This must include a thorough analysis of the siting and design of the building, and its potential impacts in both the immediate and broader contexts. Architectural models and three dimensional drawings should be used to gain an accurate understanding of:
 - how the building will appear in the streetscape;
 - how it will relate to other structures and landmarks;
 - how the building will shape the city's skyline;
 - whether it will impede any important views from, to or within the City Centre.

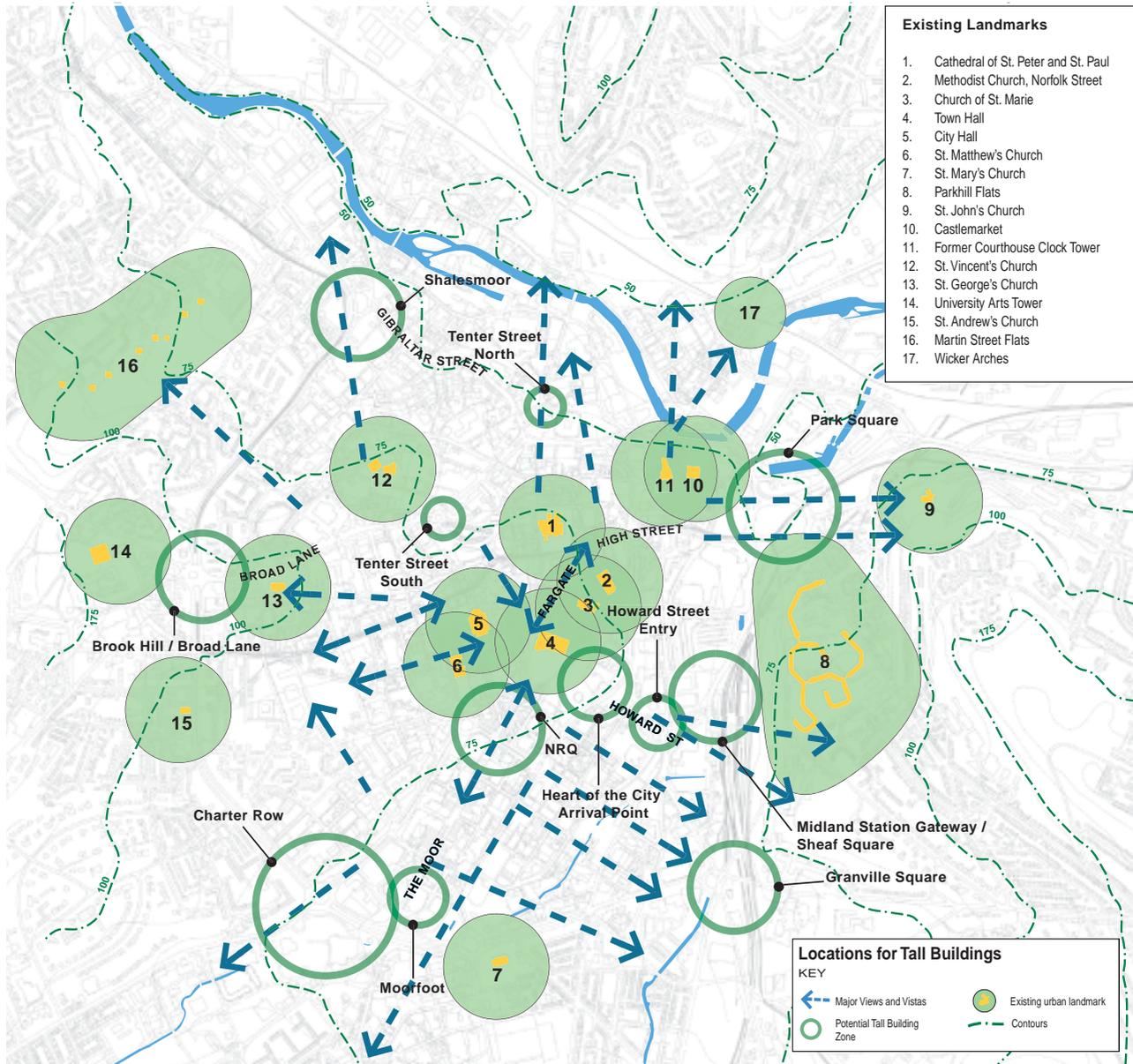
- The appropriate height and location for tall buildings in Sheffield will ultimately depend upon how each proposal satisfies overall the design standards and land use planning considerations, as set out below.

Location

- The detailed urban design analysis of the preceding sections has identified appropriate locations for tall buildings in Sheffield, which are indicated on the map opposite. These sites have been selected as they fulfil one or several of the following functions:
 - define gateway sites;
 - mark an area or site of civic importance;
 - mark a principle activity node within the City Centre, such as the NRQ;
 - form the focal points of vistas.
- This map also identifies important local landmarks and the areas surrounding them which are considered to be more sensitive to proposals for tall buildings. Within these areas, tall buildings should possibly be avoided.

Tall buildings as landmarks

- Tall buildings can play a positive part in the design of the City Centre by marking places of civic, commercial or cultural importance, or focal points of activity such as major gateways to the City Centre.
- The Sheffield skyline could be redefined by a number of landmark tall buildings, over 15 storeys in height, such as the proposed tower of the New Retail Quarter. Such buildings must be striking in their form and design and serve to distinguish the skyline as unique to Sheffield.
- Tall buildings will fail to perform a landmark function if their use is indiscriminate or too widespread.



The wider context

- The impact of a tall building upon the skyline, and the overall composition of built form within the city, should be analysed and assessed through the use of architectural montages.
- Given the flattening effect that tall buildings have had on Sheffield's skyline, tall buildings should be clustered in higher parts of the city, above the 75m contour level.
- Tall buildings should only be permitted at a limited number of strategic sites in lower lying areas, such as Sheaf Square or Park Hill roundabout.
- Tall buildings should be located so that internal vistas to important focal points or views out to the surrounding countryside are not impeded.
- The location and design of tall or larger scale buildings will potentially have an impact upon the visibility of landmarks. Within areas in close proximity to landmarks, as identified on the map opposite, the effect that a tall building may have upon the prominence or visibility of a landmark will be a consideration.
- Tall buildings have the potential to irrevocably change the urban grain of a part of the city.



Tall buildings located on a hill will accentuate the topograph



Tall buildings located in the valle will tend to flatten the topograph

The local environment

- A tall building must make a positive contribution to the appearance and activity of the streetscape and not detract from the pedestrian experience at their base.
- At ground level, the detailed design and function of a tall building must be in scale with its immediate environment and contribute to the 'sense of place'.
- It is important that the ground floor uses of tall buildings are compatible with the activity of the street and the locale.
- Tall buildings should aid in the permeability of their context by allowing through-block pedestrian connections.
- Tall buildings can better integrate with their surrounds by providing internal or external spaces for public access such as parks, cafes, shops, thoroughfares etc.
- Particular attention must be paid to the impact a tall building may have upon adjacent heritage sites or areas of special urban character.
- Additionally, the impact that a tall building may have upon natural features, such as waterways or landscapes, or public spaces is also an important consideration.
- Microclimate impacts such as the creation of wind tunnels or overshadowing must also be considered.

Architectural Quality

Of importance in the design of tall buildings is the form, profile and massing of the building, particularly in the roof line, as these elements will create its silhouette on the city's skyline.

- The design of tall buildings should be striking and distinctive so that they become identifiable landmarks on the skyline.
- It is recommended that tall buildings are slender in form and proportion having a vertical emphasis to its overall mass. Tall buildings, which are slab like in form and proportion, will not be acceptable.
- If a tall building is part of a larger complex then it is important to have sufficient contrast between adjacent building heights to maintain emphasis on the taller element.
- Also important are the treatment of facades and the colour and reflectivity of building materials.

Sustainability

- Environmentally sustainable design techniques should be incorporated in the site layout and orientation of the building, as well as the material specification (refer p.52).
- Tall buildings should be designed with adequate flexibility so that the structure can be converted to an alternative use in the future, should the need arise.

Transport

- Tall buildings should be located near, or have good connections to, transport nodes.
- Parking for tall buildings should be provided in such a way that conflict does not occur between pedestrians and vehicles at street level. It should be designed so that it doesn't detract from the building's streetscape appearance.

Existing Tall Buildings

In applying the above recommendations to existing tall buildings in Sheffield it is evident that there are many which do not meet the current standards of location, design or function. The urban design analysis of the City Centre has clearly shown that many tall buildings in Sheffield significantly detract from the quality of the city's urban environment.

Where a building has reached the end of its life span, or is no longer a functionally or economically viable asset, an opportunity is presented to remove the structure or to remodel it. This is an issue which will be facing many of the buildings in Sheffield which were constructed during the 1960s and 1970s.

A tall building which is to be removed can be replaced with a building which is more responsive to the immediate and wider context. The recommendations for tall buildings will indicate whether replacement with a building of a similar height is appropriate, or whether a smaller scale structure would be a more appropriate response.

Buildings can be given a new lease of life through remodelling and relatively simple measures such as:

- recladding with a material of a more contemporary appearance, a different colour or reflectivity;
- addition of upper floors to change the profile of a building;
- removal or obscuring of unsightly services;
- introducing active uses at the ground floor to create a connection with the streetscape;
- landscaping of the grounds to improve streetscape appearance;
- internal conversion to allow a change of use, for example from office to residential.

Landmarks

Landmarks aid in legibility, serving as visual references within a city or from external vantage points. Landmarks may act as focal points, terminating significant vistas or punctuating a sequence of spaces or movement corridors. Usually they will signify an important building, space or focus of activity.

Key landmarks in Sheffield are identified on the map on the preceding page:

- The spires and towers of the Town Hall, St. Marie's Church, Victoria Hall are principal landmarks within the City Centre.
- The Town Hall clocktower is an important focal point for a number of streets including Pinstone Street, Division Street, Leopold Street, the Moor and Fargate.
- The old Courthouse clock tower is a landmark within the Castlegate Quarter, and on the city skyline when viewed from the north.
- The spire of the Cathedral of St. Peter and St. Paul is a landmark structure within the Cathedral Quarter and on the Sheffield skyline.
- St. George's Church tower is a landmark within the Sheffield University area and is the focal point for the vista along Portobello Street.
- The Sheffield University Arts Tower and Parkhill Flats are distinct modern landmarks;
- St. Vincent's Church is principal landmark with the quarter.



These landmarks must be retained and enhanced. Careful attention must be paid to the siting and design of new development, particularly tall or large scale structures in close proximity to these landmarks, so that these important visual and spatial references are preserved.

New buildings should be sited and scaled so that they do not impede views to landmarks nor detract from the visual prominence of landmarks.

The visibility of landmarks on the skyline and as viewed from within the city must be taken into consideration.

Tall or large scale buildings must be carefully sited in relation to other landmarks to create a stimulating urban composition.

New landmarks can be created in strategic locations throughout the City Centre to signify:

- gateway sites;
- focal points such as road junctions;
- activity nodes, such as the proposed tower in the New Retail Quarter;
- important buildings or spaces.

New landmarks can take many forms:

- a tall building;
- a highly contemporary or striking piece of architecture;
- a spire or tower;
- a major public artwork;
- an important building or space which is a focus of civic, community or commercial activity.

Views

Significant views from the City Centre which need to be retained include:

- views out to Park Hill and Norfolk Park from the eastern side of City Centre, especially Charles Street and the proposed Millennium Place.
- extensive views from St. Vincent's Quarter across the Don Valley to the northern hills and dry ski slopes, and west along the Solly Street ridge.
- elevated parts of the Cathedral Quarter have restricted views north over the Don Valley, and east along High Street to Park Hill.
- the framed views southwest, through the gridded streets of the Devonshire Quarter, out to the green suburbs such as Norfolk Park.
- Views from the Heart of the City public spaces to Claywood/Norfolk park.

Any proposed development over four storeys in height located in proximity to landmark buildings or structures, or along major view corridors, should undergo a contextual urban design analysis. This should demonstrate that they will not:

- detract from important focal points;
- disrupt viewing corridors within the City Centre;
- inhibit views to the surrounding hills and green spaces.

Gateways

Gateways include sites or spatial sequences which denote a point of arrival. The design of gateways is an essential component of creating a legible urban environment. There are many gateway sites and linkages within the Sheffield City Centre and their design will reflect arrival or movement by different means of transport.

Vehicular gateways

The principal vehicular gateways into the City Centre are located around the inner ring road:

- Shalesmoor;
- Tenter Street (north & south);
- West Bar;
- Wicker/Lady's Bridge;
- Park Square;
- Sheaf Square;
- Granville Square;
- Shoreham Street;
- St. Mary's Gate;
- Charter Row;
- Charter Square;
- Furnival Square;
- Brook Hill/Broad Lane.

These link into key approaches within the City Centre including:

- Charter Row;
- Arundel Gate;
- Rockingham Street;
- Fitzwilliam Street;
- Tenter Street;
- Furnival Street;
- Matilda Street;
- Eyre Street.



The access loops proposed in the Masterplan will provide further gateway linkages within the City Centre.

The design of these gateway sites and linkages will need to reflect that they are entry points for motorists, to be read from a distance and whilst travelling at speed:

- Buildings can be emphasised on gateway sites by adopting a larger scale than their surrounding context. These sites present opportunities for tall buildings, subject to the design criteria set out in this section.
- Building form in a gateway sequence should be strong and address the street to create an 'urban wall' or a sense of enclosure along the route.
- Larger scale architectural detail and careful consideration of building form and profile is also required to emphasise gateway buildings.
- Bold, striking architecture in certain locations can create landmark buildings at gateway sites, such as the Ponds Forge Sports Centre at Park Square.
- Ground level activity on gateway sites and corridors will signify entry to the activity hub of the city.
- Gateway corridors can be emphasised with boulevard planting.
- Large scale artworks or theme planting could be selectively used on the many roundabouts of the inner ring road to express a sense of entry into the City Centre. For example, the function of a single lighting pole, such as that of the Brook Hill/Broad Lane roundabout, could be incorporated into a sculptural installation.

All of these vehicular gateways also serve pedestrians and this must be a fundamental consideration in their design. The principles for design of pedestrian spaces will apply (refer Public Realm Strategy and Guidelines).

Significant opportunities currently exist to improve legibility and create more distinctive environments along these gateway routes. The completion of the Inner Relief Road will open new development sites, and other roads are being downgraded from grade separated dual carriageways. This will allow substantial redesign of a currently inhospitable and unwelcoming road network. Gateway structures and spatial sequences can be introduced to create a sense of arrival into the city.

Pedestrian Gateways

In the experience of the pedestrian and cyclist many different types of gateways exist throughout the city: at points of arrival in the City Centre; at points of transition between the quarters or the precincts within; or along the sequence of spaces of a movement route.

Key pedestrian (and cyclist) arrival points and routes into the city include:

- Park Square, which provides access to the City Centre from the Victoria Quays and the northeastern part of the city;
- Brook Hill /Broad Lane which is a key pedestrian route between the City Centre and the university;
- From the Railway Station, Sheaf Square and Howard Street lead into the City Centre hub of the Peace Gardens and Town Hall;
- West Street leading to Division Street and City Hall precinct;
- Funnival Square and Charter Square;
- Moorfoot/South Street;
- Wicker, Lady's Bridge;
- Canal & Riverside Walks.

With the exception of West Street, the urban design of these gateway sites and linkages fails to adequately signify entry to the city in terms of buildings scale and design, legibility, pedestrian amenity and quality of connection. Public realm improvements and new built form must contribute to the creation of a sense of arrival and a flow of spaces along these key routes.

Points of arrival within the City Centre also include the bus interchanges and the City Centre carparks. At these gateways particular attention must be paid to the design of the public realm and legibility of the urban environment.

Pedestrian gateways do not need to make grand statements. They can be more subtle and read intuitively. Obvious gateway signage should not be necessary. There are a number of means that can be used to signify these arrival spaces, for example:

- Gateway sites can be marked with a taller building structure, a building of a particularly striking design or a significant public space.
- Land uses can create a focus of activity at gateways, such as a busy shop or café, a market entry or an important public building.
- Changes in public realm details such as lighting, planting or surface materials will signify transition or arrival.
- Public artworks can be used to denote a point of arrival or as landmarks along a series of spaces.
- A narrowing of entry passages can signify arrival by creating a sense of anticipation and then surprise at what lies beyond.
- Landmarks and views used strategically as orientation tools will create a sequence of spaces and buildings.

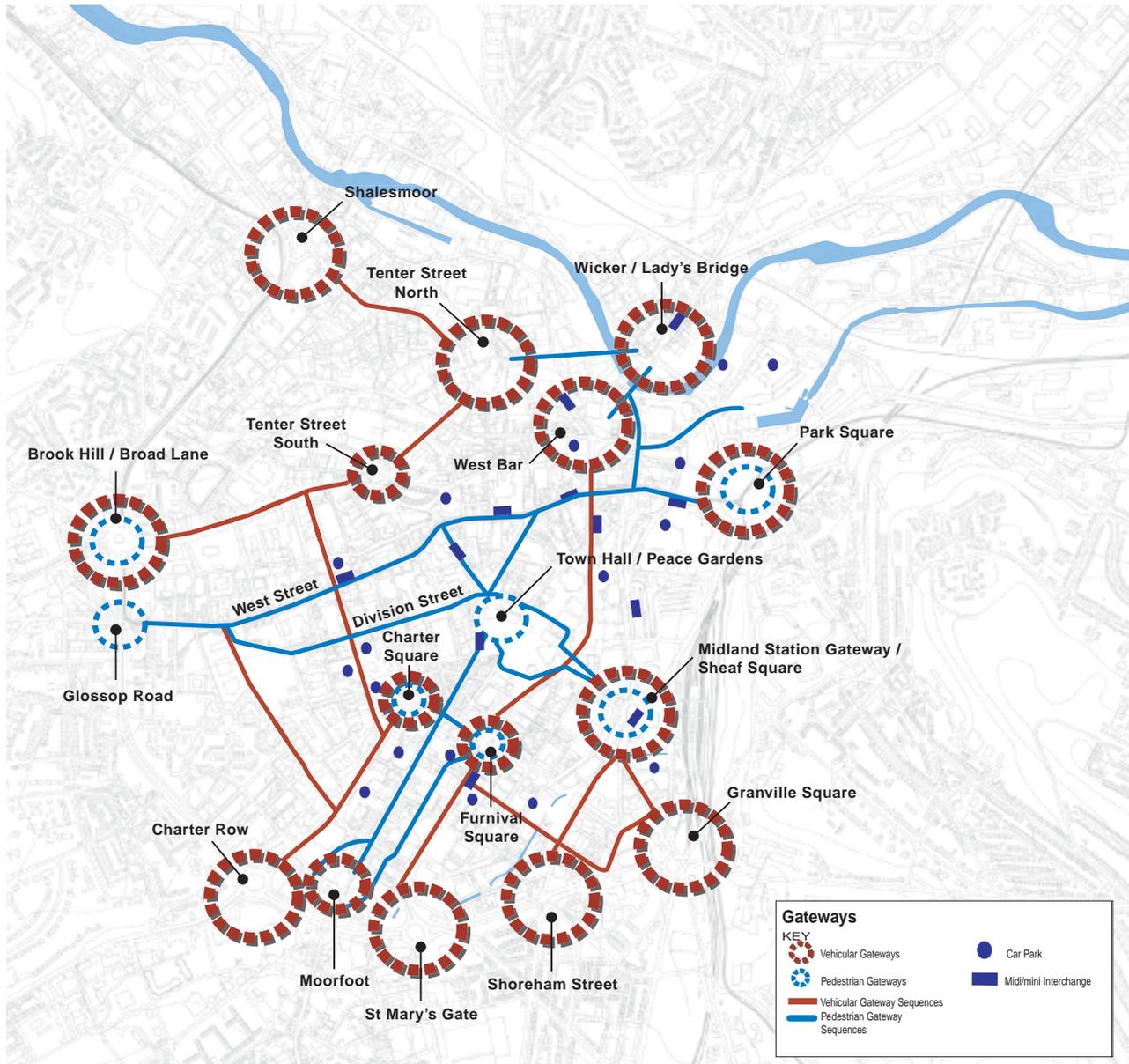
All of these design mechanisms will add interest to the city. These are the finer grain details that residents value highly in their day to day experience of the city and visitors delight in discovering.



Funnival Square tall buildings mark this as a gateway site, yet are not a memorable design and do not provide activity at ground level.



The street activity of West Street signals arrival into the city centre.



Reforming Streetscapes and Creating Gateways

A Case Study - Tenter Street

The potential for transformation of Sheffield's urban realm is explored in this three dimensional study.

Tenter Street was selected for this exercise as it is a principle gateway space and movement corridor into the City Centre, yet presently suffers from a poor quality urban realm and lack of identity.

Through an analysis of the existing streetscape, propositions for change have been developed which aim to:

- foster a sense of arrival into the City Centre by introducing landmark buildings at gateway sites and using urban form to create a gateway sequence;
- strengthen linkages to the City Centre, particularly for pedestrians;
- transform an inhospitable and road dominated environment into an attractive and vibrant streetscape;
- create a distinct identity for this important space;
- effect transitions between different quarters;
- improve the legibility of the urban environment;
- improve pedestrian amenity;
- ultimately increase street life and activity.

The urban form models of the existing streetscape and the development proposition show how this can be achieved through built form - both new and recycling of existing.

Tenter Street

Tenter Street is the principal gateway to the City Centre from the northwest.

Presently, Tenter Street suffers from a neglected image. There is a lack of consistency in its built form and a poor quality urban realm. The width of the street, as well as the volume of traffic carried, creates severance between St.Vincent's and the City Centre or the Cathedral Quarter.

Surface car parks and gap sites significantly detract from the appearance of the western side of the street and represent underused space in the City Centre.

On the eastern side of the street the 1960s and 1970s office towers present a cold and hostile image and make no contribution to streetscape activity or amenity.

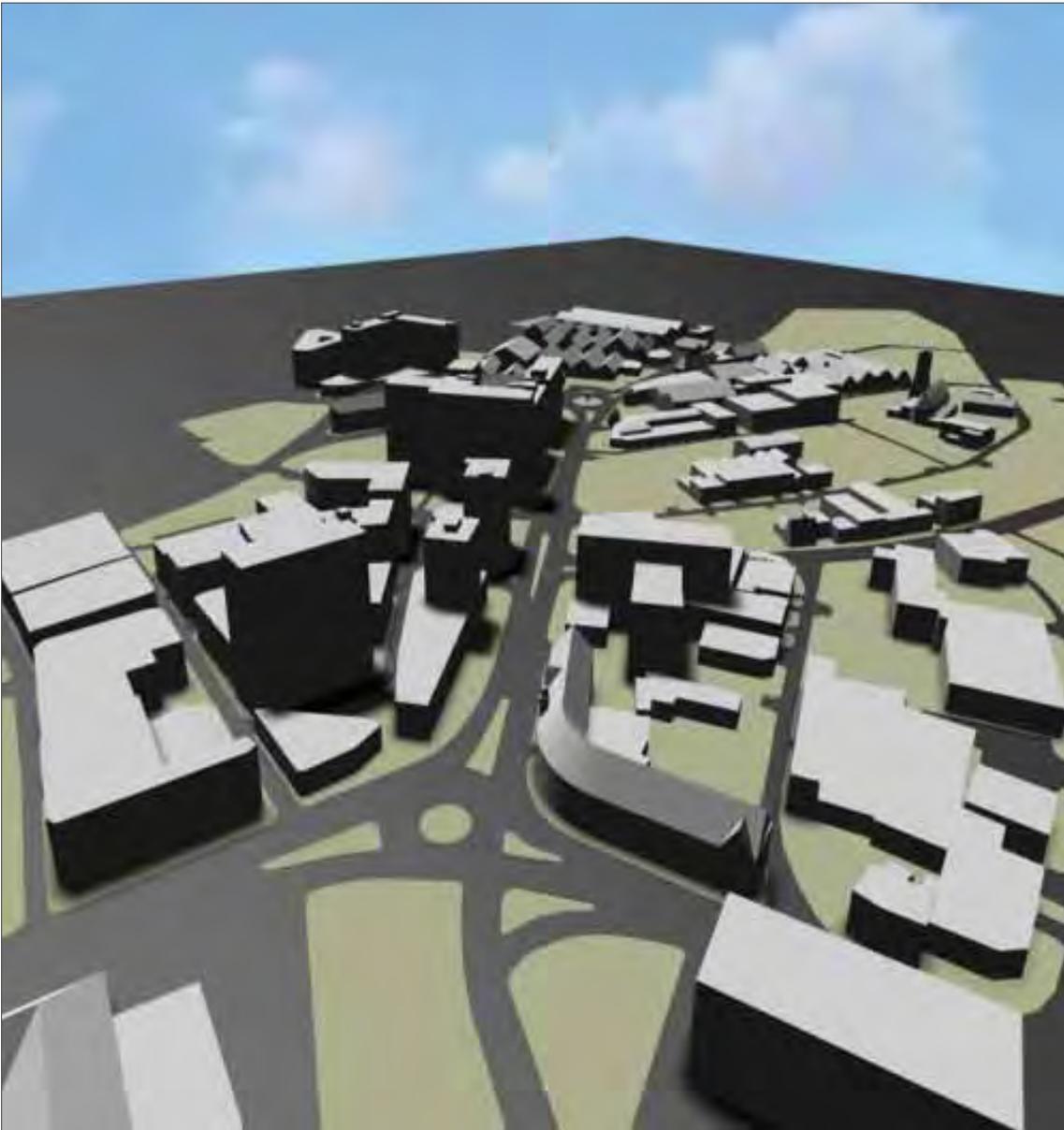
The potential benefit from visual or physical connections from Tenter Street to the many heritage places in this area has not been considered.



Tenter Street office blocks.



Fire Museum.



Tenter Street - existing situation (Gillespies)

Tenter Street Proposition

The vision for Tenter Street transforms this street into a metropolitan gateway. Tenter Street becomes an activity spine characterised by an attractive streetscape environment and high quality development.

New landmark buildings at the northern and southern entry to Tenter Street define this gateway space and serve as focal points. Transitional elements lead from these entry points into Tenter Street and new, stronger built form along the length of the street helps to define this space.

A new tower marks the southern axis of Tenter Street, with the curved façade of the car showroom defining the transition into this gateway space from Broad Lane.

A tower also serves as a landmark at the northern axis. The realignment of Corporation Street at the base of this building provides a link from the northern ring road into a new junction at West Bar. Here lower level buildings also serve as transitional elements into Tenter Street, including the landmark historic Fire Museum. On the western edge of Tenter Street mixed use developments have replaced undeveloped land and open lot carparking.

The lower levels of these buildings respond to the scale of development within the St. Vincent's Quarter, beyond the Tenter Street frontage. At ground level they provide a continuity of built form and activity to the streetscape.

The upper levels rising above define the western side of the street and create a strength of built form to signify Tenter Street as a gateway to the City Centre. The overall height of these buildings responds to the height of buildings on the opposite side of Tenter Street and serves to create a sense of enclosure.

With a striking yet considered design, these contemporary interventions could effect a modern transition to the historic urban fabric of the St. Vincent's Quarter. By placing the towers gable end to street, visual links with adjacent heritage areas of the St. Vincent's and Cathedral Quarters remain. The original street and lane layout is retained and reinforced, some as traffic routes and others as pedestrianised footways.

At ground level they could contribute a variety of activities to the streetscape such as small businesses, shops, local services, cafes etc. The upper levels of these buildings have a range of potential uses including residential or office.

Prominent buildings showing visible signs of disrepair such as the offices on the eastern side of the street and the Police Headquarters should receive an external facelift and incorporate a variety of activities at street level.

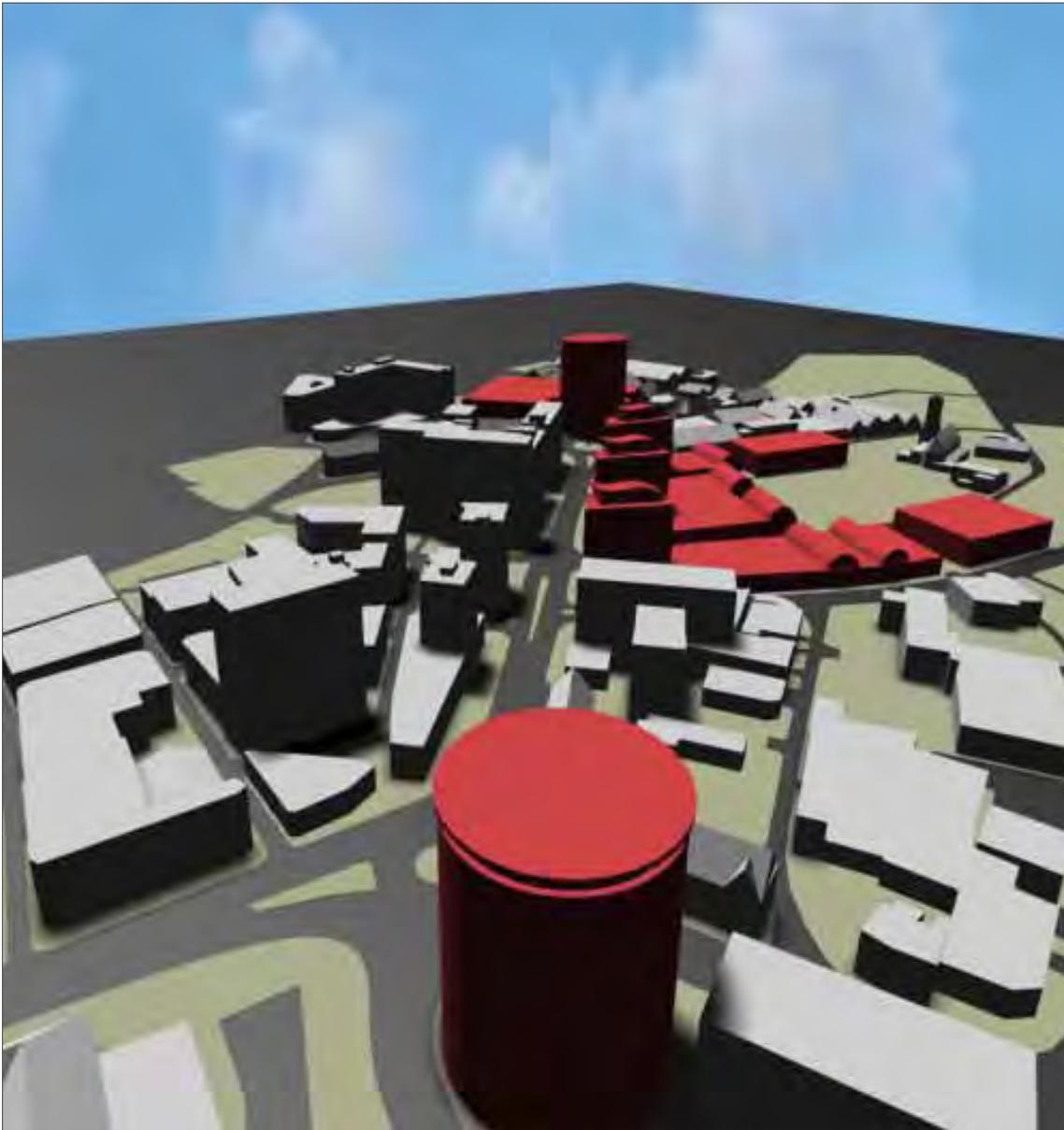
A multi storey carpark has replaced open parking lots and consolidated parking onto one site.

Potential public realm details to complement urban form interventions include:

- boulevard planting on the sunny eastern side of the street to add to the sense of Tenter Street being an arrival space.
- further reduction of the carriageway width to allow street cafes and improvements to pedestrian amenity.
- traffic calming measures and pedestrian controlled crossing points to give greater ease of pedestrian movement and permeability between the St. Vincent's and Cathedral Quarters.

Historic buildings have a significant contribution to fostering a sense of neighbourhood around Tenter Street:

- the community focus of St. Vincent's Roman Catholic Church, and associated buildings, is retained as a focus for the new residential and business communities along the Tenter Street spine or in the St. Vincent's Quarter.
- the original fabric of nineteenth century workshops and housing between Hollis Croft and Garden Street is retained. Where these buildings no longer perform an industrial function, adaptive re-use schemes have ensured their restoration.
- the Fire Museum is conserved and enhanced as a significant heritage site.
- the 1890s housing on Hawley Street and Townhead Street is retained as an early example of municipal housing.



Tenter Street - possible interventions (Gillespies)

3.3 The Public Realm



Introduction

The public realm is defined as the 'space between buildings' – the streets, spaces and movement corridors which form the framework for our use and perception of a city. A high quality public realm improves the legibility of a city, adds to its attractiveness and enhances the experiences of citizens and visitors alike.

People choose to spend more time in high quality public spaces and streets, stopping to linger, rather than utilising the city spaces purely as a thoroughfare. The Peace Gardens is an example of a vibrant and well used space in the heart of Sheffield. Here on a sunny day people stop to relax on the grass or the wooden benches and children play around the fountains. In contrast, there are many places in the city centre where a poor quality and uninviting public realm offers no inspiration to stop.

It is recognised that it is not desirable or financially viable to propose a high quality treatment to all streets and spaces throughout a city centre. The strategy for Sheffield proposes an ordering principle to the public realm, which will accord with a grading of treatments and palettes throughout the city centre.

In practice, the public realm strategy should provide private developers and public authorities with a statement of the quality of design expected and best practice examples. It will also aid in material selection, acknowledging that each development must fit into and contribute to a high quality network of streets and spaces within the city centre.

Whilst it is recommended that the significance of key places and movement networks is emphasised with the highest quality design treatments, all of the spaces within the city centre require careful and considered design.

There is a need to improve the pedestrian environment within Sheffield city centre, particularly between key activity areas such as Fargate and the universities, and public transport links. This will improve the image and legibility of the city, soften the hard urban corridors and create a more comfortable pedestrian experience.

Methodology

The Public Realm Design Guidelines (contained in part 5) for Sheffield city centre were developed through a series of cognitive mapping and surveying exercises, meetings with key officers, a review of improvements implemented to date and pending in the city, and an understanding of best practice. It was informed by the following process:

- An audit of the existing public realm in the city centre to:
 - develop an understanding of the existing palette of materials and determine any consistency which positively contributed to the legibility and permeability of key routes;
 - ascertain the consistency and quality of design of street furniture and determine any impact (positive or negative) that its layout may have on ease of movement for the pedestrian;
 - provide an understanding of the existing open space network and identify opportunities for improving connectivity through such a network.
- A survey of the existing cafe zones and identification of opportunities for further outdoor dining facilities.
- A survey of the facades of buildings and their relationship with the street, including identification of active and animated ground floors, or blank facades which deleteriously affect the surrounding urban environments.
- Discussions with the principal landscape architects of the Council about the aspirations for the public realm and where material palettes had been established within the city centre.
- A review of the Council's accessibility requirements and an understanding of the Disability Discrimination Act and its impact on the urban environment.
- A review of the literature relating to the design and choice of materials for the Heart of the City.
- A review of the guidance contained within action plans relating to material selection and detailing of streets within the CIQ and Devonshire Quarter.
- Discussions with city centre management and the Streeforce team about management, maintenance and the selection of materials within the city centre.
- Workshops and meetings with the Stakeholders Group to address the issues on the design standards and maintenance of the public realm.

Public Spaces: a network

Sheffield city centre contains several key public spaces, such as the Peace Gardens, which are attractive and well used. However, it has been identified in the workshops that there is a lack of public space in the city centre. Many opportunities still exist to bring to life other under-used public spaces of the city:

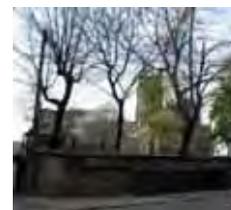
- Paradise Square is an attractive Georgian Square presently overrun with cars. It could be reclaimed as the heart of the Cathedral Quarter and finished with either hard or soft landscaping treatment, instead of being used as a parking facility for surrounding businesses.
- Fitzalan Square is hidden away and somewhat disconnected from the activity of the city centre as a result of the poor quality of connections leading to the space. The built form surrounding the square creates a sense of enclosure to the space which benefits from substantial mature trees. The square, which is located on an important historic route, should be revitalised and connectivity to other parts of the city centre improved. There is the potential for Fitzalan Square to serve as an important node en route from the Railway Station to Castlegate and Riverside.
- Sheaf Square/Howard Street is an essential route from the train station and Hallam University to the Heart of the City. This area should be developed as a more pedestrian orientated route to better connect the station to the city centre.
- The grounds of the religious buildings are valuable resources in the city centre, providing green refuges from the hard urban fabric. They should be reinforced as special places within the public space network through improved accessibility and/or landscape works where appropriate.

- The banks of the River Don are important linear spaces which must form an integral part of the public space network and provide links to the surrounding locality. Victoria Quays should be visually and physically reconnected with the city centre by way of pedestrian links facilitated from Castlegate. The downgrading of Exchange Street on completion of the Inner Relief Road provides an opportunity for this link to be achieved.



Provision of public space in front of civic buildings encourages people to linger.

- There could also be an opportunity to downgrade West bar and the area in front of the Law Courts as a traffic route on completion of the IRR. This would allow the space in front of the law court to be developed as a hard landscaped public space.



Grounds of religious buildings should be utilised where appropriate.

- There is a multitude of vacant sites within the city centre, largely facilitated for car parking. Many of these could be viewed as opportunities for new public squares, providing a stimulus for the development of adjacent sites and a focal point for activity within their precinct.

Every opportunity must be taken to introduce new spaces and places as a part of new developments to contribute to the public space network of the city. This is particularly relevant in the drive to promote city centre living.



Pedestrianised routes improve the quality of the public space network.

Public spaces should contribute meaningfully to the network in the city and not just be left over spaces. They should make connection with key pedestrian routes and other spaces, be of quality design and maintained to the highest possible standard. A network of formal and incidental spaces should weave through the city from the centre out to the surrounding large green spaces, such as Weston Park and Parkhill.



Reinforce the importance of spaces through innovative planting strategies.

Microclimate

Public spaces which are sunlit or sheltered from the wind and rain will draw life onto the street and increase the vibrancy and activity of a city.

A Place in the Sun

The orientation of streets is one of the influencing factors in determining people's choice of route on pedestrian journeys and their use of public space. People tend to be drawn to the sunny south-facing side of the street and will search for a patch of sunlight in which to stop and spend time. Public space should be designed with this in mind and to maximise opportunities for public life in areas that enjoy a good solar aspect.

The Peace Gardens are inundated with people on sunny days – particularly at lunchtime – where it is sometimes difficult to get a seat for all the people enjoying the sun! Cathedral Square is also orientated toward the sun, with large trees offering shade in some areas. People use this space to sit or wait for the tram, and as a meeting point in the city. Devonshire Green is also a sun trap, and the grassy areas become a place for picnics and lunch on any sunny day.



Shelter from the elements would improve the retail experience in the city centre.



Example of typical shelter provision in the city centre.

A Windy City

The hilly topography of Sheffield, coupled with the built form of the city centre creates areas which are very windy. Winds blow up from the valleys channelled between the taller slab buildings located along road corridors. There are some streets where it is a physical struggle to remain upright in particularly windy weather.

Screens placed in strategic locations may ameliorate the effect of the wind and provide opportunities – in sunny areas and along frequented routes – for seating and outdoor dining facilities.

Shelter from the Rain

There must be opportunities for shelter in the streets of the city centre for periods of inclement weather, particularly along key routes or where people wait for public transport. There is a lack of adequate sheltered facilities on public transport routes at present which, if properly addressed, could increase public transport use. Similarly, the current shopping facilities in Sheffield suffer from a lack of sheltered areas. This exposure can make the shopping experience uncomfortable and may in part account for the preference of a large indoor shopping centre such as Meadowhall, instead of the city centre strip shopping. The NRO development will aim to address this issue.

Activity

A focus for the strategic planning of towns and cities must be the creation of environments that encourage street life and activity, support the economy and foster the identity of a place.

Mixing uses

Planning and design policy must have a degree of sophistication that allows the sometimes conflicting activities of city life to be held in balance. It is often the very conflict between adjacent activities that can bring interest and dynamism to urban centres. The role of the design in the public realm is to accept and manage the tensions that exist between activities. Streets and spaces in the city must be welcoming and flexible enough to accommodate a variety of users and activities.

The land-use mono-culture which exists in many areas of Sheffield city centre brings sterility to the street. Street life and activity depends on designing environments which attract a variety of uses and people.

Creating a mix of uses within a precinct or a particular development site will have a range of benefits including increasing diversity and maximising efficiency of land use. Where mixed-use developments are not wholly appropriate, such as in residential areas, carefully managed through traffic can enliven the street. Increased activity can provide a greater sense of security particularly at night time.

Facades

Opportunities will be presented with new development proposals, or the refurbishment of existing buildings, to introduce active ground floor uses and permeable facades along the key pedestrian routes of the city centre. Promoting connection between internal spaces and the activity of the street in this way will improve the appearance, amenity and ambience of the city centre.



Vibrant street life needs to attract all user groups (source: Sheffield 1).



Ha Ha's Kitchen (source: Sheffield 1).



Peace gardens at night (source: Sheffield 1).



Ad-hoc street activity.



Outdoor cafe areas add vitality to a space.



Occasional markets provide interest.

Particular locations where these connections are vital include:

- West Street, where there is a high pedestrian flow and activity generated by the tram and the university;
- around Devonshire Green, where surrounding uses such as restaurants and cafes could spill out onto terraces or sidewalk seating, in the same way as the Forum;
- around Tudor Square, where it is proposed that the functions of the galleries are brought into the square and cafes and bars provide additional activity and life on its edge.

Within each quarter key pedestrian links or focal points have also been identified that would benefit from active facades in the ground floors. For example, the connection between Portobello Street and West Street could be strengthened to link the activity of the university precinct to the Devonshire Quarter urban village.

Street life and celebration

Thoughtful management and design can bring additional life, and a sense of spontaneity, to the city's streets and spaces. Well organised cafes or stalls spilling onto the street will generate colour and bustle. Ad-hoc activities such as street theatre, buskers and performers can enliven city.

Seasonal activities such as Christmas events, festivals, processions or weekly traders' markets are an important part of civic life. In Sheffield city centre, the principle pedestrian routes such as Division Street, High Street or the Moor and spaces such as Devonshire Green, Peace Gardens or Tudor Square could be particularly suited to this type of activity. In the detailed design of public spaces, such activities can be provided with dedicated service points or other such facilities they may require.

Safety

Areas which are poorly lit and rarely used can often feel threatening and encourage antisocial behaviour which affects local businesses and had a negative impact on the quality of life of the local community.

There are several design approaches which can be applied to improve the safety of the public realm such as promoting active frontages to encourage natural surveillance thus reducing the fear of crime and discourage anti-social behaviour. A good lighting strategy can also improve the safety of an area as spaces that are poorly lit and rarely used can feel threatening and attract antisocial behaviour which will affect businesses, customers and the local community.

Active Frontages

A mixture of uses should be encouraged as part of any development proposal to increase pedestrian activity throughout the day extending the hours of natural surveillance.

Where appropriate commercial and ancillary activities should be integrated with industrial uses to increase pedestrian and vehicular activity in these areas.

Ground floor uses should comprise retail, commercial and residential uses to generate street level activity and avoid blank facades.

Parking within the ground floor of buildings will not normally be permitted especially where this displaces other accommodation from street level.

Design and Orientation of Buildings

The siting and design of any new building should maximise surveillance along streets, spaces, car parks and pedestrian routes.

The design of new buildings should avoid recess and set back features unless absolutely necessary to the function of the building as they often create hiding places and increase the fear of crime.

Entrances to buildings should be overlooked and well lit to maximise security after dark.

An unobstructed view from dwellings to external streets and spaces should be provided to maximise natural surveillance.

Buildings should be sited to allow windows and entrances to overlook streets and other pedestrian routes within the site.

Building design or landscaping should not restrict surveillance of pedestrians or provide places to hide alongside pedestrian routes and spaces.



Blank facades create unattractive pedestrian environment.



An active frontage has been created as part of the redevelopment of Victoria Quay.



Play park at Edward Street flats is well overlooked.



Well spaced trees at Devonshire Green delineate the space while allowing views through.



Example of CCTV camera with signage integrated into the design (source: SCC)



CCTV mounts proposed for Sheffield City Centre (source: SCC)

Open Space

Public open spaces including streets, car parks, cycle stands and public squares should be well observed by surrounding uses and evenly lit at night.

Children's play areas should have clearly defined but permeable boundaries to prevent unauthorised vehicular access while facilitating natural surveillance.

Boundary treatments should provide a secure edge but should not restrict views into and out of the site unless it has been agreed that a landscaped screen is required on a particular boundary.

Public spaces should be designed to ensure that there are no unnecessary paths which could be used as a hiding place or an escape route for criminal activity.

Low growing shrub planting should be encouraged along pedestrian routes and the perimeter of public spaces where appropriate to avoid creating hiding places. Trees along pedestrian street and spaces should be well spaced out with high canopies to the maximise visibility of both the user and those who overlook these areas.

Bus, train and tram stops should be well observed from the surrounding area on a 24 hour basis.

CCTV

In some areas a monitored Close Circuit Television (CCTV) system covering the key streets and spaces and particular problem areas may be needed. The use of CCTV cameras in public places can deter and help detect crime.

The sensitive siting of CCTV cameras is essential. They should be visible to the general public however should not detract from the visual attractiveness of key public spaces, streets and buildings.

Lighting

Good lighting can deter criminals and help reduce the fear of crime it is therefore important to ensure that all pedestrian areas, routes and car parks are properly lit and conforms to British Standards (BS5489).

Access and Movement

The accessibility and circulation, or ease of movement, within an urban area is one of the underpinning factors of its success. Vehicular, pedestrian and cycle networks must be well integrated to maximise the safety and quality of all modes of transport thus encouraging users into the city centre. Sheffield is currently subject to a range of transport and public realm improvements which aim to create an ease of movement and efficient circulation within and to the city centre. These are considered in detail in the Faber Maunsell Transport Strategy.

Road Network

The post-war era in Sheffield saw the large-scale adaptation of the city centre to accommodate vehicular traffic as a priority form of transport. To deal with the increased use of the car a number of dual carriageways were introduced into the city centre such as Charter Row and Eyre Street/Arundel Gate. The development of these vehicular routes fragmented the urban fabric. The city centre quarters referred to within this document are largely a result of the severance caused by these roads.

At present the main routes in and out of the city centre are:

- Eyre Street/Arundel Gate;
- Charter Row/Furnival Gate;
- Wicker/Waingate;
- Broad Lane and Tenter Street;
- Glossop Road/West Street;
- Shoreham Street/Sheaf Street;
- Commercial Street.

Secondary access routes have been identified as:

- Portobello Street;
- Townhead/Leopold Street;
- Norfolk Street.

Despite this dominant road network, the city centre still suffers from poor access to its car parks and places of interest. This lack of accessibility is compounded by inadequate signage which undermines the legibility of the city for vehicle users. There is a need to provide clearer access routes in and out of the city in order to improve local permeability and reduce congestion.

A number of strategic proposals have been identified by the Transport Strategy to improve the vehicular accessibility to the city without reintroducing through traffic into the city centre. These projects include the completion of the Inner Relief Road and the introduction of access loops. These access loops will provide better vehicular access to the city centre without impinging on the key pedestrian areas.



Busy bus route at Castlegate.



Supertram.



Midland Station.



Derelict site utilised for parking.



Side streets are dominated by parked cars.

Car Parking

Sheffield City Centre is proliferated by unsightly open parking lots. These create significant disruptions to the cohesion and continuity of the city's urban form. From both urban design and economic perspectives, greater use could be made of these sites, for open space or pedestrian generating developments.

Multi-storey carparks within the city centre have no relationship with their urban context. Many are underused due to their inhospitable or perceived unsafe interiors, difficulty of access or expensive rates.

Public Transport

Sheffield could have an exemplary integrated public transport network, much of which is already in place.

In the 1990s the tram was reintroduced to the city, and the supertram line now provides an efficient and well utilised mode of transport between the city centre and surrounding residential districts.

The existing bus system operates in a figure 8 dispersed system which again is well utilised, although there is a need to improve the current service. At present there is no interchange on the east side of the city centre and many of the stops do not correlate with the main pedestrian generators. The bus service also suffers from poor passenger facilities. There is a need to provide bus shelters along key routes to encourage people to use public transport.

There are a range of public transport proposals relating to the public realm contained within the Transport Strategy and Connect Sheffield, including:

- Improved facilities and information to encourage use of public transport;
- Mini/midi interchanges sited at points of maximum use;
- Development of the railway station as a gateway to the city.

Pedestrian Movement

There is a lack of legibility and permeability in the city centre pedestrian environment. Postwar traffic infrastructure and ill-considered modern developments have severed many key pedestrian routes. This is compounded by an incoherent signage system which is confusing for the pedestrian, making it difficult to develop an understanding of the city.

The intrusive road network within the city centre gives a dominance to the car. Although projects have been completed to pedestrianise some areas, the often inferior quality of these spaces means that many are under utilised.

At present pedestrian movement is largely generated by:

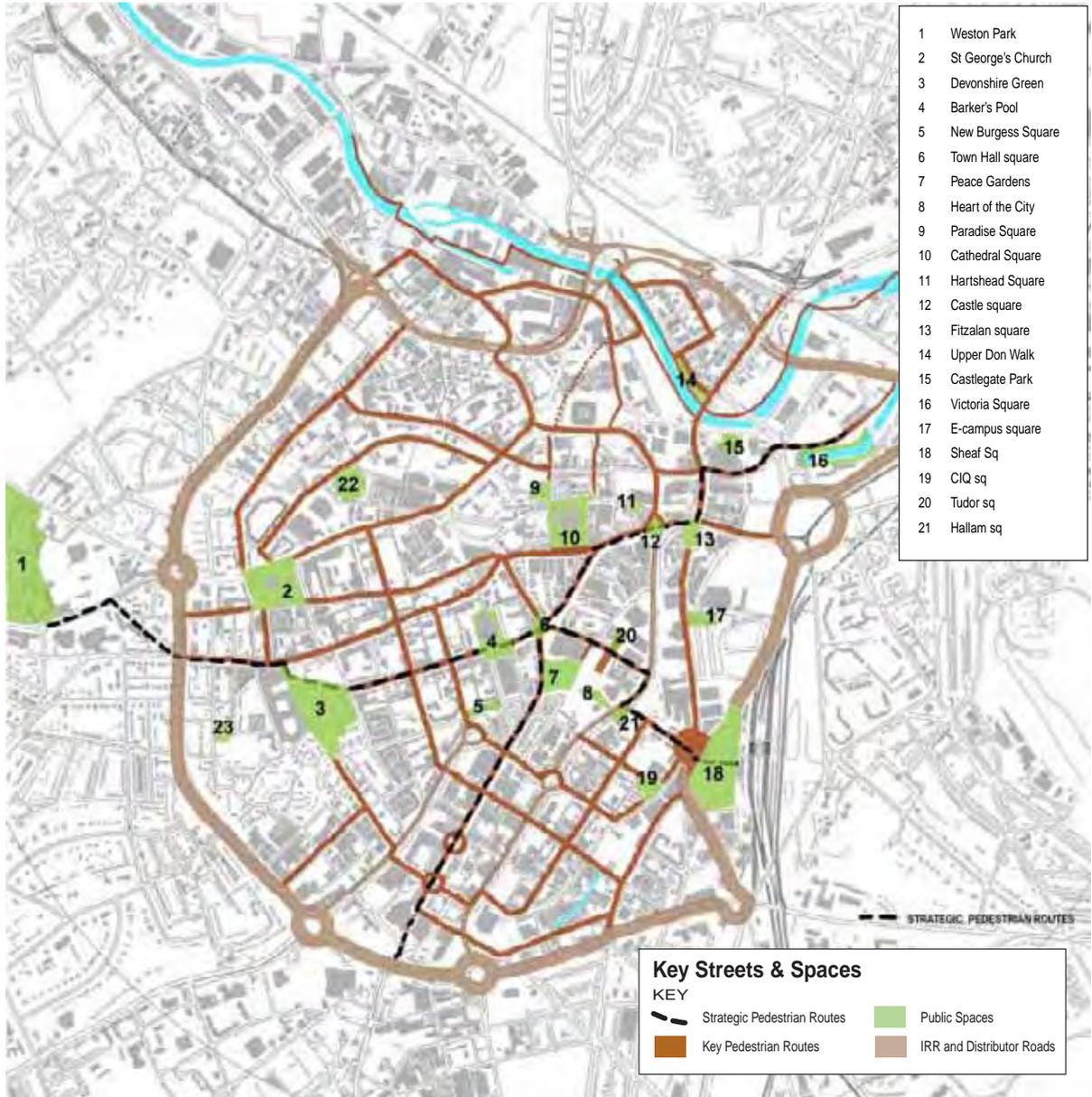
- The principal retail spine which runs from Fargate to the Moor;
- The main institutions of Sheffield University and Hallam University;
- The Heart of the City;
- The tram route at West Street/High Street;
- The bus and rail station route to the Heart of the City.

There are also a number of secondary pedestrian routes which link into the different quarters of the city centre and to the residential suburbs on the periphery. These routes generally suffer from poor environmental quality.

In addition to the proposals contained within the Transport Strategy, Connect Sheffield (refer Part 2.2) aims to improve pedestrian permeability, legibility, connectivity and safety.

Cycleways

Cycling is an efficient, environmentally friendly, space-saving and inexpensive means of transport. Despite Sheffield's hilly topography cycling has many advantages over the use of private cars and should be encouraged. The current cycle network suffers from poor design and lack of integration. There is a need for cycle lanes on the key routes, such as those between the universities and the city centre. This will encourage people to cycle in the city centre instead of using private cars.



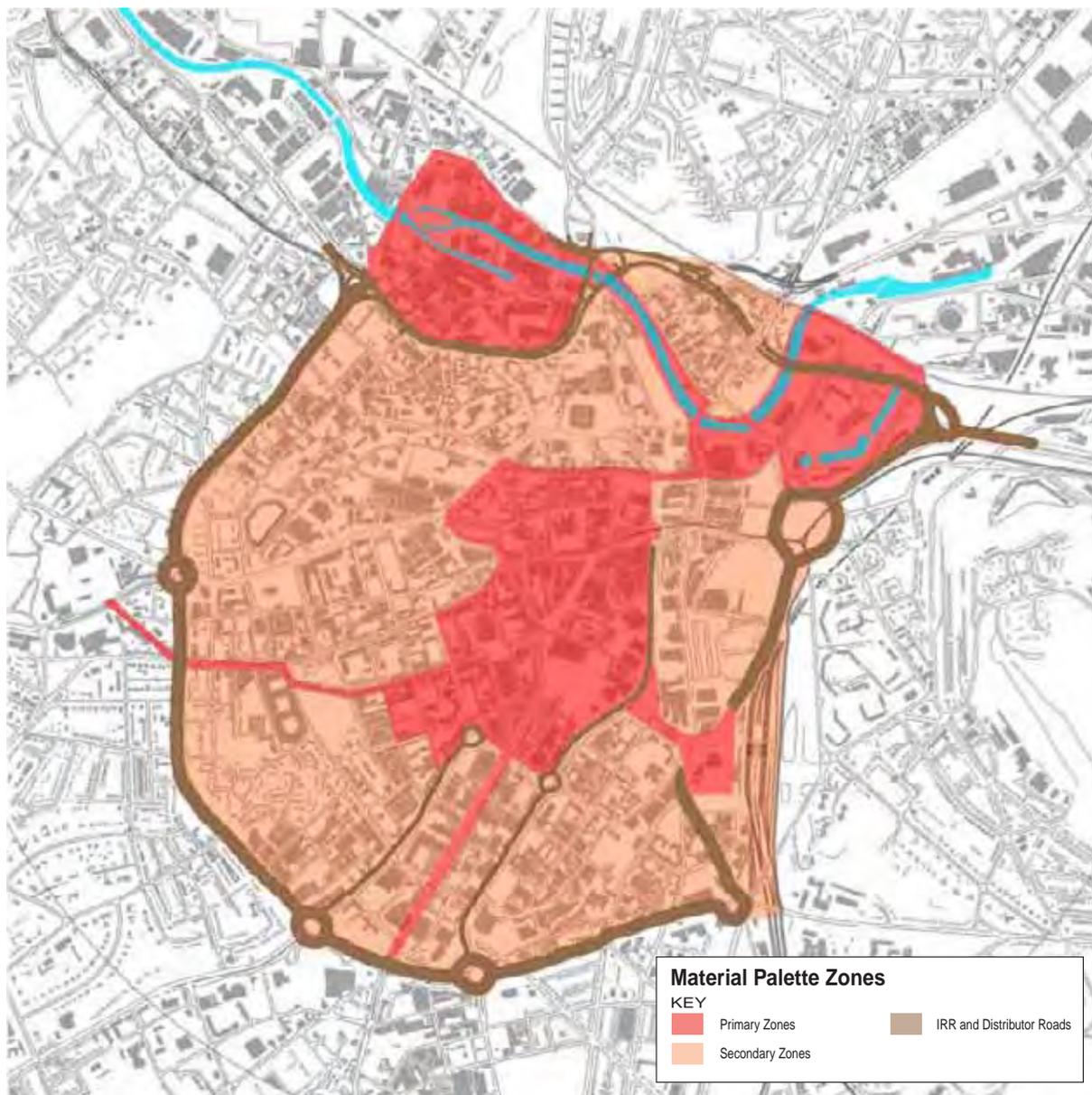
Pedestrian Hierarchy

The adjacent diagram identifies a hierarchy of streets within the city centre.

This hierarchy is not intended to be rigidly applied or followed as there will be exceptions.

Within the city centre there are clusters of institutions, retail /commercial uses, public transport services and pedestrian streets, which develop a hierarchy of routes for the public. These routes pass through and link the various quarters of the city centre.

- Strategic Pedestrian Routes: linking the main institutions, retail /commercial uses and transport services.
- Key Pedestrian Routes and Spaces: providing the main links within and between Quarters.



Material Palette Zones

As illustrated on the adjacent map, the City Centre has been divided into three material palette zones:

- Primary;
- Secondary; and
- Ring Roads and Distributor Roads.

This section of the Compendium offers guidance on the palette of materials which should be applied to public realm schemes within these areas.

Primary Zones

The following areas have been identified as Primary zones:

- City Centre Core: including Heart of the City, New Retail Quarter and Upper Cathedral Quarter;
- Kelham Island/Nursery Street;
- Canal Basin/Castlegate;
- Strategic Pedestrian Routes:
 - Railway Station to Sheffield University
 - Canal Basin to the Moor.

Materials

Paving

All materials/materials finishes, dimensions of units, laying patterns and bedding/grouting systems to be to SCC specifications:

- A. Footways to be paved in 75mm thick hard Pennine Sandstone with course widths of 600-750mm and slab lengths of 750-1000mm. Tactile crossings in matching sandstone (uncontrolled crossings) and red granite (controlled crossings)
- B. Kerbs to be 310mm wide mid grey granite with radius blocks to all radii less than 40m and special chamfered angled blocks at parking/loading bays.
- C. Chamfered tree grille edging blocks to be 310mm wide dark grey-black granite. Tree grille to be SCC standard ductile iron model with uplighter extensions where required.
- D. Channel blocks to be 310mm wide dark grey-black granite with 310mm wide ductile iron gully grates. Radius blocks to all radii less than 40m and special chamfered angled blocks at parking/loading bays.

- E. Sets to be 200mm long x 100mm wide x 100mm deep or 300mm long x 150mm wide x 150mm deep granite for carriageways. Parking/loading bays to be in 100mm granite cubes.

Street Furniture

SCC standard stainless steel suite except Heart of the City Area which will have SCC bronze suite. These suites and other related items are described in table 5.2.

Lighting

Streets with narrow footways should be lit from building mounted lighting wherever possible. Where column lighting is to be used, columns should be elegant and tapered in form. Lanterns should be of a high quality, simple and elegant in design. Special lighting may be required in streets of Special Character including the use of additional feature lighting.

Public Art

The sensitive incorporation of public art into the streetscene is encouraged.



Secondary Zones

For the purposes of the Compendium the Secondary Zone incorporates all streets within the boundary of the Ring Road excluding the Primary Zones identified and any Distributor Roads. It should be recognised that there are may be instances where the primary zones materials are appropriate but this should be considered at the detailed design stage of any public realm proposal.

Materials

Paving

All materials/material finishes, dimensions of units, laying patterns and bedding/grouting systems to be to SCC specifications:

- A. Footways to be paved in 600x450x63mm thick fibre mesh reinforced concrete slabs with a 'natural' pale buff colour and ground surface. Unreinforced slabs of these dimensions/finish may only be used where there is no risk of vehicle overrun
- B. Kerbs to be 310mm wide mid grey granite with radius blocks to all radii less than 40m and special chamfered angled blocks at parking/loading bays.
- C. Chamfered tree grille edging blocks to be 310mm wide dark grey-black granite. Tree grille to be SCC standard ductile iron model with uplighter extensions where required.
- D. Channel in smooth hot rolled asphalt (without aggregate).
- E. Carriageway in hot rolled asphalt with green aggregate in clear binder.

Street Furniture

To be SCC standard range as described in table 5.2.

Lighting

Streets with narrow footways should be lit from building mounted lighting wherever possible. Where column lighting is to be used, columns should be elegant and tapered in form. Lanterns should be of a high quality, simple and elegant in design. Special lighting may be required in streets of Special Character including the use of additional feature lighting.

Soft Landscape

The highest standard of street tree planting is required. Quality / size / planting system for street trees must be to SCC approved specifications.

Public Art

The sensitive incorporation of public art into the streetscene is encouraged.



Ring Road and Distributor Roads

The following routes will be designed to Ring Road and Distributor Road specifications:

- Ring Road – all sections;
- Charter Row;
- Eyre Street / Arundel Gate;
- Corporation Street.

Materials

Paving

All materials/materials finishes, dimensions of units, laying patterns and bedding/grouting systems to be to SCC specifications:

- A. Footways to be paved in 240x160x 80mm deep silver/grey granite aggregate blocks with a smooth finish and sharp arrises.
- B. Kerbs to be 125mm wide mid grey granite with radius blocks to all radii less than 20m.
- C. Tree grille edging blocks to be 310mm wide mid grey/green granite. Tree grille to be SCC standard ductile iron model with uplighter extensions where required.
- D. Channel blocks 310mm wide mid grey/green granite with 310mm wide ductile iron gully grates.
- E. Carriageway to be in black asphalt (SMA).

Areas of footway adjoining active frontages to retail or catering to be paved in mid grey/green granite to enable pressure washing.

Street Furniture

Street furniture to be SCC standard range as described in table 5.2.

Lighting

Columns should be kept as low as is practical. Columns should be elegant and tapered in form. Lanterns should be of a high quality, simple and elegant design. Feature lighting should be incorporated including the use of tree uplighters and special feature lighting to major structures and public art works.

Soft Landscape

The highest standard of street tree planting is required. Quality / size / planting system for street trees must be SCC approved specifications.

Public Art

The sensitive incorporation of public art into the street scene is encouraged.





Examples of artistic detailing and public art within the city's public realm.

Key Public Spaces and Streets of Special Character

Within the broad frameworks set by the material palette zones a creative flexibility is to be encouraged so that distinctive and memorable spaces can be designed. Standards of materials and construction must be at least as high as those described in the standard palettes appropriate to zone in which space is located. The environment of spaces through the incorporation of the work of artists and craftworkers is encouraged as is the creative use of lighting and water. Standards of soft landscape work must be appropriate for a City Centre location using the Peace Gardens as a benchmark of quality. Trees in paving must be planted to SCC approved details and specification.

Materials

- Within Primary Zones only the highest standards of natural stone paving will be accepted. Designs should respect the palette of Pennine Sandstone footways and granite paving for vehicular areas. Wider use of granites for shared surfaces is encouraged. Detailing must be robust and simple with the use of pattern reserved for special circumstances only.
- Any bespoke street furniture must display the highest standards of craftsmanship and materials use and must be at least as high a standard as the SCC standard range. The furniture must be robust and not prone to skate board damage.
- Public Art must display the highest standards of craftsmanship and must be robust and able to withstand normal public interaction.

SHEFFIELD CITY CENTRE

Urban Design Compendium

PART 4 Introduction to Quarter Specific Guidance

This part of the document analyses each of the city centre quarters and the extent of development or conservation which should be considered for each.

Character

An assessment of the character and quality of each quarter has been undertaken. This work draws on the Characterisation Study undertaken by the Architectural History Practice and commissioned by English Heritage, for Sheffield City Council.

An urban design appraisal identified important features in each quarter such as the topography, key streets, buildings and public spaces. It includes descriptions of their character, architecture and public realm, as well as the materials used in the buildings, streets and spaces. This appraisal is supported by a photographic survey and an analysis diagram.

Influences

The impacts that the range of projects and strategies will have on the evolution of each quarter, and how they will influence the development potential within, has been considered.

Vision

An aspirational statement has been developed for each quarter, which describes scenarios for future use, form and character of the area. Comparator projects have been included to illustrate the standard of regeneration that Sheffield could achieve or surpass.

Design Principles

The visionary statement sets the scene for the establishment of guiding principles to influence future policy and development. The principles are not prescriptive, but are criteria to be used to encourage positive intervention within overall aims. The principles cover a number of issues - activities, scope for contemporary intervention, height and massing of new buildings, public space, materials, parking, access and the role of public art.

The City Centre Quarters

The Urban Design Compendium has defined eleven city centre quarters.

These quarters are based on those areas first described in the 1994 City Centre Strategy. This concept was later developed in the Masterplan which identified “a number of well defined districts”.

The city centre covers a large area of an incredible diversity. Each of the city centre quarters has its own unique history, urban form and land use patterns. Each quarter will also be affected to a varying degree by the influences of planning policy or major redevelopment projects.

Some quarters, such as the Heart of the City, have already seen the benefit of the sustained investment, commitment and energy of those dedicated to their regeneration. Other quarters, such as St. Vincent's, are in need of a new focus and direction to stimulate growth.

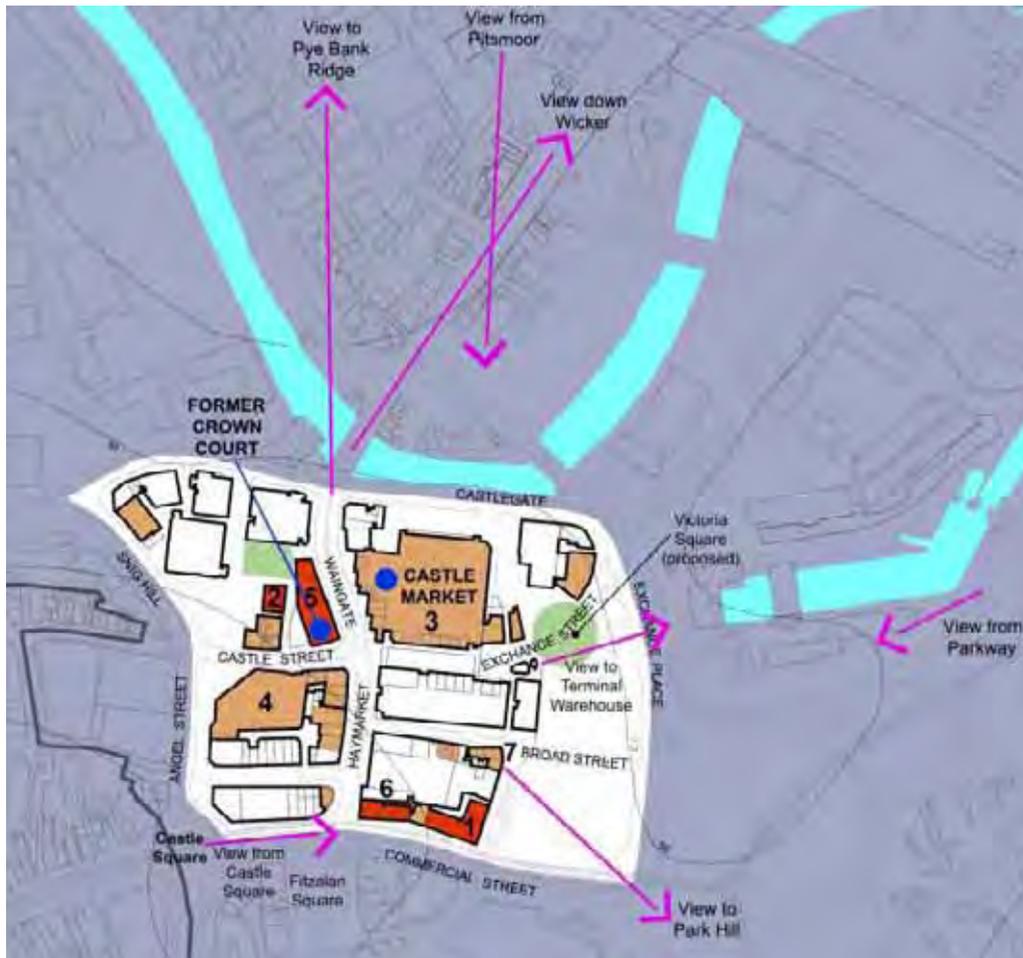
The quarter specific guidelines comprise the level of detailed focus required to create distinct neighbourhoods within the city centre, each with its own sense of place.

Through analysis of the individual quarters, the Compendium identifies the opportunities that lie within each, and sets out specific recommendations for development. By embracing the unique potential of each quarter, Sheffield will increase its diversity and foster a wide range of buildings, spaces and activity.



Castlegate





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	
 Landmarks	
 Listed Buildings	

Significant Buildings

- 1 Former Sheffield United Gas Light Co.
- 2 Old Police Station
- 3 Castle Market
- 4 Castle House
- 5 Former Crown Court
- 6 Yorkshire Bank /The Former Stock Exchange
- 7 Hen and Chickens Public House



Character

The Castlegate Quarter is one of the oldest areas of Sheffield: the site of the old Norman fortress and the main market area are part of the original settlement. Today there is little evidence of the original street pattern and the market survives in the form of the bustling Castle Market, with remnants of the historic castle buried beneath.

The quarter is to the north east of the city centre, sited on the steep southern slopes of the River Don, and offers views out to the northern hills and eastward to Parkhill.

The multi-storey structure of the 1960s Castle Market dominates the quarter, both as a landmark building and as the focus of its activity. Surrounding the indoor market are smaller shops and outdoor market stalls on the pedestrianised section of Exchange Street. Much of the area is rundown and has the general ambience and appearance you would expect from a budget shopping area. Decorative pedestrian bridges and porticos signal the entry points to the market precinct, however their general state of disrepair add to the cluttered appearance of the area.



View to Castle Market from Haymarket / Waingate



Castle Market external stalls



Castle Market internal stalls

The market and shopping thoroughfares, some with small offices located on the upper levels, to the south and west of the quarter serve a secondary commercial role to that of the Heart of the City. The retail activity within the quarter lends the streets a lively and animated atmosphere. The quarter was also home to the former Sheaf and Setts Markets, however these sites have now been demolished for major mixed use redevelopment. The Setts has been re-established as a street market in King Street and Exchange Street.

The quarter is an important gateway to the city centre from the northeast and the Castle Market a prominent feature in its elevated position. However, the market building presents its service areas to this aspect and fails to address the slope of the land in its design. This has removed any sense of connection to the River Don, which flows alongside its northern boundary, and inhibited key linkages to the emerging business, residential and recreational activity of Victoria Quays and the Riverside Quarter.

Haymarket and Waingate are historic thoroughfares into the city, connecting into the northern entry point of Lady's Bridge and the Wicker, and have historic associations for local government and the administration of justice. The quarter is well served by public transport with the supertram route running along Commercial Street on the southern edge and an adequate provision of bus stations at Waingate provide an important shopper function.

The built form of the Castlegate Quarter currently consists of high density developments which are largely used for retail. There is a small area of pub and business use to the west and the area in the east of the quarter is under demolition (the former Sheaf Market site). There is minimal housing in the quarter.

The age and style of the area's architecture varies. War time bombing and subsequent redevelopment have removed most of the earlier buildings, although several examples of fine Victorian and Edwardian architecture have survived, such as the historically significant Old Court House which is currently vacant.

Older buildings are typically red brick, with stone being used for public buildings, such as the early nineteenth century Old Court House. The quarter's more modern buildings are predominantly concrete and curtain walling. Building heights vary from 4-6 storeys in earlier buildings and 7-8 storeys in the more modern structures.

The environmental quality of the streets and spaces is poor and detracts from the character of the area. Paving surfaces are generally in bad condition, a variety of street furniture clutters the streetscape and bus stops and road signage cause obstacles for pedestrians. There is a lack of amenities such as seating or greenery which, when coupled with the litter in the streets, further detracts from the quarter's ambience.

There are no distinct character areas in the quarter.

The principal buildings in the Castlegate Quarter are:

- Former Sheffield United Gas Light Co.
- Old Police Station
- Castle Market
- Castle House
- Former Crown Court
- Yorkshire Bank /The Former Stock Exchange
- Hen and Chickens Public House



High Street Supertram



Old Courthouse



Castle Market viewed from Riverside

Influences

Castlegate has been designated within the UDP, for the following uses:

- the east and west sections of the quarter are identified as Business Areas.
- the remainder of the quarter is zoned for use as a Central Shopping Area, with parts of High Street, Haymarket and King Street comprising the Retail Core Area.

Revitalisation of the quarter has been the subject of a number of studies - the Masterplan, the earlier Castlegate Quarter Action Plan and a draft planning brief for the Broad Street and Sheaf Market sites prepared by EDAW. All have identified several key projects for revitalisation of this area:

- Primarily, the introduction of a greater mix of uses including office, hotel, leisure and shopping. This will be facilitated in the redevelopment of the existing Castle Market, the former Setts and Sheaf Markets sites and the Broad Street site at the Park Square roundabout.
- The completed Victoria Quays development and ongoing Exchange development at Riverside will also contribute to the revitalisation of the quarter by bringing new residents and office workers to the surrounding area.
- The creation of stronger pedestrian links into the Riverside Quarter and Victoria Quays, enabled with the completion of the Inner Relief Road and the downgrading of the roads along the northern and eastern edges of the quarter. Ultimately, the entire length of Exchange Street will be pedestrianised to complete this link.
- At the centre of the quarter a new square is proposed. This will serve as an entry to the market and provide a vibrant civic space with outdoor market stalls and smaller shops or cafes around its perimeter.

The Sheffield Masterplan Transport Strategy has nominated the existing bus stop at Haymarket and Waingate to become a bus mid-interchange as a part of its goal of dispersing good quality passenger facilities throughout the city centre.

The City Centre Living Strategy encourages housing within the proposed mixed use developments on the eastern edge of the quarter, as well as above existing shops. This would be subject to improvement of the environmental quality of the area.

Vision

Major developments will see significant changes to the Castlegate Quarter enhancing its gateway location, public realm and links with the riverside.

Castlegate will become an important point of connection. Haymarket and Waingate, as historic thoroughfares to medieval Sheffield, will be reinforced as principal pedestrian routes, their design and planting theme flowing into Lady's Bridge and the Wicker. This street will also become a transit focus with the new bus midi-interchange, into which the pedestrian links throughout the quarter will feed. The re-invention of Shude Hill and Pond Street as an important pedestrian route will provide strong connectivity with the Heart of the City.

Once pedestrianised, Exchange Street will be a vital link into the city centre, Riverside and Victoria Quays.

The Castle Market will be redeveloped to present a striking image at the city's gateway. The building will step down to meet its northern frontage at Castlegate via a series of terraces. Pedestrian connections will filter through the site, opening the quarter to the river. Rooftop courtyards and gardens will embrace the elevated position and afford views over the river to the distant hills.

Redevelopment of the Sheaf Market and Broad Street sites will continue the gateway along Exchange Street, forming a strong and vibrant eastern edge to the city centre and presenting a welcoming image at this entrance.

The current lack of architectural definition in the Castlegate Quarter will provide the licence for bold contemporary architecture and urban design. The quarter's remaining Victorian and Edwardian buildings will be rejuvenated and adapted to modern day use, so as to retain a connection with the area's past.

As a long term aspiration for the Castlegate Quarter, part of the River Sheaf will be deculverted and the city of Sheffield reconnected with the river after which it is named. Until this vision can be realised, a symbolic connection to the river will be developed through the quarter by integrating water in the public realm, or through artworks and interpretive signage.

Comparator Projects



Hay's Galleria, London

This retail and market space is covered to allow activity all year round. Being open at one end and with a transparent roof structure, it has the feeling of an outdoor space. Offices located in the floors above bring a mix of uses. Redeveloping Castle Market in this way will create the ambience of an open air market whilst providing necessary shelter from the elements.



St. Mary's Square, York

This informal outdoor space in the centre of York is busy with music, buskers and outdoor cafes. The buildings around its edges create a sense of enclosure, and include ground level shops with residential above. A point of connection between pedestrian routes to other parts of the city centre, the lively ambience of this space and its attractive seating and planting are conducive to stopping en route. This type of space would work well in Castlegate and help re-connect it to the rest of the city centre.

Principles

Degree of Intervention

The regeneration of Castlegate requires two levels of intervention - *Repair and Recovery* of heritage buildings and historic routes at the west of quarter and *Reinvention and Reconfiguration* at the east of the quarter, which will result from the major projects underway.

Architectural style and materials

Conserve and enhance remaining historic buildings in the quarter such as the former Crown Court, to serve as a reminder of its past. Where appropriate these buildings should be sensitively refurbished to allow them be used by modern businesses.

In the eastern part of the quarter encourage contemporary architectural styles to strengthen the relationship with the modern developments emerging on the riverside.

Redevelop the rear of the market to create a more attractive frontage to the river.

The building materials used in new developments adjacent to the remaining historic buildings should be sensitive to the character of that area. In the rest of the quarter modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Building form and height

Building heights will generally be 5/6 storeys, to reflect the existing urban form, minimise any negative impact on surrounding historic buildings and to protect the city skyline. Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Gateway and perimeter sites such as Haymarket/ Commercial Street, Park Square and Exchange Street, present a distinct built form to the roadway edge. Buildings could be constructed up to 8 storeys in height and with stronger, larger scale design details. At ground level, ensure that perimeter sites contribute positively to the public realm and street activity.

Public realm improvements and materials

Redesign Exchange Street as an attractive public space. This space could accommodate outdoor market activity with permanent sculptural steel canopies to create a sense of place at the central focus of the quarter.

Additional public spaces could be created within the quarter on existing surface car parking sites at Bridge Street or Broad Street. Parking could be consolidated within well designed multi-storey carparks to free land for new public spaces that link into the overall city centre public space network.

The Castlegate quarter will generally adhere to material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) with the exception of Castle Street and the area Haymarket/Waingate to the Exchange Street bound by Castle Street and the river which will adhere to the Primary Zone palette of materials and street furniture set out in these tables (refer diagram 3.3).

Reinforce pedestrian connections throughout the quarter to improve integration with the city centre and the riverside to ensure that the quarter benefits from its prominent location within the city centre.

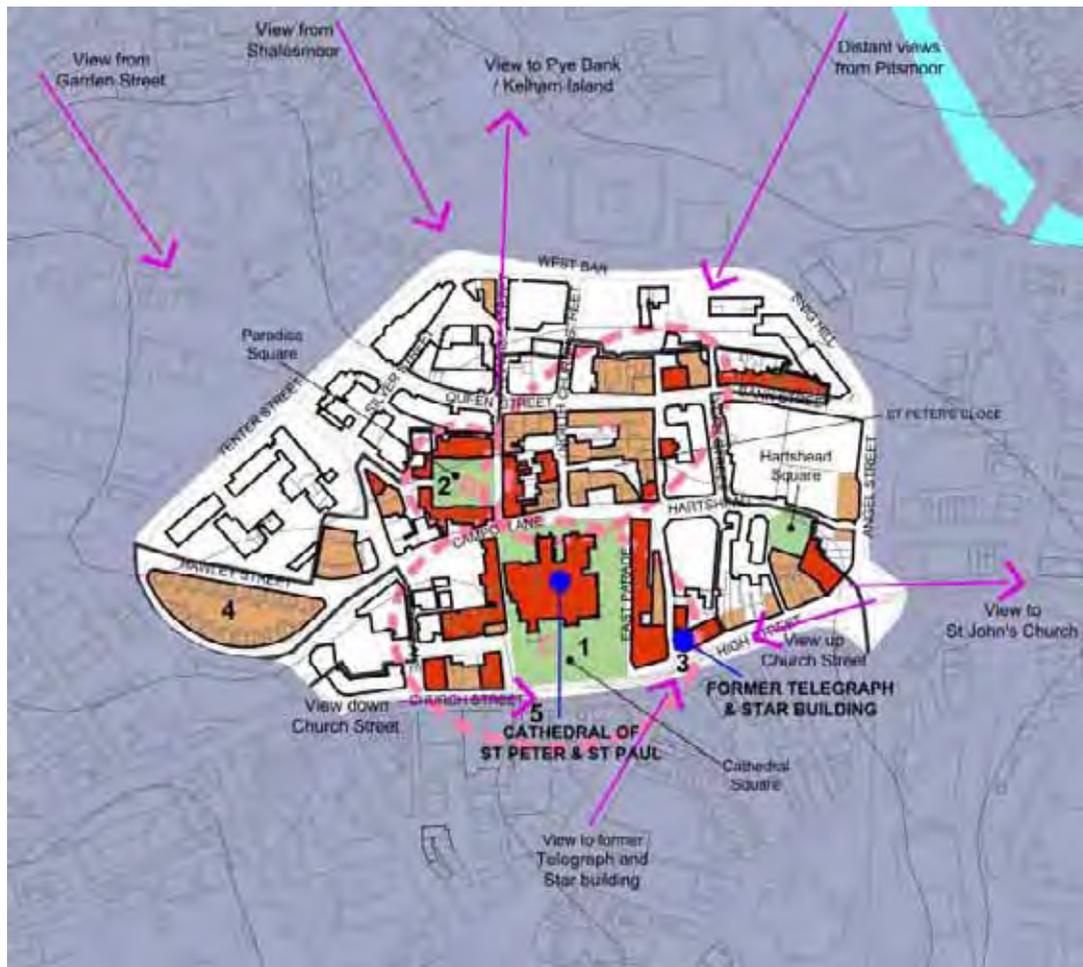
Establish tree planting on the peripheral streets to create a more attractive pedestrian environment.

Ensure that the image of the Castlegate Quarter is uplifted with sustained maintenance and cleaning regimes.

On completion of the northern section of the IRR, strong linkages should be created between Castlegate and Victoria Quays through the development of Victoria Square.

Cathedral





Quarter Analysis

KEY

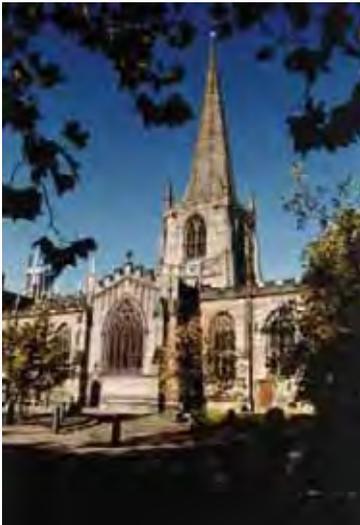
 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	 City Centre Conservation Area
 Listed Buildings	

- Significant Buildings
- 1 Cathedral Precinct
 - 2 Paradise Square
 - 3 Telegraph & Star Building
 - 4 Hawley Street & Townhead Municipal Housing
 - 5 Cutler's Hall

- Character Areas
- A Queen Street/Campo Lane
 - B Paradise Square
 - C Cathedral Precinct



East Parade



Cathedral of St. Peter & St. Paul



St. James Row

Character

The Cathedral Quarter is located in the northern part of the City Centre Conservation Area. Situated on a steep slope, dramatic views are afforded north over the Don Valley to Woodside and Parkwood Springs and east along High Street. Its focus is the historic core around the Cathedral of St. Peter and St. Paul.

The street pattern reflects the city's medieval origins and later development as a speculative residential area in the Georgian era. Originally Sheffield's middle class suburb, today the Cathedral Quarter is predominantly a business precinct for legal and property services. There is also some retail on the ground floor of converted Georgian and Victorian terraces.

However, since the development of the Law Courts at West Bar, many of the quarter's legal tenants have moved from the area to sites nearer the Courts. Paradise Street provides the main connecting route to the Law Courts but the quality of the environment requires improvement to strengthen this relationship.

The Cathedral Quarter has several distinct character areas:

A. *Queen Street and Campo Lane.* The streets adjoining Paradise Square such as North Church Street, St. Peter's Close and Fig Tree Lane contain a relatively intact group of 19th century buildings. An important feature of the area is the steeply sloping lanes, alleys and courtyards, many of which have early origins.

B. *Paradise Square.* Mainly given over to legal practices occupying Georgian townhouses, Paradise Square possesses great uniformity of style and character. As Sheffield's only complete Georgian Square it is an ensemble of great importance.

C. *The Cathedral Precinct.* Formerly a parish church, the intimate scale and character of the Cathedral and its surroundings is an unusual yet distinctive feature of the area's character. There are also groups of Victorian and Georgian buildings. The area contains some of Sheffield's finest buildings and is of great historical significance and sensitivity.

Also of significance are the municipal housing developments in Hawley Street/Townhead Street. Constructed in the 1890s, they are an early example of redevelopment after slum clearance.

Significant buildings of the Cathedral Quarter are:

- Cathedral Precinct;
- Paradise Square;
- Telegraph & Star Building;
- Hawley Street and Townhead Street Municipal Housing;
- Cutler's Hall.

There are also some modern buildings within the quarter in the form of larger scale office development located around the periphery of the quarter, namely along Tenter Street and West Bar. A recent development at Hartshead Square to the east of the quarter has seen the creation of office accommodation, a hotel and a new civic space at the termination of one of the quarter's key streets.

The quarter has a four principal open spaces: Cathedral Square, which is an attractive and well used space; the Georgian Paradise Square, which is now used for car parking; Castle Square and the new Hartshead Square.

The quarter is generally well maintained and offers an extremely attractive environment. Despite its central city location, the Cathedral Quarter has a quiet and peaceful atmosphere and feels distant from the activity of the surrounding quarters.



Cathedral of St. Peter & St. Paul



Cathedral Square and East Parade



High Street Supertram



Hartshead Square



Paradise Square



Cars dominate medieval street network

Car parking is a major problem in the area which significantly detracts from its quality and charm. In addition to the lost potential of Paradise Square, the cars reduce the permeability of the intriguing closes and lanes within the quarter.

The architecture of the quarter generally comprises a comfortable mix of older buildings adapted for reuse and modern commercial buildings. However, much of the peripheral postwar development, particularly along Tenter Street, has not respected the scale of character of the quarter. Traditional materials are mostly red brick with details of local gritstone used for ashlar work and Welsh slate as roofing.

While the major streets of the quarter are finished with simple tarmac and concrete curbing, the side streets offer a more interesting pedestrian experience with many of the original surfaces intact. This includes natural Yorkstone kerbs, slabs and sets on certain streets, lanes and in Paradise Square.

The quarter is in close proximity to the excellent transport links of the supertram and has good pedestrian, bus and cycle routes throughout.

Influences

The Cathedral Quarter has been designated within the UDP as follows:

- Predominantly a Business Area.
- Small area identified as a location for local Shopping with a small section of High Street as a part of the Retail Core of the Central Shopping Area.
- An area of Public Space at Paradise Square.
- Public Open Space at St. Peter and St. Paul's Cathedral.
- Small area at west of quarter zoned for Housing.

The Cathedral Quarter is part of the Sheffield City Centre Conservation Area, for which a statement of interest has been prepared, dated August 1996. The Cathedral Quarter was not an area of focus within the masterplan. A scoping study has been undertaken by the Council to identify the issues which will lead to the development of an Action Plan for the Cathedral Quarter. (Refer Scoping Study March 2002 (Draft) S.C.C. Development, Environment and Leisure).

The City Centre Living Strategy promotes the reintroduction of high quality residential accommodation into the quarter which will encourage a greater mix of activity.

As a pilot study emerging from the 'Connect Sheffield' work, the departments of the Council are undertaking a review of the street clutter in the Cathedral Quarter. This will prompt a rationalisation of signs, removal of redundant furniture and creation of clear pedestrian passage through the streets and spaces.

Vision

The layers of Sheffield's history and evolution will be revealed in the Cathedral Quarter, as a unique and special part of the city centre.

Like the Sheffield of medieval times, the focus of the quarter will be the Cathedral of St. Peter and St. Paul and its square – a vibrant space in the commercial heart of the city.

Exploring the historic interior of the quarter will reveal an intricate network of cobblestone laneways and the fine Georgian terraces of Paradise Square. With its streets and spaces given a pedestrian focus, the quarter will offer quiet refuge from the bustling city centre. Here it will really be possible to imagine what Sheffield must have been like 200 or even 400 years ago.

Amongst these carefully conserved historic buildings and streetscapes, a mix of professional, business and residential activities could be successfully achieved. Many of the Georgian terraces will be converted back to residential use, while others will accommodate small offices or businesses.

With its proximity to the Law Courts on West Bar, the quarter will continue to grow as the legal district of Sheffield. A new public space will be introduced on West Bar at the Law Courts to strengthen the relationship between the established legal quarter in Cathedral and the new legal quarter at Riverside.

The Cathedral Quarter will remain well preserved as the principal historic precinct of the city. However, well considered contemporary developments will occasionally add interest to the streetscapes.

The western and northern edges of the quarter, along Tenter Street and West Bar, will develop a dramatically different character to the rest of the quarter. Emerging as high profile office precincts, larger businesses will choose to relocate here, where expansion is possible outside the confines of the conservation precinct.

The principal thoroughfares through the quarter – Campo Lane, Bank Street and Paradise Street – will provide strong connections to West Bar and the river, the city centre and Castlegate. In time, Cathedral will be transformed into a pedestrian enclave, assisted by the direct access to efficient bus and tram networks running through the quarter and along its periphery.

Within this environment, the life and activity of the quarter will prosper and it will be renowned for its eclectic array of small speciality shops, cafes or galleries. Residents and visitors alike will be attracted to this unique environment.

Comparator Projects



National Gallery of Ireland, Dublin

Sitting within a Georgian streetscape, this highly contemporary building achieves a balance between design innovation and respect of its context to produce a striking result. The façade treatment, openings and materials are dramatically different to those of this historic streetscape, however its elegant design carefully responds to the scale of the existing buildings and their relationship with the street. This example shows how a contemporary intervention could be introduced into the Cathedral Quarter without having a negative impact on its historic character.



Grainger Town, Newcastle

Grainger Town has been revitalised through the careful restoration of its historic buildings and the reintroduction of mixed uses. Adding life and activity to the streets are co-ordinated public realm upgrades and improved access for pedestrians and cyclists. Although larger in scale than the Cathedral Quarter, Grainger Town provides a good example of how historic buildings can be adaptively re-used to create an environment of distinct character and charm.

Principles

Degree of Intervention

The revitalisation of the Cathedral Quarter should generally follow a programme of *Conservation*. Sensitively designed new developments, where appropriate, will allow the quarter to adapt to market demand while retaining its unique historic character. This will be achieved through close adherence to established conservation controls.

Activity

Encourage restaurants, cafes and bars that will complement existing city centre facilities and provide for the existing building and increasing residential population in the area.

Architectural style and materials

Acceptable proposals for new buildings will offer extremely well considered designs which are of a form, scale, proportion and style complementary to the existing urban fabric.

Reinforce and express the historic street pattern and topography in new buildings. In some instances curved facades may be appropriate or, on sloping streets, a stepped terraced building form. Building facades should present a solid form to the street to continue the historic sense of enclosure.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

In the distinct character areas of the quarter building materials should be sensitive to the character of that area with the use of red brick and stone encouraged. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Shop fronts should be sensitively designed and of high quality to reflect the historic context of both individual buildings and the overall character of the area.

Building form and height

New buildings must show sensitivity to their context and be in scale with the surrounding building height. In the Georgian heart of the quarter, this will be 3-4 storeys, with scope for 4-5 storeys to create corner features. Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

West Bar and Tenter Street can accommodate greater building heights as these streets are gateways into the city. New buildings could reflect the height of existing structures (up to 13 storeys) however, they must provide a transitional form to the lower scale of the Cathedral Quarter. New development on these sites must have no impact upon adjacent heritage sites, nor inhibit views from the quarter across the valley.

Views to and from the Cathedral should be protected to reinforce its position as an important city centre landmark.

Public realm improvements and materials

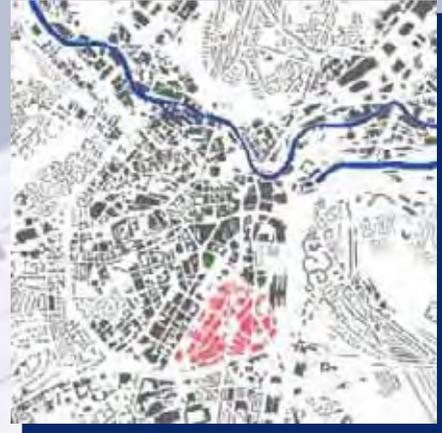
Enable a program of public art works in the form of small scale, detailed elements to be included in paving trails, signage or street furniture, responding to the historic or religious context of the quarter.

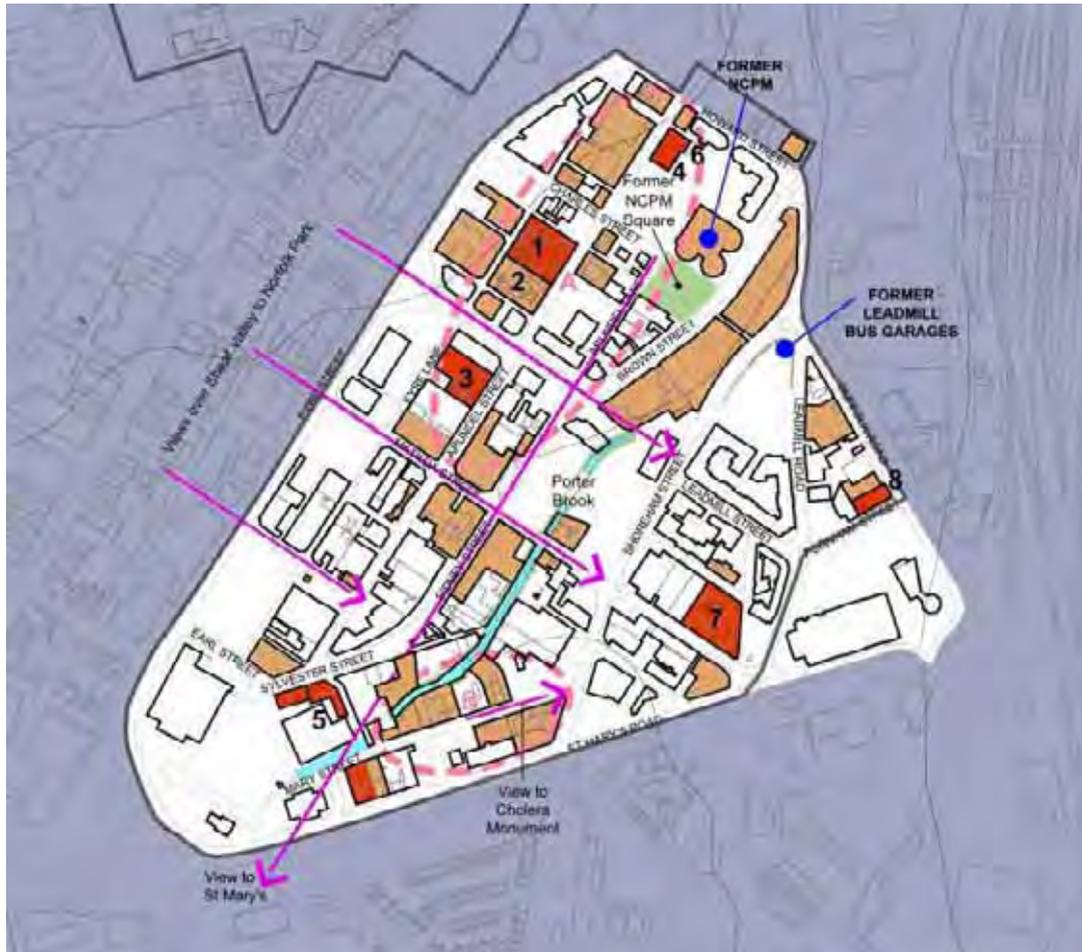
As part of the lighting strategy for the city centre, pedestrian routes and public spaces should be illuminated to enhance key sites and create a secure night time environment.

The Cathedral quarter will generally adhere to material palette and street furniture suite for Primary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) with the exception of the area between Queen Street and West Bar which will adhere to the Secondary Zone palette of materials and street furniture set out in these tables (refer diagram 3.3).

Develop a strategy for rationalising and reducing car access and parking. Ultimately, limit or remove cars from lanes, closes and squares to reinforce the medieval character of the quarter. As a priority, commence this project with the reduction or removal of cars from Paradise Square which has the potential to become a focus of the Georgian heart of the quarter. Active ground floor uses such as cafes could take advantage of the south facing side of the square.

Cultural Industries Quarter





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Listed Buildings	 Character Areas
 City Centre Conservation Area	

← Views
● Landmarks

- Significant Buildings
1. The Butcher's Wheel
 2. Stirling works
 3. 92 & 92a Arundel Street
 4. 113 Arundel Street
 5. Sylvester Works
 6. Venture Works
 7. Truro Works
 8. Columbia Place

- Character Areas
- A Arundel Street
B Mary Street



Character

The CIQ lies on the western side of the Sheaf Valley and slopes from north to east along the course of the culverted River Sheaf. The quarter developed as an industrial location in the 18th and 19th centuries. At its peak in the late 19th and early 20th centuries, the area comprised tightly developed industrial workshops with residential areas for the skilled metal workers. The early 20th century saw the incorporation of larger industrial developments into this tight urban form. Slum clearance in the 1960s resulted in the demolition of much of the traditional Victorian industrial character and many of the cleared sites still remain vacant.

Despite this large scale clearance, the quarter's industrial origin is illustrated by the presence of the original grid pattern which remains largely intact (with the exception of the Eyre Street, Furnival Square and Arundel Gate interventions). There are also clusters of significant industrial buildings dating from the early 19th century concentrated at Arundel Street, Matilda Street, Sylvester Street and Mary Street.



Refurbishment of industrial buildings.



Opportunit to reuse under utilised industrial buildings.

The quarter as it exists today is still partially severed from the rest of the city centre by the post-war road network. However, the northern part of the quarter has a strong relationship with Sheffield Hallam University and includes many university buildings. The new Science Park and the Showroom cultural complex consisting of a cinema, bar and restaurant are also located in the northern section of the quarter. The remaining industrial areas to the south are effectively landlocked by the dual carriageways.

The area has been subject to a number of regeneration projects since the decline of the traditional industries in the 1980s. These projects aim to establish the quarter as prime location for cultural industries and reintegrate the area into the city centre. Major initiatives which have helped established this identity include the Red Tape Studios, the Sheffield Science Park, the Workstation, the Showroom and the principally residential complex at the Leadmill Triangle.

Regeneration has taken the form of refurbishment or conversion of old industrial works and striking modern interventions such as the (former) NCPM, Persistence Works and the Site Gallery. Together with the Showroom complex, these developments are establishing Paternoster Row and Brown Street as the axis for recreational and cultural activity.

Building heights in the CIQ generally range from single storey workshops to 3-4 storey Victorian factories with modern buildings generally respecting this height.

The initial impression of the public realm within this quarter is that it appears run down as a result of the prevailing light industry. With the exception of Paternoster Row, streetscapes are finished with asphalt, tarmac paving and concrete kerbs. The area is devoid of street furniture aside from basic street lighting. There is evidence that streetscape improvements are being incorporated at the new residential sites, the galleries and new businesses currently being developed in the area. There is also an improvement in quality in the areas surrounding Sheffield Hallam University with new paving materials such as perfecta paving, concrete blocks and some Tegulas. These public realm improvements and the pedestrian zones implemented at Charles Street and Hallam Square are important steps in the process of reconnecting the quarter to the rest of the city centre.

The significant buildings in the CIQ are:

- The Butcher's Wheel
- Stirling Works
- 92 & 92a Arundel Street
- 113 Arundel Street
- Sylvester Works
- Venture Works
- Truro Works
- Columbia Place

The distinct character areas in the CIQ are:

A. *Arundel Street* : comprising a group of historic works and small scale domestic buildings. The area is industrial in character with red brick buildings of similar scale developed on a regular grid street pattern

B. *Mary Street*: contains several unlisted 19th century red brick works buildings. Some buildings back on to the Porter Brook with many of the more interesting buildings hidden behind later street fronts.



Showroom Complex at Paternoster.



Red Tape Studios.



Republic Nightclub adaptive reuse of an industrial warehouse.



Modern intervention in industrial streetscape at Brown Street.

Influences

The Cultural Industries Quarter has been designated within the UDP as follows:

- Mainly a Fringe Industry and Business Area.
- The area to north of Quarter is a Business and Industry area.
- As an Area of Special Character at the north of the quarter, which has now acquired Conservation Area status.

The CIQ's evolution is currently being guided by a Quarter Action Plan. Many developments proposed within this document are currently completed or underway, including:

- New-build housing in the Matilda Street area which will re-populate the quarter and sustain mixed use developments within the area.
- Conversion of the former bus depot to mixed use development with a high student accommodation component to strengthen the relationship between the CIQ and Sheaf Valley Quarter.
- Improvement of the Railway Station, enabling Sheaf Square to be developed as major arrival space and gateway to the city. This development will improve the connectivity of the quarter with the rest of city centre and allow the creation of several new development sites.

The City Centre Living Strategy promotes further young people's/student housing, as well as live/work spaces and accommodation for childless workers. This will take the form of student schemes including those at Sterling Works, Dyson House, Exchange Works, Leadmill Bus Garage (part) and Columbia Works. Housing with businesses in the ground floor will be located at Sterling and Butcher Works, Leadmill Street and Matilda Lane.

Vision

The Cultural Industries Quarter will continue to develop its growing reputation as a thriving cultural enclave and will help to establish Sheffield as a regionally and nationally significant centre for knowledge and creativity, as envisaged in the CIQ Action Plan. The new cultural industries will blend with the retained traditional industries in the quarter to provide a dynamic juxtaposition between old and new Sheffield.

The completion of the premises for the Yorkshire ArtSpace Society through the development of Persistence Works, the UK's first purpose built artists' studio complex, have been contributing factors to the quarter's success. A range of internationally renowned events and animation activity, such as the lovebytes New Media Festival and the International Documentary Film Festival, is raising the profile of the CIQ and the creative drive of Sheffield. These activities will be showcased in the studios, galleries and venues orientated around the quarter's pedestrianised core at Paternoster/Brown Street and Arundel Street.

Land uses similar to that of the successful Leadmill Triangle will extend throughout the quarter culminating at the School of Drama and Music Technology with its in-house nightclub and theatre venue for showcasing new talent and hosting national and international theatre and music productions.

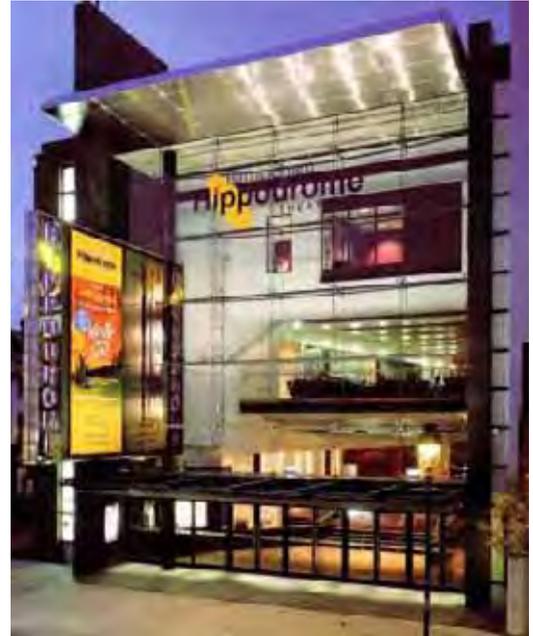
The quarter will become an integral part of the city with the completion of current proposals for Sheaf Square and Brown Street and the downgrading of the highways which currently sever the quarter from the rest of the city centre. Public realm improvements to these streets, particularly Eyre Street, will see a better quality of pedestrian experience and linkages with the surrounding retail and commercial areas. Eyre Street will offer a variety of office and retail space for ancillary uses supporting the cultural industries in the quarter, such as ticket offices and music shops. These uses will further integrate the quarter with the rest of the city, whilst enabling it to retain its distinctive character.

The industrial heritage of the city will be represented through the adaptive reuse of the historic built form, while public realm improvements will further enhance the importance of this industrial legacy. Street furniture and public art will pay homage to the quality craftsmanship that made Sheffield a household name and the re-naturalisation of the Porter Brook will celebrate the important role that the city waterways played in the city's evolution.

The continued integration of the quarter with Hallam University will help develop the institute's reputation as a national centre for technological and media studies and reinforce the city's image as a creativity and knowledge based community.

The expansion of the Cultural Industries Quarter will provide Sheffield with a contemporary industrial identity.

Comparator Project



The Hippodrome Theatre, Birmingham

The radical approach to the refurbishment of this building has helped to strengthen the city's cultural offer. The open and active frontage conveys a feeling of vibrancy which has resulted in a reversal of declining audience figures. Modern interventions of this scale and style would reinforce the innovative and creative architectural character that has been established through the construction of buildings such as Persistence Works. It would also contribute to the Cultural Industries Quarter's growing portfolio of high quality cultural and entertainment venues.

Principles

Degree of Intervention

The CIQ should be subject to a high level of - *Repair and Recovery* - which enhances the existing character and activity of the quarter, while embracing new development opportunities.

Architectural style and materials

Innovative and imaginative designs should be encouraged to create a unique architectural identity which reflects the contemporary character of the area. However, care should be taken to ensure the impact of these buildings is not diluted by over exploitation of modern architectural styles.

Vacant buildings should be reused, with care taken in the reuse of significant industrial buildings to restore authentic detailing. In sensitive character areas of Arundel Street and Mary Street, the restoration of existing buildings is preferred.

New development should maintain the existing straightforward and robust street pattern, a distinct part of the quarter's character.

Retained modern factory developments must be refurbished to a standard of design throughout the quarter to ensure they do not impact negatively on the innovative and high quality architectural character being promoted by developments such as the (former) NCPM and 'Persistence Works'.

All new or regeneration developments should be flexible and adaptable to ensure they can accommodate changing uses as the market dictates.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

In the distinct character areas of the quarter building materials should be sensitive to the character of that area with the use of red brick and stone encouraged. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Building form and height

Infill developments should respect the existing building line in order to retain the character of the quarter and enhance legibility. These will generally be 3-5 storeys. Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

There is some scope to introduce taller buildings at Howard Street and Granville Square, with the creation of interesting and attractive landmark buildings to improve the urban experience and legibility of the city. Along the Ring Road (St. Mary's Road) and the vehicular gateway of Eyre Street it may also be appropriate to rise above the general height of 5 storeys to provide enclosure to these wider streets, providing it can be demonstrated that there will be no detrimental impact on the CIQ core.

Activity

Mixing of uses within the quarter could offer a diverse range of activity. These uses would complement each other and not inhibit the development of the quarter as a vibrant cultural destination.

Public realm improvements and materials

Public realm improvements such as replacement of overpasses and underpasses with at grade crossings will improve connectivity and safety.

Street furniture within this quarter should be minimal in its layout but the design should reflect its artistic and innovative character.

Unique public art should be promoted within this quarter to reflect its contemporary identity. Local artists and designers within the quarter could be engaged in these projects. An innovative lighting strategy should be introduced to the CIQ to help promote its identity.

The CIQ will generally adhere to material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1).

Landscaping works should be introduced to re-naturalise the exposed areas of the Porter Brook at Brown Street to provide new public spaces and create an attractive juxtaposition to the industrial built form.



Reconnecting the city through public realm improvements at Charles Street.



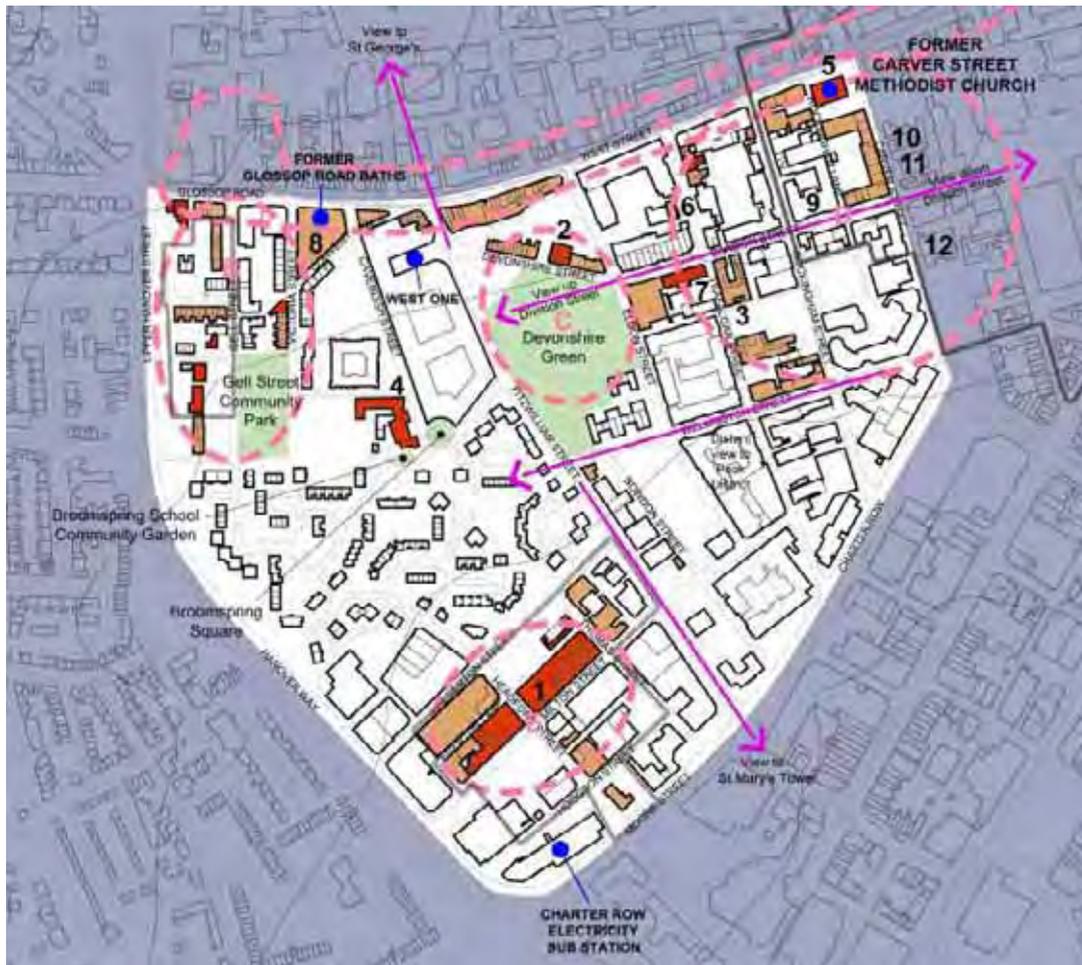
Neglected Porter Brook.



Juxtaposition between the old and new - adaptive reuse on the left and the Pop Museum.

Devonshire Quarter





Quarter Analysis

KEY

 Public Spaces	 Unlisted Buildings (Contribute to Area Character) Significant Buildings
 Listed Buildings	 Character Areas
 Landmarks	 Views

- Significant Buildings
- | | |
|---|--|
| 1 Taylor's Eye Witness, Beehive and Taylor's Ceylon Works | 8 Former Glossop Road Baths |
| 2 Wharncleffe Fireclay Works | 9 Former Fire Station |
| 3 Aberdeen Works, Trafalgar Works, Select and Kangaroo Works | 10 Workshops at No 23, Carver Street |
| 4 Springfield Board School | 11 National School at No 35, Carver Street |
| 5 Carver Street Methodist Chapel | 12 Church of St. Matthew |
| 6 Facade of Mount Zion Chapel | |
| 7 Original developments on Division Street, Canning and Gell Street | |

- Character Areas
- | |
|---|
| A West Street |
| B Wilkinon Street and Gell Street |
| C Devonshire Green |
| D Holly Street/Westfield Terrace/Trafalgar Street |
| E Milton Street |



Character

The Devonshire quarter is situated on the southern slopes of the high ridge separating the Don and Sheaf Valleys in the west of the city. The high ground location of the majority of the quarter affords it good views of the surrounding country to the north and south.

The Devonshire Quarter has been developed on a 19th century street grid and this offers a high degree of legibility and permeability.

The development of Glossop Road saw the area evolve as residential and commercial area based around the traditional light industries such as cutlery making. The typical built form reflected the early industrial uses of the area and consisted of terraced housing, factories and little mesters workshops.

The character of the quarter changed in the postwar period as slum clearances saw the demolition of the majority of its residential areas, leaving a patchwork of vacant sites amongst the failing industrial uses. However, some important clusters of buildings of industrial heritage remain, around Division Street, Milton Street and Trafalgar Street.

Division Street is now establishing itself as a predominately residential mixed use location with specialist shopping, leisure and entertainment facilities. Aberdeen Court on Division Street is good example of adaptive reuse of industrial buildings, now accommodating small independent commercial and retail units. There is also the modern mixed use development West One, an imposing building of 7-8 storeys which terminates the vista along Division Street.

Devonshire Green is the largest open space in the city centre. It is a community focus in the quarter with activities, particularly for young people, such as skateboarding and concerts. It is set to benefit from further enhancement.



Division Street.



Imposing mass of the West 1 development.

The distinct character areas within the Devonshire Quarter include:

A St. George's. This comprises the St. George's Church lecture theatre, the Jessop Hospital and the Mappin Building, which form a group of architecturally and historically significant buildings.

B Wilkinson Street and Gell Street

Wilkinson Street and Gell Street form a quiet nineteenth-century residential group which before Hanover Way was built joined with the streets to the west. Most of the houses are in private ownership, but the University of Sheffield uses some at the Glossop Road end as offices. It retains both its strong grid street layout, and an identifiable industrial vernacular, derived from the requirements of the metal trades.

C Devonshire Green

Devonshire Green is the largest public park in the city centre and is thus an important space. The row of shops and the Wharnccliffe Fireclay Works on Devonshire Street is an important early group of buildings, forming part of a group including the Fitzwilliam to Eldon Street section of West Street.

D Holly Street/Cambridge Street (overlap) to Westfield Terrace/Trafalgar Street

Although Holly Street and Cambridge Street fall into the Heart of the City Quarter, historically they form part of the development which started in the early nineteenth century and continued through the following decades. Although compromised by demolition, the area demonstrates the dense, mixed industrial and residential use which characterised much of central Sheffield from the mid-nineteenth to early-twentieth centuries.

E Milton Street

Milton Street, with the Eyewitness Works and the Beehive Works, has two outstanding examples of metal trades architecture. The area comprises an attractive group of Georgian and Victorian buildings, the earlier dwellings in particular set in reasonably sized grounds, behind brick or stone walls with trees behind.



Pedestrian street in residential area.



Residential character in the south of the quarter.



Skater Park in Devonshire Green.



Devonshire Green - community focus.



Visual connection along Division Street to civic buildings of the Heart of the City.

The Headford Grove area in the west of the quarter is a 1980s housing development which has its own garden suburb character, completely unlike any other in the city centre. This area consists of a network of cul-de-sacs and winding roads with tarmac and buff concrete paving and red concrete block road surfacing. There is an emphasis on shared surfaces, cycling and pedestrian priority due to the residential nature of the area. The street furniture is coordinated and simple and elements of soft landscaping are also incorporated into the streetscape.

The quality of the public realm within this quarter varies. Division Street has been subject to public realm improvements which aim to strengthen the connection between the quarter and the Heart of the City. Materials introduced include buff concrete pavers and road surfacing, blue resin and glass blocks and modern customised street lighting. Improvements have also been made to the public realm in the area surrounding West One, Royal Plaza on Fitzwilliam and Eldon Street. Unfortunately, at present these public realm improvements do not extend to the surrounding side streets of the quarter which generally consist of asphalt, tarmac paving and nondescript street lighting.

The mixed use developments and public realm improvements around Division Street have seen it become the focus of an 'urban village' which extends towards the Heart of the City and West Street through to St. George's Quarter.

The significant buildings in the Devonshire Quarter are:

- Taylor's Eye Witness, Beehive and Taylor's Ceylon Works;
- Wharcliffe Fireclay Works;
- Aberdeen Works, Trafalgar Works, Select and Kangaroo Works;
- Springfield Board School;
- Carver Street Methodist Chapel;
- Facade of Mount Zion Chapel;
- Original developments on Division Street, Canning and Gell Street;
- Former Glossop Road Baths;
- Former Fire Station;
- Workshops at No 23, Carver Street;
- National School at No 35, Carver Street;
- Church of St. Matthew.

Influences

Parts of the Devonshire Green Quarter have been designated within the Unitary Development Plan for the following:

- A Business Area.
- A Fringe Industry and Business area.
- A housing area with east of the quarter zoned as a Central Shopping Area with a City Centre Housing Priority Zone.
- Identified as an Area of Special Character.
- Part of the City Centre Conservation Area (to Rockingham Street).

New Housing

West One on Devonshire Green, Royal Plaza on West Street and other residential developments, with A3 ground floor uses are being built along West Street. These projects should encourage economic growth in the quarter and are setting a new standard for residential developments aimed at attracting and retaining long-term residents.

Action Plan

The Devonshire Quarter Action Plan offers finer grain guidance on a wide range of issues including:

- encouragement of a strong mixed tenure by integrating private, student and social housing in high quality developments;
- public realm improvements;
- improvement of the quality of public spaces and pedestrian connections through public realm and signage improvements;
- a strategy to balance the growth of an evening economy that does not detract from the development of the area as a speciality shopping destination;
- also, finding a balance between shopping and A3 uses;
- development of a Community Association.

Sheffield City Centre

part 4.4

Vision

The Devonshire Quarter will continue to develop as a vibrant urban village within Sheffield's city centre.

This village will provide a unique residential mixed use area to rival Manchester's Northern Quarter and reinforce Sheffield's position as a leading diverse and competitive European City.

City centre living will be encouraged in this quarter to create a dense and vibrant inner urban neighbourhood. This will be achieved with a 'living over shops' scheme on the main commercial streets and mixed tenure residential on the secondary streets.

The quarter will become an (inter)nationally renowned cultural entertainment destination with specialist retail outlets, a variety of high quality cafe/bars/restaurants and specialist music clubs offering a range of music genres from jazz to rock. All these elements will propel Sheffield's popularity as a destination for weekend visitors, with the Devonshire Quarter enjoying the success of the Temple Bar area of Dublin.

Division Street and West Street will be established as secondary branches of the city centre retail spine, providing small outlets for specialist and entrepreneurial commercial ventures. Small studio spaces will also be established to support the development of the city as a cultural industries destination.

These streets will be given a strong pedestrian focus, complemented by a range of public realm initiatives. The activities of the shops, cafes and bars will be encouraged to spill out onto the streets, creating a distinct 'urban village' feel. The Devonshire Quarter will host a variety of markets, stalls, local festivals and exhibitions.

These pedestrian links and the street activity will strengthen relationship of the Devonshire Quarter with the activity of Sheffield University, St. George's and the emerging neighbourhood at St. Vincent's.

Devonshire Green, the city's largest urban park, will be further developed. Consideration could ultimately be given to removing all car parking on the Green to create more landscaped space and provide an attractive setting for the West One development. The Green will be a functional park which will host small annual festivals and music events.

Outwith this 'urban village' the existing residential areas will be retained. The Milton Street industrial area at the south of the quarter will become a desired location for the remaining industrial companies within the city. The development of this area as a high quality industrial park has enabled the rationalisation and consolidation of industry in other areas, creating a more buoyant and competitive market.

Comparator Project



Lisson Gallery, London (Tony Fretton)

The Lisson Gallery provides an innovative mixed use design solution with residential accommodation included on the upper floors and gallery space below. The design is highly innovative and contemporary, yet remains consistent with the existing built form in terms of scale, proportion, doorway and window alignment and storey heights. A transparent frontage is presented at ground level to engage the activity of the street. Contemporary interventions of this nature would reinforce the Devonshire Quarter's emerging identity as a dynamic and distinctive urban area, which supports quality architecture and a range of activity.

Principles

Degree of Intervention

Devonshire should follow a programme of - *Repair and Recovery* - which enhances the existing 'urban village' character of the quarter, while embracing new opportunities and a variety of uses.

Architectural style and materials

The architectural style will be innovative and contemporary and make a positive contribution to the vibrancy of the quarter.

The regeneration and refurbishment of existing buildings should provide adaptable space to enable the evolution of the quarter over time.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

Buildings should address the street to maintain the compact 'urban village' feel of the quarter and provide natural surveillance to enhance safety on the street.

In the distinct character areas of the quarter building materials should be sensitive to the character of that area. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

New development and the regeneration of existing buildings at Glossop Road/West Street, St. Mary's Gate and Charter Square should reflect their gateway locations to ensure that a memorable arrival point is created.

Building form and height

New development should be innovative and contemporary in design but should respect, and make a positive contribution to, the scale and proportion of existing built form.

Buildings within this quarter should generally be of 2 –5 storeys to reflect the existing building height and enhance the impact of the quarter's landmark building - West One. Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Public realm improvements and materials

The public realm improvements of Division Street must be extended to the side streets to create a more coherent and attractive urban environment.

The Devonshire quarter will generally adhere to material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) with the exception of Division Street and the area from Trafalgar Street to Heart of the City bound by Division Street and Wellington Street which will adhere to the Primary Zone palette of materials and street furniture set out in these tables (refer diagram 3.3).

Creation of dual function spaces to accommodate occasional outdoor activities including local festivals, exhibitions and specialist markets should be encouraged.

Soft landscaping should be limited to Devonshire Green and Gell Street Park to maximise its urban park feel. This space should be informal in design to give the users a sense of ownership.

The possibility of implementing a unique street lighting scheme through the replication of the lamppost signage which marks the entrance to the quarter at Carver Street should be explored.

Car parking will be rationalised and multi-functional shared surface areas created wherever possible to help improve the pedestrian experience of the quarter. Parking will be provided in the form of underground/basement parking with some short stay on-street parking.

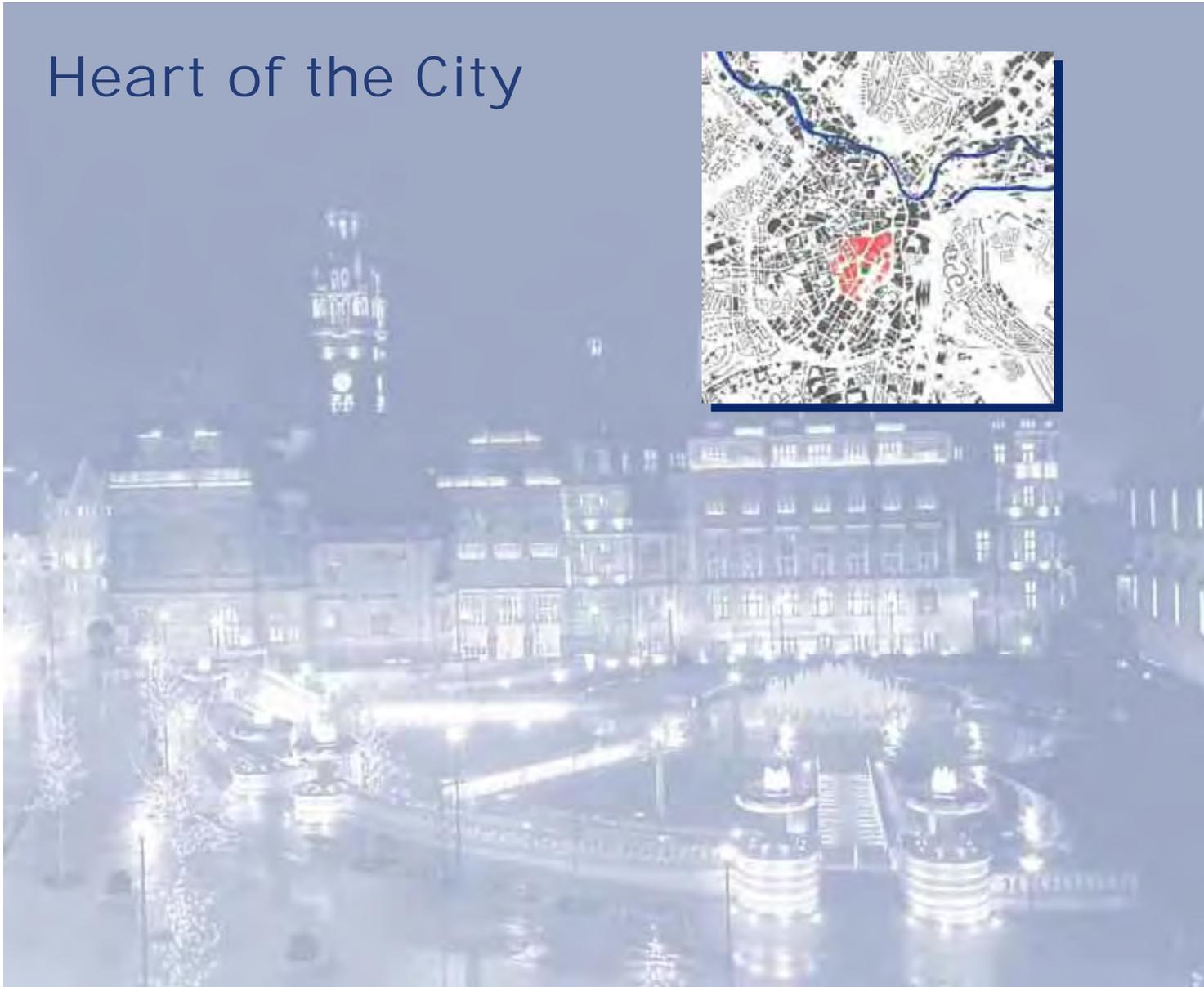
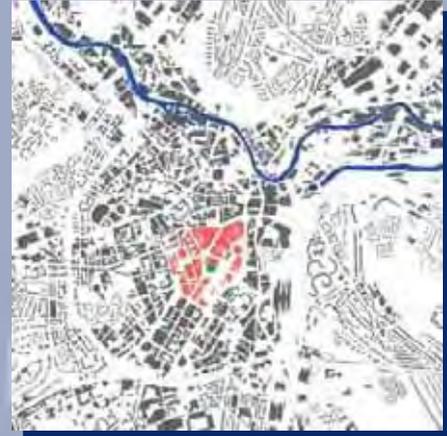


Soft landscaping to reduce the visual



Orientation of buildings to the street

Heart of the City





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	 City Centre Conservation Area
 Listed Buildings	

- Significant Buildings**
- 1 The Town Hall
 - 2 Cutler's Hall
 - 3 Leah's Yard
 - 4 The Cathedral Church of St. Marie
 - 5 City Hall
 - 6 Lyceum Theatre

- Character Areas**
- A Cathedral Precinct
 - B West Street
 - C Fargate
 - D Norfolk Row
 - E Holly Street/Westfield Terrace/Trafalgar Street
 - F Heart of the City
 - G Tudor Square



Peace Gardens (source; SCC)

Character

The Heart of the City is the civic, cultural and retail focus of Sheffield.

With the Town Hall and the spectacular Peace Gardens at its core, this quarter contains Sheffield's principal buildings and spaces.

The recent Heart of the City project has seen the transformation of the quarter with the realisation of the acclaimed Peace Gardens, Millennium Galleries and Winter Garden, which have won a number of awards.

The quarter's underlying street pattern is medieval in origin and this can be most clearly seen closer to the historic Cathedral Quarter, in the little laneways such as Chapel Walk or Black Swan Walk. The street pattern was formalised during the Victorian era with various schemes to widen the principal thoroughfares. With its collection of buildings bearing significance to all phases of Sheffield's development, the majority of the Heart of the City is included within the City Centre Conservation Area.

The important civic role of the quarter was established with the construction of the Town Hall in the 1890s. Today the Town Hall clock tower remains a focal point throughout the quarter and, together with the recently completed Peace Gardens, they form the civic heart of Sheffield. The 1930s City Hall on Barkers Pool also plays an important part in the civic function of the quarter.

As the cultural centre of Sheffield, the Heart of the City contains the city's principal art spaces - the Graves Art Gallery and the Millennium Galleries - both of which host permanent collections and temporary displays of regional and national significance. Set around Tudor Square are the Central Library and famous Crucible and Lyceum Theatres. Sheffield's identity as the centre of the metal trades is represented by the Cutlers' Hall on High Street, which is not only a building of architectural distinction, but also one that has had a great influence on this aspect of the city's history.

The presence of the metal trades in this quarter is also represented by Leah's Yard in Cambridge Street. Small workshops such as this, where lighter trade production was undertaken by little mesters, were at one time prevalent near the city centre.

Sheffield's most prestigious retail areas are located within the Heart of the City, including the very popular pedestrianised spaces of Fargate, Barker's Pool and Orchard Square. Within the quarter are also the retail anchors of the large department stores.

The Cathedral of St. Marie and its imposing spire are significant landmarks within the Heart of the City. The cathedral is the focus of a religious precinct centred around Norfolk Street and Norfolk Row which forms a distinct character area within the quarter.

The built form within the Heart of the City comprises an interesting mix of fine buildings, many of a grand civic scale. Generally building heights are 2-5 storeys with modern office or hotel blocks in the south of the quarter rising to 8-10 storeys. Architectural styles range from Victorian and Edwardian to the bold and innovative contemporary design of recent developments. A striking juxtaposition is created between the timber and glazed arches of the Winter Garden located in the context of the classic architecture of the Town Hall and Surrey Street.

The range of building materials used within the quarter reflects this diversity of style. Materials include natural stone, brick or concrete block in a variety of shades, colour render and modern cladding such as glass, steel and laminated timber. Victorian and Edwardian roof lines finished in slate and enlivened with dormers, turrets, chimneys and occasional copper domes, form a contrast to the flat roofs of modern buildings.

The Heart of the City contains a great variety of streetscapes, many with a distinct character, design and finish. Within the core of this quarter, a higher quality of streetscape design and materials are evident, particularly around key buildings and public spaces.



Town Hall Clock Tower



Roof of the Winter Garden (source: Sheffield 1).



Millennium Galleries.



Cit Hall.



Orchard Square.



Fargate.



Chapel Walk.

A 'Heart of the City palette' has been developed, comprising a suite of natural materials: sawn Pennine sandstone footways; granite kerbs and channel blocks and granite setts for carriageways and shared surfaces. Where granite setts are not appropriate for carriageways, then hot rolled asphalt including green/grey aggregate with clear binder is used. In clearly defined areas of special focus, such as the Peace Gardens, other natural materials are introduced into paved surfaces, in disciplined and controlled patterns to denote the significance of the space.

Green spaces within the quarter correlate with the major landmarks of the City Hall, the Town Hall and the Cathedral of St. Marie. Tudor Square is an important space, with trees and a grassed area, and forms a visual link to the Winter Gardens opposite.

The distinct character areas in the Heart of the City Quarter are:

A. The Cathedral Precinct. Formerly a parish church, the intimate scale and character of the Cathedral and its surroundings is an unusual yet distinctive feature of the area's character. There are also groups of Victorian and Georgian buildings. The area contains some of Sheffield's finest buildings and is of great historical significance and sensitivity.

B West Street. West Street is the dividing line between the Devonshire and St. George's quarters and is one of the historic streets of the city. Much of the nineteenth century development remains, and there are a number of good commercial blocks with shops on the ground floor and offices above.

C Fargate. This is one of Sheffield's most prestigious shopping streets and the busy thoroughfare at the top end is an important nodal point and a space with a civic quality. From Fargate there are important vistas to the landmark Telegraph and Star Building and St. Marie's Church.

D Norfolk Street, Norfolk Row and George Street. This is a particularly important area, containing a number of significant listed buildings such as the Cathedral Church of St. Marie and Victoria Hall Methodist Church. The streets and spaces in this area have a more intimate scale.

E Holly Street (Cambridge Street, Carver Street and Rockingham Street). This area continues the historic grid of the Devonshire Quarter and contains a range of significant historic buildings. The spire of St. Matthew's Church on Carver Street is an important landmark and there are impressive southerly views toward the surrounding hillsides.

F Heart of the City. The Town Hall and the adjoining Peace Gardens, the civic centre of the city, provide an important visual and mental point of reference. Adjacent to the Town Hall, Surrey Street possesses a very fine ensemble of Victorian buildings of great variety and interest. These buildings and the restored traditional paving complement the form, style and materials of the Town Hall.

G Tudor Square. This area comprises the city's principal theatres, art galleries and library, as well as the recently completed Winter Gardens and Millennium Galleries.

Significant buildings in the Heart of the City are:

- The Town Hall
- Cutlers Hall (which forms part of the character area of the Cathedral Precinct)
- Leah's Yard
- The Cathedral Church of St. Marie
- City Hall
- Lyceum Theatre



Peace Gardens.

Influences

The Heart of the City has been designated within the UDP for the following:

- Part of the Central Shopping Area and Central Area Zone for the Retail Core.
- Some of this quarter is located in the City Centre Conservation Area (refer Conservation-Part 2).

The Masterplan gave the most prominence to the Heart of the City, promoting major projects which would attract investment in the city centre and counteract its decline. These key projects are focused on reinforcing the quarter's significance as the civic, retail and cultural heart of Sheffield:

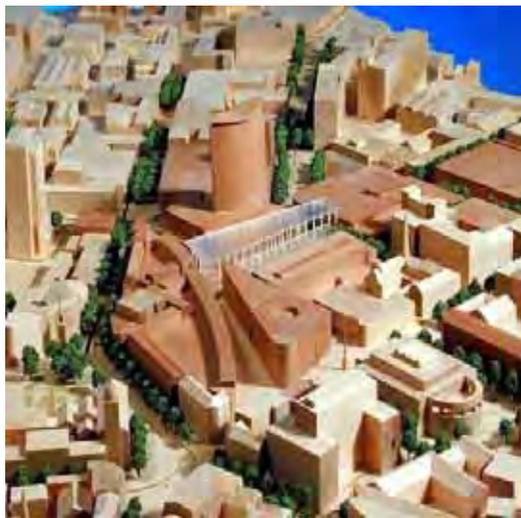
The Heart of the City

First conceived in 1994, the Heart of the City Project has seen a series of initiatives undertaken, or planned for the future, which have transformed the city centre:

- Peace Gardens, completed in 1999.
- Town Hall Square, completed in 1999.
- Millennium Galleries, completed 2001.
- Howden House, the new offices for Sheffield City Council, completed 2001.
- Winter Gardens, opened December 2002.
- Hallam Square, completed 2000, as a public space on the link from the station to the university.
- Demolition of the modern Town Hall annex – formerly known as the 'eggbox' - to create a redevelopment site for a hotel, due to commence construction in Autumn 2003.
- Office development around the proposed St. Paul's Square, to start in Autumn 2003.
- Millennium Place, a new public space between the Winter Gardens and new commercial offices, to start Autumn, 2003.
- Howard Street pedestrian enhancement to start November, 2003.
- Tudor Square completion, to start early 2004.

Sheffield City Centre

part 4.5



NRQ Model (BDP).



Cambridge Street (BDP).



Barkers Pool (BDP).



New Burgess Street (BDP).

The New Retail Quarter

The New Retail Quarter (NRQ) proposal responds to the need identified in the masterplan for consolidation and improvement of the city centre's retail function as an essential part of Sheffield's economic regeneration.

This proposal will see the comprehensive redevelopment of the shopping precinct located between Fargate and The Moor. A wide-ranging proposal for the area will open up strategic sites for major retail-led, mixed use development through the realignment of existing streets and city blocks.

Retail proposals include anchor department stores and a variety of smaller shops, complemented by cafes, bars and restaurants. Also proposed are city living apartments, a health and fitness club, a hotel tower at the top of Charter Row and a bus interchange at Charter Square.

Significant heritage buildings, such as Leah's Yard, and important historic streets will be incorporated as a part of the redevelopment scheme and rejuvenated.

The streets and spaces of the NRQ will be defined by strong and cohesive contemporary architectural forms and spaces linked by high quality public realm design. The new urban form will be cohesive, legible and permeable and serve to link the surrounding city centre districts. The focus of the NRQ will be The Square – a vibrant new public space, surrounded by active frontages.

In addition, the City Centre Living Strategy recommends that the upper floors of many commercial buildings on Fargate, Pinstone Street and High Street could be utilised for residential accommodation, now that the demand for secondary office space has declined. A mix of housing types could attract a wide ranging market from young professionals to the retired.

Sheffield City Council has developed Planning Guidance for the New Retail Quarter, outlining the strategy for the area and offering detailed guidelines for its development.



Barkers Pool (Source: SCC).



Leopold Street (Source: Sheffield 1).



Cit Hall Precincts (Source: Sheffield 1).



City Hall and Barkers Pool Precinct

City Hall

The City Hall is a fine civic building in the Heart of the City, but it is in need of refurbishment. It is proposed that the City Hall is upgraded to make it a major venue for concerts and events.

Leopold Street

The redevelopment of the historic former Education Department offices on Leopold Street will see a sensitive conversion of these historic buildings combined with contemporary additions. Set around landscaped courtyards, the scheme will create a mixture of uses including housing, a restaurant, a music venue, a hotel and a gym.

Carver Street/Holly Street

It is proposed that these two sites become a mixed use development, including offices and flats, with A1 and A3 uses in the ground floor to address the streets surrounding City Hall.

City Hall Precincts

Complementary to the upgrading of facilities and refurbishment of City Hall, it is proposed that the surrounding streets be developed into a high quality pedestrian precinct. Barkers Pool is to be redesigned as a civic forecourt to the City Hall and a connecting space from the NRQ to Fargate.

The redevelopment of the City Hall and Barkers Pool precinct will supplement the emerging cultural district around Tudor Square. The proximity of these two areas will promote increased pedestrian activity in the city, particularly during the evening. The new residential population in the adjacent developments will create a presence in the city centre and improve the sense of safety and security at night.

An outline scheme has been prepared by Building Design Partnership (BDP) to provide a high quality public realm which ties into Barker's Pool and develops an appropriate and attractive setting for the City Hall.

Tudor Square

Tudor Square is located in the cultural heart of Sheffield with galleries, theatres, the Central Library and now the Winter Garden fronting onto this space. The Masterplan promoted Tudor Square as a centre for evening activity in Sheffield, with restaurants, bars and cafes to support the cultural facilities.

Sheffield City Council have seized the opportunity to realise the potential of this space and have developed three options for its redesign. These have undergone a community consultation exercise, from which a preferred option has been developed, namely:

1. An adaptable square for hosting a variety of events, including big events, multiple stages with screens or weekly markets.
2. An animated interactive square, which would contain a number of feature elements including an outdoor gallery or animated installations with water, sound, light, or 3-dimensional objects.
3. Enhancements and upgrading to the existing square.

The space will be designed to flow from the Winter Garden opposite and enhance the significant buildings along its perimeter, establishing this part of the city centre as an important cultural precinct.

The highest quality materials would be used in the redesign of Tudor Square. This would extend into Norfolk Street which would be designed as a continuation of Upper Surrey Street in terms of the palette of materials. Lower Surrey Street would have its vehicular access downgraded to promote a physical and visual connection with the Winter Garden. The Square would also be upgraded to promote access to all and provide a stage for events and activity.

The Ruskin Gallery has now been redeveloped into a quality restaurant and continental café bar and this will complement and act as a catalyst for the initiatives in Tudor Square.

Vision

The wealth of activity and energy underpinning the range of projects within the Heart of the City will dramatically transform and revitalise Sheffield's city centre and reinforce its status as a leading city in the UK.

Development of the Heart of the City Project itself continues with the addition of a new hotel and function or conference suite. Two further public spaces will also be created - Millennium Place and St. Paul's Square. These will be surrounded by high quality shops and cafes, with prestige offices and apartments above.

With the completion of the NRQ, the range of shopping facilities provided in the city centre will be broadened to make Sheffield the most outstanding shopping destination in the region. The NRQ will see realigned city blocks defined by striking architecture. At the same time, the NRQ will prompt significant historic streetscapes to be upgraded, such as the Barkers Pool and City Hall precincts, and historic buildings to be given new life with innovative reuse schemes.

The NRQ will be the core of the city centre retail activity, catering for all markets, and the hub of a retail spine which extends into the secondary retail areas of the Moor and Castlegate.

The quarter's role as the cultural centre of Sheffield will also emerge very strongly. An enhanced Tudor Square will become the focus of a vibrant and thriving cultural district, linking into the adjacent theatres and galleries, the Winter Garden and the major events venue at City Hall. Public event spaces and a cafe terrace in Tudor Square will bring activity onto the street.

Each of the various locales within the Heart of the City will sustain a cluster of speciality shops, cafes, bars and restaurants, bringing a vibrant street life to the quarter during the day and well into the evening and night time. Grand urban squares, pocket parks and courtyards created throughout the quarter, developed as part of the public space network of the city, will provide the venues for this activity.

The quarter will also see the restoration of its significant historic buildings. Amongst the flurry of building activity within the quarter, special places which capture the history of the city, such as the Leopold Street group will be carefully preserved.

A series of coordinated public realm improvements will provide the vital visual and pedestrian connections between the distinct precincts of the Heart of the City. Important links to neighbouring city centre quarters and the railway station will also be fostered.

The backdrop and framework for the transformation of the quarter will be a new and cohesive urban form. This will be created through a consistency of architectural quality and public realm design seen throughout all of the major projects taking place within the quarter, serving to visually and spatially bind together its various enclaves. Sheffield's new architectural idiom - dynamic, contemporary and unique - evidenced throughout each of the city centre quarters, will be displayed in the grandest scale within the Heart of the City.

Principles

Degree of Intervention

A large part of the quarter is contained in the City Centre Conservation Area and new development should be introduced sensitively. Outwith this are the degree of intervention will be *Reinvention and Reconfiguration*.

Activity

Active frontages lining all major pedestrian routes will ensure engagement with the street, and increase the perception of safety throughout the city centre. Introduce a coordinated public art scheme as an integral component of public space and street design.

Encourage a residential population to the city centre with high quality apartments in new development schemes and on the upper levels of existing shops or offices.

Architectural style and materials

Within the conservation area, natural materials such as stone, brick or slate will be preferred, as set out in the Council's guidelines. The remainder of the quarter could support more contemporary influences. This could include traditional materials used in modern forms or more contemporary materials such as glass, stainless steel or coloured enamelled panels.

Ensure locally significant heritage sites and precincts, as identified within the City Centre Conservation Area, are conserved and enhanced in accordance with existing Council policy. Bring under-utilised historic buildings back to life with innovative adaptive reuse schemes.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

Building height

Within the Conservation Area, the height of new buildings should reflect the height of adjoining buildings which is mostly 2-5 stories. There may be scope for taller buildings to the south of the Conservation Area, providing it can be demonstrated that there will be no visual or amenity impact on the streetscape and that view corridors to important landmarks are not impeded. Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

There are many important city centre landmarks within the Conservation Area such as the Town Hall, City Hall and St. Marie's Cathedral, and view to these buildings should be protected.

Gateways

The Heart of the City comprises a number of important pedestrian gateway sites and spaces, such as Furnival Square, Charter Square and Division Street. There are also the important pedestrian links from the railway station to the city centre via Charles Street or Surrey Street. These should be designed to emphasise the sense of arrival into the city centre and enhance the pedestrian experience.

Furnival Square and Charter Square are also key vehicular gateways into the city centre which should be reflected in the built form and details of roadway and public realm design.

Public realm

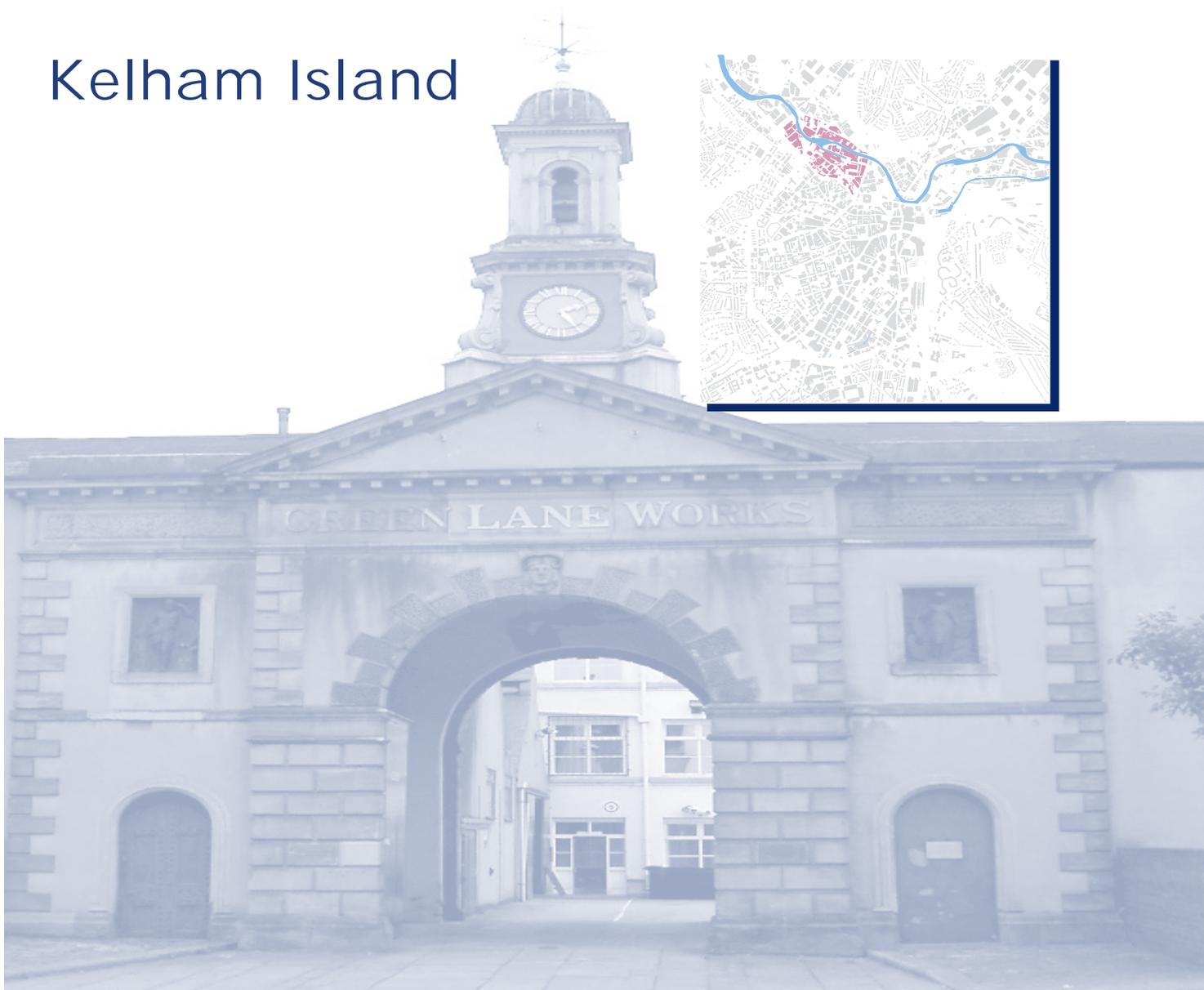
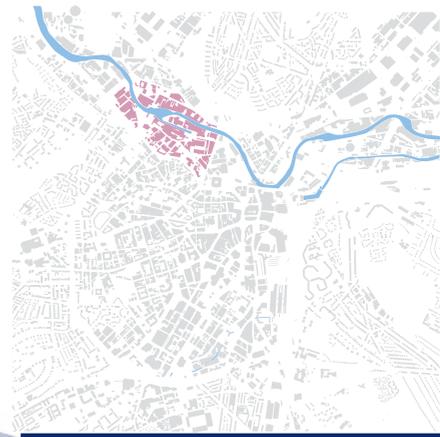
Build on existing public realm improvements, using the Peace Gardens as an exemplar project. The outstanding design quality and craftsmanship of the Peace Gardens should be used as a benchmark throughout the Heart of the City. The Heart of the City quarter will adhere to material palette and street furniture suite for Primary Zones as set out in table 5.1 and 5.2 respectively (part 5.1).

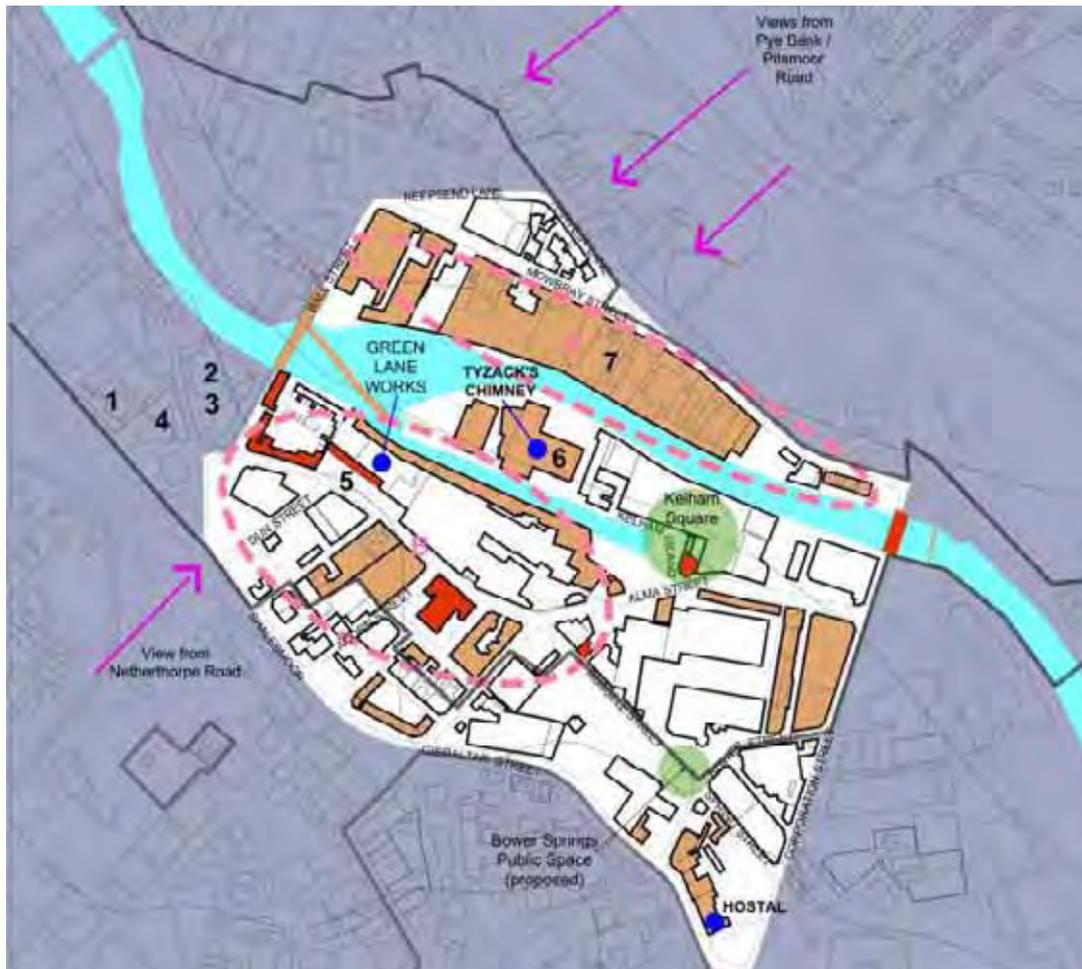
When creating a strong pedestrian connection to the station, the Heart of the City materials palette should be rolled out toward Sheaf Square to develop this route. The Heart of the City Project should incorporate a pedestrian link to the west of the Novotel.

Introduce an innovate lighting strategy to the Heart of the City, to extend the hours of use and highlight landmark buildings. Develop a consistent range of elegant lighting columns to illuminate all major pedestrian routes through the city and encourage imaginative lighting schemes for individual shop fronts.

Vehicular access into the Heart of the City should be minimised. Carparks should be of high quality and have positive pedestrian connection into the main retail area.

Kelham Island





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	 Kelham Island Conservation Area
 Listed Buildings	

- Significant Buildings**
- 1 Globe Works
 - 2 Cornish Works
 - 3 Wharcliffe Works
 - 4 Green Lane Works
 - 5 The Kelham Island Industrial Museum
 - 6 Mowbray Street works and workshops
 - 7 Brooklyn Works

- Character Areas**
- A Mowbray Street
 - B Green Lane



Green Lane Works.



View along Dun Street to Green Lane Works.



Activity within the built form turns its back on the river.

Character

Kelham Island is located north of the city centre and has developed around the River Don. The majority of this quarter is within the Kelham Island Conservation Area as it represents the most intact area of industrial heritage within the city.

The quarter evolved along the river as a consequence of the traditional metal trades which needed to locate near a water supply. These industrial origins are still evident in the medieval industrial street pattern focused around Green Lane and Alma Street. The area contains a number of Sheffield's significant early Victorian industrial developments such as the Green Lane Works and Globe Works.

Despite the area's strong historic relationship with the river there is little connection between the existing built form and the watercourse. Although many buildings are flush with the river's edge they are not oriented to engage with the riverside environment.

While the area contains many historic and listed buildings there is some evidence of more modern industrial developments within the quarter, particularly on the western edge. The older industrial buildings generally consist of brick with stone detailing and slate roofs. The more modern interventions use materials such as brick, metal cladding and asbestos with slate, asbestos or profile metal roofing. Building heights within the quarter vary between 2–5 storeys.

Whilst there is still a strong industrial presence within the quarter, it is currently developing as mixed use area. Several regeneration projects have been completed or are underway which will ensure the successful reinvention of the area. The quarter offers examples of effective re-use of industrial buildings at the Sheffield Design Studio at Ball Street and the residential conversion of Brooklyn Works.

Generally the public realm reflects the industrial nature of the area with minimal design elements or street furniture. Paved surfaces are predominately tarmac with some areas of cobblestones still exposed. There is a lack of open space in the area which would need to be rectified to improve amenity. Many vacant open spaces have been adopted for car parking.



Victorian industrial building on Ball Street.



Adaptive re-use of a historic site - the highly successful Brooklyn Works



Typical industrial streetscape.



Residential conversion with riverside frontage - Brooklyn Works

The distinct character areas within Kelham Island are:

A. *Mowbray Street*. This area contains an important group of operational works and workshops, originating from the mid to late 19th century, and centred on the metal trades.

B. *Kelham Island and Green Lane*. This is an important grouping of large scale works, comprising one of the last remaining cores of metal trades related buildings within the city. Contained within the Kelham Island Conservation Area, it retains much of its early industrial street pattern. Buildings often have grand frontage or gateway ranges, with courtyards surrounded by workshop and warehouses behind.

Significant Buildings

- 1 Globe Works
- 2 Cornish Works
- 3 Wharncliffe Works
- 4 Green Lane Works
- 5 The Kelham Island Industrial Museum
- 6 Mowbray Street works and workshops
- 7 Brooklyn Works

The significant buildings in Kelham Island are:

- Globe Works;
- Cornish Works;
- Wharncliffe Works;
- Green Lane Works;
- The Kelham Island Industrial Museum;
- Mowbray Street works and workshops;
- Brooklyn Works.

Influences

The completion of the Inner Relief Road will have an impact on the quarter as many of the urban design proposals promote mixed use development and will address the new road. This will improve Kelham Island's connectivity with the rest of the city and offer the opportunity to develop gateways signalling entry to the city of Sheffield through the use of landmark buildings.

The successful redevelopment of Riverside will act as a catalyst as it will increase the population and enhance the image of these industrial areas.

Kelham Island's status as a Conservation Area will have a direct effect on the quality and materials which can be used within the area.

Vision

Kelham Island will develop into a vibrant, mixed use neighbourhood which represents and celebrates its riverside location and the industrial heritage that made Sheffield an international brand.

The river will become the heart of the Kelham Island community, providing leisure, employment and educational facilities. This will focus around the activity of the Kelham Island Museum, which offers a valuable insight into industrial Sheffield.

The historic identity of the quarter will be enhanced with the refurbishment of the early Victorian industrial buildings and warehouses. Innovative adaptive reuse schemes will see these important buildings sensitively converted to mixed residential and commercial use.

Sitting alongside adapted historic buildings will be new mixed use developments of exemplary and innovative design standards. Throughout the quarter, active ground level uses such as shops or cafes will generate street life and reinforce a feeling of community in Kelham Island by providing places for people to meet and socialise.

The river will provide the opportunity for a variety of unique public spaces. This will include riverside parks, walkways and terraces which will connect to the Riverside Quarter and Victoria Quays. A new Kelham Island Park will also be created on the river by the weir. This will be an urban oasis and a haven for residents, visitors and wildlife.

A network of urban blocks will take advantage of the existing courtyard industrial buildings. These urban blocks will be connected by a series of riverside walkways and pedestrian footpaths which will culminate at Kelham Island Park.

Some of the larger metal working firms may choose to move to more modern premises outside the quarter. The remaining industry will eventually be consolidated on the western edge of the quarter, allowing for the evolution of a strong residential and mixed use neighbourhood in the east of the quarter. This will become integrated with the new mixed use development in the Riverside Quarter.

Smaller enterprises based on traditional skills may continue to operate alongside new uses. Some may benefit from moving closer to the Kelham Island Museum, where they can receive the direct custom of visitors. Following the lead of projects such as the Sheffield Design Studio, design based companies and creative industries will also be attracted to Kelham Island. Many will be able to establish their premises in adapted industrial buildings.

The creation of this urban community will help re-establish the River Don as a focus and functional part of the city. The exemplary reuse of industrial buildings will preserve the origins of the city, while the Kelham Island Quarter develops into a diverse and vibrant mixed use area in a delightful conservation area setting.

Comparator Project



The Calls, Leeds

Industrial warehouses on the river Aire have been converted to mixed use to create a vibrant urban quarter. The addition of balconies and terraces offered the opportunity to exploit the river by creating attractive outdoor areas for cafes, bars and restaurants or private garden spaces for residential units. Kelham Island has the potential to become a vibrant riverside quarter whilst preserving Sheffield's industrial heritage by exploiting the adaptability of its warehouses and its strong relationship with the river Don.

Principles

Degree of intervention

As the Kelham Island Quarter is mostly contained within a conservation area the degree of intervention recommended is Conservation.

Architectural style and materials

The reuse and regeneration of the existing historic built form will be encouraged to enhance the character and quality of this quarter.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

Buildings within the conservation area should match the traditional brick/stone/slate palette of natural materials in order to preserve the historic integrity of the quarter. Some high quality modern materials may be appropriate providing they are used sensitively.

Commercial or retail developments should follow strict shop front guidance. Modern transparent facades will only be permitted where there is no adverse impact on adjacent heritage places.

Building height

New developments must respect the scale, height, proportion and materials of the existing historic built form to ensure the retention of the quarter's distinctive character, in accordance with Sheffield City Council's Conservation Strategy. Generally, building heights will not exceed the existing maximum of 5 storeys.

Taller buildings may be developed along the completed IRR section to reinforce this gateway route. A transitional form to the 2-5 storey height of the remainder of the quarter is essential.

Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Public realm

The potential of the river as a place for recreation and exploration must be embraced. Develop the existing network of riverside connections with additional pathways, raised boardwalks (where buildings are constructed to the river bank) and pedestrian bridges. Continue the program of themed riverside trails and public artworks which reflect the river's role in Sheffield's history and evolution.

Connectivity between the Kelham Island Museum and the rest of the quarter should be improved through the establishment of a river walkway from Neepsend Road through to Nursery Street in Riverside.

The Kelham Island quarter will generally adhere to material palette and street furniture suite for Primary Zones as set out in table 5.1 and 5.2 respectively (part 5.1)



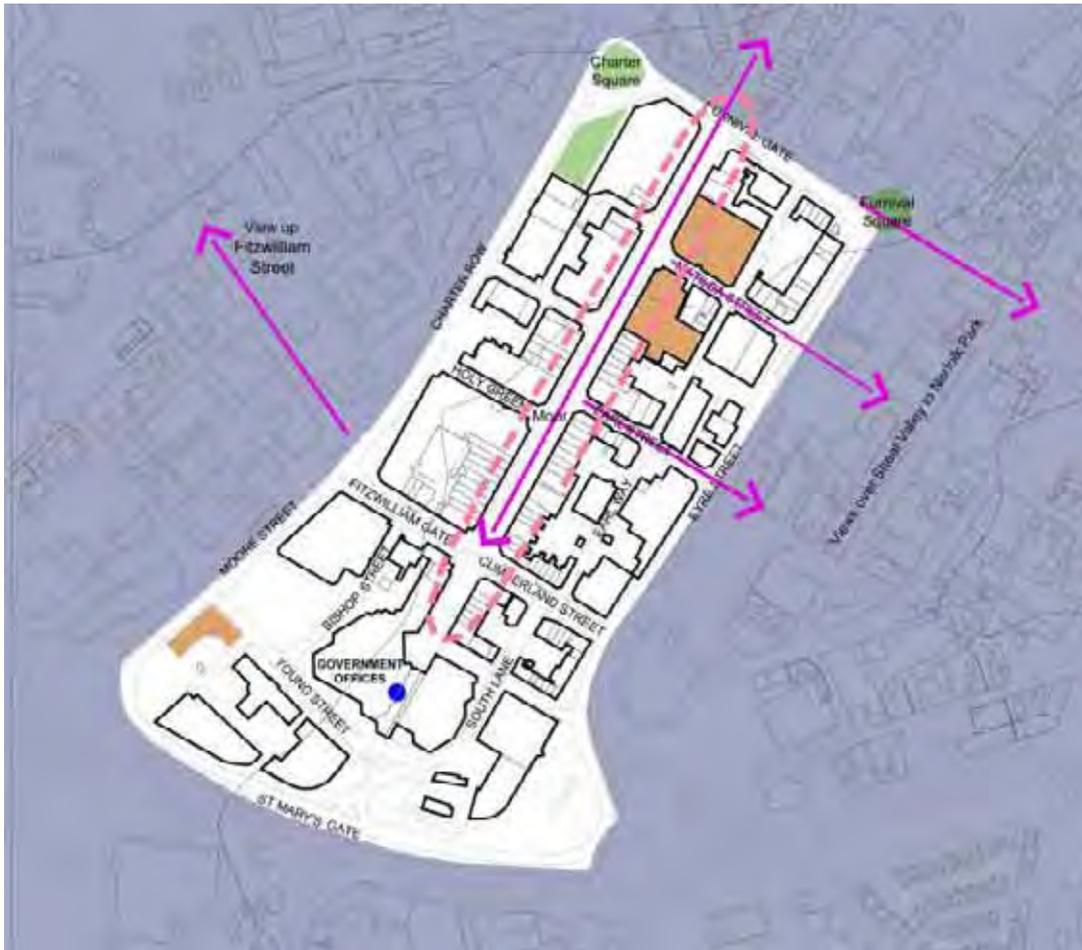
A weir and green space on the River Don.



Riverside greenspace at Ball Street offers potential for urban oasis.

The Moor





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	
 Landmarks	



Moor looking towards Government Buildings



Ere Street.



View to Town Hall.

Character

The Moor lies to the south west of the city centre on a gentle gradient which offers views north to the town centre and restricted views south to Sheaf Valley and the hills beyond.

The Moor began as a traditional main street (South Street) running south west and formed the main route to Chesterfield and London. Almost totally destroyed in the Second World War, the area was rebuilt during the post war years by over 50 landlords. The architecture reflects this period with the buildings dating from 1946 (Baldwin and Francis) to as late as 1969 (Sunwin House). The built form of the Moor is characterised by the Portland stone used within the facades, which offers a degree of unity through the consistent scale, form and materials used. The Moor was pedestrianised in 1979 at around the same time as the construction of the Government Offices at Moorfoot.

The 1960's street grid pattern is dominated by the post-war road network, which has fragmented much of Sheffield's city centre. This segregation is particularly evident at Charter Row and Eyre Street, which define the boundaries of the quarter. However, it does benefit from a strong axial link with the Heart of the City along the Moor.

The Moor is a primary retail area in Sheffield with Anchor stores such as Debenhams located at the Moorhead. It forms a strong retail spine creating important connection with the Heart of the City. This role is characterised by the permanent pavilions, which have been developed at Moorfoot to accommodate the bustling daily market stalls.

The connection between The Moor and the Heart of the City at present is undermined by the over complicated street furniture.

The side streets of the quarter offer the opportunity to reconnect it with the rest of the city centre, however, at present they are unattractive and lifeless due to the blank facades and poor lighting.

In addition to the quarter's retail provision, a small office sector is evident at Charter Row. This part of the quarter differs in character from the 3-4 building height of the post-war shopping precinct. The built form of Charter Row consists of modern concrete office blocks up to 8- 10 storeys in height and large building footprints.

In most parts of the quarter, The Moor is a relatively homogenous group of buildings. The buildings of note are the government offices at the south end of The Moor and in Young Street which forms a city wide landmark.

Despite the popularity of the area, the lack of permeability and legibility create a poor pedestrian environment during the day. The cluttered and unattractive public realm adds to the sense of insecurity created by the lack of pedestrian movement during the evening hours.

The design quality of the public realm varies throughout the quarter. The Moor suffers from the over complicated design of the streetscape rather than the poor quality of materials or surfaces. This over-design of the pedestrianised street reduces its permeability and detracts from the experience of the user.

The pedestrian connections within the quarter, and to other quarters, generally takes the form of unattractive concrete underpasses and overpasses which create an uninviting and intimidating pedestrian experience. This lack of permeability is compounded by the Government offices at the south of the quarter which completely severs the areas to the south-west from the city centre.

Overall, the Moor is a popular and well used quarter, but suffers from a lack of permeability and legibility caused by the peripheral roads and the poor layout of street furniture within the main pedestrian route - the Moor.



Pedestrian activity on the Moor.



Charter Row.



Overpass at Eire Street.



View down the Moor towards the Government building at Moorfoot.

Influences

The Moor has been designated by the Unitary Development Plan as part of a Central Shopping Area containing part of the retail core and public space corridor.

The Masterplan promotes the importance of the long-term development of the Moor, and recommends the following:

- Better connections with the Devonshire Quarter and the Cultural Industries Quarter through the ambitious redesign of Eyre Street and Charter Row.
- Mixed uses at the southern end of the Moor and some of the blocks fronting Eyre Street and Charter Row.
- Development of a distinctive mixed-use neighbourhood with a strong retail core.
- Potential for a commercial office centre.

The New Retail Quarter

This development will bring a bigger retail offer to the city which could have positive and negative impacts on The Moor. The anchor stores located in The Moor may be encouraged to relocate to the NRQ, thus weakening the primary retail offer the quarter currently enjoys. However, it will also serve to strengthen Sheffield's position as a retail centre, thereby attracting other retailers to the area. This will bring benefit to The Moor due to its location on the main retail spine.

The Transport Masterplan Strategy

Charter Row and Eyre Street are being downgraded as part of the transport strategy for the city centre. This will improve the pedestrian environment in Charter Row between St. Mary's Gate and Rockingham Street. The result will be increased accessibility to the multi-storey car parks and connectivity with the rest of the city centre. Provision for northbound buses will be introduced to encourage the use of public transport.

Phase 2 Charter Row will develop a bus gate at Charter Square to eliminate through traffic and create a new public space, improved pedestrian crossing facilities and a mid-interchange.

Similar public realm improvements will be implemented at the downgraded Eyre Street between St. Mary's Gate and Matilda Street.

Furnival Square will be radically redesigned to create a significant 'gateway' to the city centre which will be further enhanced by the removal of through traffic at Furnival Gate.

Connect Sheffield

A pilot project for introducing the variable message signing (V.M.S.) system is being introduced along Charter Row to inform drivers to the city centre of car parking availability in the Charter Row car parks. This will improve legibility within the area for drivers.



Current situation at Furnival Gate - bus traffic, pedestrian barriers and underpasses.

Vision

The Moor will remain part of the city centre retail area and will be consolidated by capitalising on the development of the neighbouring New Retail Quarter. It will become a key retail location which accommodates both primary retail units at Moorhead and secondary units with an all weather market at Moorfoot.

The Moor will be comprehensively redeveloped to complement the NRO and provide a greater critical mass for regeneration. It will achieve higher densities and a greater vitality in the area through a greater mix of uses, and the re-use of much vacant floor space at upper levels.

Taller buildings both at the Moorfoot and Charter Square will provide landmark structures that help re-establish legibility. A modern office quarter will be developed at Charter Row comprising tall contemporary pavilions offering modern linked offices to cater for a range of business needs. Similar office developments may be introduced at Eyre Street on a smaller scale. These developments will incorporate a range of activity at the ground floor to ensure that they create a vibrant streetscape environment. In conjunction with Tenter Street, Sheffield's competitive office market will be established at Charter Row and Eyre Street.

The redevelopment of Eyre Street and Charter Row will also compound Sheffield's growing reputation as a city of architectural design excellence. Both streets will be developed as the result of an international design competition which will see the creation of sculptural gateways to the city.

The downgrading of the road network, combined with the creation of a city gateway at Furnival Square and the improved public transport links, will enhance the accessibility of the retail core and consequently boost the local economy by attracting more users.

Multi-storey car parks will be developed in Eyre Street and Charter Row to enable the redevelopment of the connecting side streets. These streets will flourish as commercial 'lanes' with ancillary uses to complement the popular office developments. This will further improve accessibility by providing clear and safe connections to the south west of the city.

The Moor shopping precinct will celebrate Sheffield's transition from an industrial city to a successful, diverse and competitive city through the incorporation of an interpretive public art strategy. This will be implemented in conjunction with the upgrading of the existing public realm and will improve the quarter's axiality, legibility and connection to the Heart of the City and surrounding quarters.

Principles

Degree of Intervention

The Moor should follow a programme of - Reinvention and Reconfiguration - to enhance and strengthen its position as the city's secondary shopping street.

Activity

Diversification of uses should be encouraged in the area to ensure its long-term development, with retail units dominating the ground level to protect the identity of the quarter as an important shopping precinct.

Architectural style and materials

The existing built form along The Moor should be largely retained to celebrate the post-war redevelopment of the city, although modern interpretations will be encouraged providing they do not undermine the existing visual cohesion of the street. Within other parts of the quarter, where there is greater opportunity for redevelopment, the use of the characteristic Portland stone and designs in keeping with the post war prescription for the area will be encouraged.

Developments on Eyre Street and Charter Row should exploit their position as key routes into the city centre and be innovative in their design to help promote Sheffield's image as a modern and competitive city.

Ground floor facades of The Moor must have a high degree of transparency to provide a positive and interactive visual contribution to the street, as this is part of the city's main retail spine.

Building form and height

Both Charter Row and Eyre Street have been identified as gateway routes into the City. Charter Row may be able to accommodate higher density developments ranging from 7-10 storeys. The Milton House development (9 storeys) provides a reasonable level of enclosure to the street and is recommended that this should form the street average, with some punctuation at key corners.

Eyre Street like Charter Row is wider and may also be able to accommodate taller buildings without becoming too enclosed. Generally a height range of 5 to 8 storeys would be appropriate, providing it can be demonstrated that there will be no detrimental impact on the CIQ core.

There is also the opportunity to increase the density and massing of the relatively low 3 – 4 storey postwar shopping precinct, possibly by up to 2 storeys, although careful analysis will need to be carried out on enclosure and pedestrian comfort.

There is scope to introduce taller buildings at the Charter Square and along Furnival Gate to Furnival Square. There is also the opportunity to terminate the strong axis of the Moor adjacent to the Government Offices and form a tall building zone.

All new developments must undertake an analysis of the potential impacts on the attractive views out to 'green Sheffield', which must be retained and enhanced.

Development must not impinge on the axiality or uniformed enclosure of the streets to ensure views to the Town Hall and the Cathedral Church of St. Marie are reinforced.

Public realm improvements and materials

The existing streetscape will be transformed with a staged programme of public realm improvements, reclaiming the spatial qualities of the streets and celebrating the 'axial way' linking the Government Offices at Moorfoot to the town hall.

Pedestrian footways on the side streets should be widened and resurfaced to provide an accessible and safe pedestrian environment.

Street clutter should be removed and signage rationalised within The Moor shopping precinct.

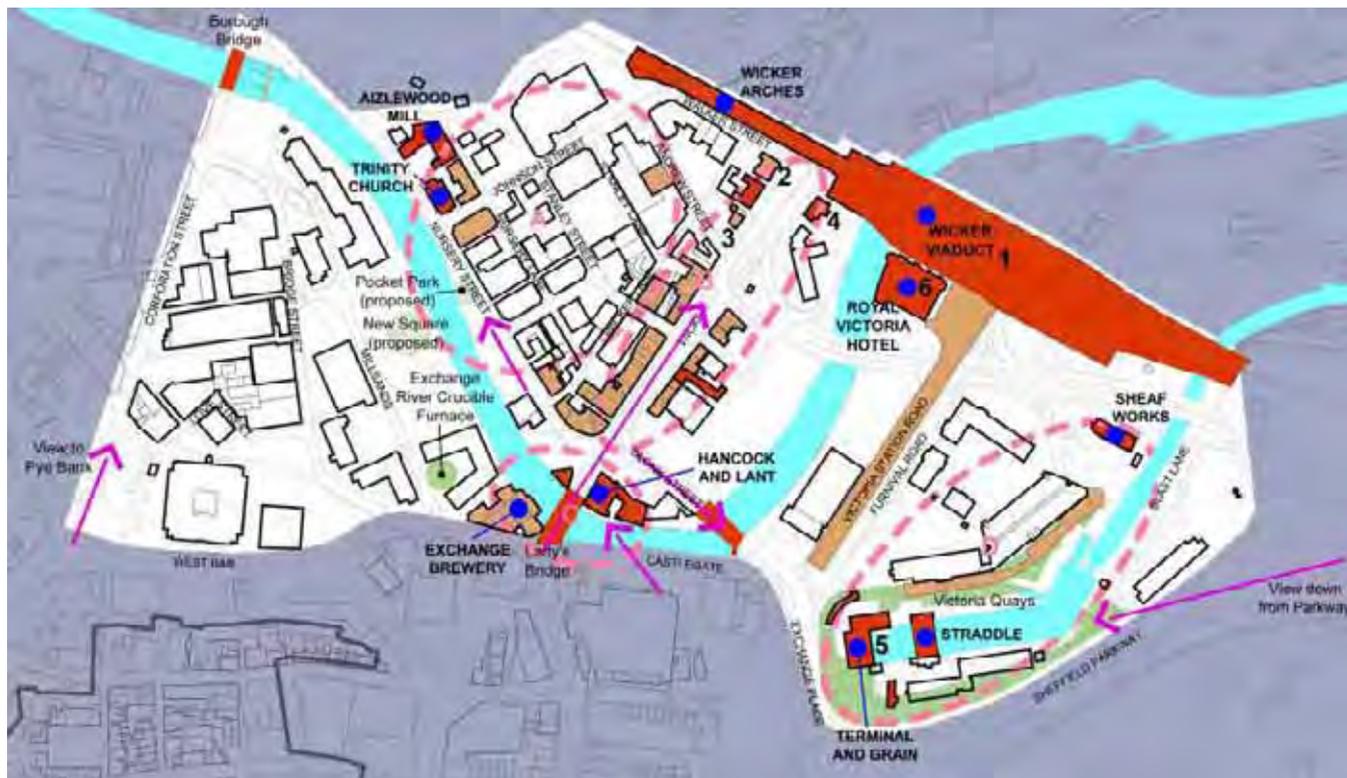
A tree lined boulevard should signal the entry to the centre from the west and links to Arundel Gate at Furnival Square should be developed to create an interpretative gateway.

Crossings should be reconfigured at the downgraded Eyre Street and Charter Row to increase permeability, create a more pleasant pedestrian environment and improve connectivity with the CIQ and Devonshire Quarter.

Public realm materials on The Moor should see the Heart of the City palette rolled out to provide continuity and cohesion on the main retail spine of the city centre. Eyre Street and Charter Row should generally adhere to the guidance for secondary streets as they provide key entry routes into the city centre.

Riverside





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	
 Listed Buildings	

Significant Buildings

- 1 The Wicker Arches and the railway viaduct
- 2 Station Hotel
- 3 Viaduct Public House
- 4 Former National Westminster Bank
- 5 Victoria Quays, including the Terminal and Grain Warehouse
- 6 Royal Victoria Hospital

Character Areas

- A Bridgehouse
- B Wicker
- C Lady's Bridge
- D Victorian Quays



View along river to The Exchange.



Adaptive reuse of industrial heritage.



Victoria Quay.

Character

Riverside is the largest of the city centre quarters. Its key feature, the River Don, enabled its development as a manufacturing hub during the 19th century. The quarter retains its industrial appearance and development is traditionally related to manufacturing or waterway traffic.

As the city extended northwards during the 19th century, the river was canalised and many large scale industrial buildings were constructed to the water's edge. In some instances this created fine landscapes of industrial riverside heritage which remain today. However, there are many developments which significantly detract from their riverside location, such as poorly sited multi-storey carparks.

Today, many buildings within the quarter show signs of neglect and the urban environment suffers from the heavy traffic carried by its main streets. There is a distinct lack of connection with the city centre due to the severance caused by major roads and the river, and the quarter feels remote as a result.

Whilst still predominantly industrial, new developments are taking shape in Riverside and its land uses are gradually becoming more diverse. An increasing number of residential, commercial and leisure activities are evident. As the precursor to this change, the recently completed Riverside Exchange has adopted the traditional form of the warehouse for a large-scale residential development.

Riverside has retained a number of fine heritage buildings, which are largely reminders of its industrial past. These include Aizlewood's Mill, which has now been successfully converted into offices, and the landmark structure of the Wicker arches which signal the arrival of the railway in the mid 19th century.

The character areas in the Riverside Quarter are:

A Bridgehouse. To the immediate west of the Wicker, this is a compact metal trades area with a number of industrial early 20th Century buildings.

B/C *Wicker and Lady's Bridge*. This is an ancient entry route into Sheffield and much of its significant 19th century architecture remains intact. The ongoing function of the Wicker as a key artery into the city centre has seen its general character negatively affected by growing levels of traffic.

D *Victoria Quays*. Located in the east of the quarter, this is a significant and intact group of 19th century warehouses, canal architecture and railway structures, including the listed Terminal Warehouse. New development, such as the Hilton Hotel, and marina facilities have seen this area converted to an attractive waterside space close to the city centre. Former railway viaducts are now used as cafes or shops and warehouses have been sensitively converted to offices and apartments. Victoria Quays is an example of how Sheffield's industrial heritage can be revived through adaptive reuse schemes which will help reconnect the city to the river.

Aside from the Wicker/Lady's Bridge, Riverside contains other important gateway routes into Sheffield city centre such as Corporation Street and Furnival Road, Sheffield Parkway and Nursery Street along the northern bank of the river.

Throughout the Riverside Quarter, tarmac paving and concrete kerbs prevail, and there is no street furniture with the exception of basic street lighting. On major roads, a proliferation of signage adds to the poor image of the area.

There are few open spaces within the quarter, most of which are sited along the riverbanks and canal. There are a number of open lot carparks on the river's edge, which is an ill-considered use of this land.

The River Don has suffered from its role in the evolution of industrial Sheffield, however, initiatives have been implemented to improve the water quality and its connectivity to the rest of the city.

Significant buildings in the Riverside Quarter are:

- The Wicker Arches and the railway viaduct
- Station Hotel
- Viaduct Public House
- Former National Westminster Bank
- Victoria Quays, including the Terminal and Grain Warehouse
- Royal Victoria Hotel



Connecting north to south - Mill Sands pedestrian bridge.



Iron Pedestrian bridge and Riverside Exchange.



Riverside Walkway s.



The Wicker.

Influences

The Riverside Quarter has been designated within the UDP as:

- A large Mixed-Use Area at the south east of the quarter with another on the north west.
- North east and south west designated as General Industry Areas.
- Central Area predominantly designated for fringe industry and business.
- Local shopping zone on Wicker.
- Large area at the north west is a Conservation Area.

Sections of the riverside area will be reconfigured due to the introduction of the northern section of the Inner Relief Road. The urban design proposals developed by Sheffield City Council promote mixed use development, addressing both the river and the new road, with landmark buildings signalling key gateways into the city centre.

The south bank of the river has begun its transformation with the development of mixed use office and residential blocks, set within a landscape framework, and promenade space addressing the river. Mill Sands has set the scene for new uses and associated linked public open space along the river corridor.

Mill Sands Phase 2 is under construction. A pedestrian footbridge promotes connection to the northern side of the river, where pocket parks and riverside terraces will allow recreational access to the water for fishing, canoeing etc.

Exchange Walk is proposed to provide a pedestrian link through the Cathedral quarter to the riverside, with active uses in the area behind the courthouse. Other pedestrian connections are facilitated in the IRR proposals, including a route along the river and to adjacent neighbourhoods, such as Burngreave. This will require a significant reshaping of the street pattern via assembly of a large development area.

The West Bar Triangle, bounded by West Bar, Bridge Street

and Corporation Street, is proposed for redevelopment as a residential and mixed use precinct. A new Courthouse Square could be incorporated in this development. This will complement the emerging legal precinct around the Courts and the activity of the adjoining Riverside Exchange.

Conversions of previous Riverside Works such as the Whitbread Brewery are ongoing, driven by the success of the residential and office developments in the area, and Kelham Island Museum is a popular destination in the Conservation Area.



Proposed Nurser Street linear park and riverside terrace
(Source: SCC).

Vision

The Riverside Quarter will be transformed to play a major role in economic regeneration of the city centre focused on the life and activity of the River Don. The celebration of the River Don corridor will be at the heart of its regeneration and the completion of the Inner Ring Road its catalyst for expansion and development.

The dramatic changes in the urban form of Riverside brought about by the IRR (Inner Relief Road) project will open many sites in the quarter to redevelopment opportunities. Major new traffic routes, in the form of carefully landscaped, tree lined boulevards, will offer high exposure to businesses choosing to locate in the area.

As the River Don winds through the Riverside Quarter, new developments will open onto its banks. Shops, cafes or bars at ground level will add vibrancy to the riverside. The water quality will continue to be improved as it is changed from an industrial resource to a centre of activity and recreation.

A network of paths, boardwalks and bridges along the river banks will connect cyclists and pedestrians through the northern part of the city centre, or allow the opportunity to quietly explore the river. Strong pedestrian connections will also link Riverside to the city centre, through Castle Market and the Cathedral Quarter.

Development in the quarter will be of the scale of the riverside works and warehouses, with more dominant forms along major traffic routes and at gateway sites. With the city's riverside heritage preserved in Kelham Island and Victoria Quays, the Riverside Quarter will welcome bold, innovative and contemporary architecture, creating a new and distinct identity for the area.

Behind the major roadways, the street pattern and built form of Riverside will become more intimate and human scale, linking into the historic urban forms and street patterns of this traditional industrial area. The downgraded Nursery Street, open only to local traffic, could become the focus of an urban village which feeds into the life and activity of the Riverside and the Wicker.

Major public realm improvements will enhance Riverside's role as the northern gateway to the city centre along the Wicker, Furnival Road and Corporation Street. A sense of arrival into the city will be conveyed through strong built form, planting or public art. Whilst these routes will carry a large amount of traffic, they will be designed to accommodate all forms of transport in a safe and attractive environment.

Riverside could become a popular destination for visitors to the city, with its quiet and attractive setting and close proximity to the city centre. The cluster of hotels in Riverside will support Sheffield's tourism industry as well as conference facilities centred in both Riverside and the Sheaf Valley.

Due to the scale and complexity of the Riverside Quarter, a comprehensive masterplan study will be undertaken, addressing in detail the potential for sensitive yet vibrant riverside development and the means by which each of the areas within the quarter can successfully evolve.

Comparator Project



The Riverside, York

The former Yorkshire Herald building has been adapted for use as a cinema in this riverside development. The activity of the cafes and bars spills out onto the boardwalks which create a series of public spaces along the riverside. A development such as this, which integrates both new and historic buildings and engages with its riverside location, would bring life and activity to the Riverside Quarter and a focus to the river.



Rotterdam Mixed Use

Located on the waterfront in Rotterdam, this new residential development includes a variety of complementary uses at ground level such as offices and a health club. Whilst highly contemporary in terms of its form and composition, it complements the adjacent C19th warehouse through the quality of its design. The significance of shipping in the area is referenced in the material finishes with the use of limber cladding. A bold and contemporary development such as this, with its mix of uses and innovative design, would add life to the Riverside Quarter.

Principles

Degree of intervention

Opportunities for dramatic change are emerging in the Riverside Quarter. The degree of intervention recommended is therefore *Reinvention and Reconfiguration*.

Activity

Foster a connection to street or riverside activity by encouraging active ground floor uses such as shops, cafes, bars or outdoor terraces. This will create a vibrant atmosphere in the quarter and offer Riverside residents or workers local shopping facilities and places to meet.

Along the riverfront, ensure that all new buildings address the river in their siting and design. This may include active ground floor frontages, outdoor terraces or public spaces which link into the riverside walkways. Set back new buildings from the river to continue the riverside walkways and promote traditional landscaping themes.

Architectural style and materials

Conserve and enhance significant heritage sites, such as the Wicker Arches and the Wicker Arches Works. Retain these buildings as a reference to the city's industrial or riverside heritage through sensitive, adaptive reuse schemes.

Conserve and enhance significant heritage sites, such as the Wicker Arches and the Wicker Arches Works. Retain these buildings as a reference to the city's industrial or riverside heritage through sensitive, adaptive reuse schemes.

The opportunities presented by the IRR project should be embraced to introduce a high quality of built form, enhance the public realm of the quarter, foster connection with the riverside environment and establish open spaces.

Outside areas of noted sensitivity, encourage high quality innovative architecture which 'pushes the boundaries' and assists in establishing a new identity for the Riverside Quarter.

Within areas or streetscapes of noted sensitivity, namely Victoria Quays, the Wicker and Lady's Bridge, new development should reflect the scale of neighbouring buildings.

In the character areas of the quarter building materials should be sensitive to the character of that area. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

Building form and height

The streets of the Riverside Quarter should be given a sense of enclosure and continuity with solid and strong built form presented to the street. The scale and form of the traditional works and warehouses could be adopted as the basis for new building in the Riverside Quarter to achieve this effect.

With the reconfiguration of existing urban form, a range of building heights will emerge in this quarter. Generally, buildings will be 2-6 storeys, however, taller buildings could be used to give definition to principal streets and gateways. Appropriate building height will be determined by the potential impact on the appearance or amenity of the surrounding area.

Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Public realm

The Riverside quarter will generally adhere to material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) except along the riverfront at Victoria Quay where the Primary Zone palette of materials and street furniture set out in these tables will apply (refer diagram 3.3).

Provide open space in residential projects in the form of private courtyards at the rear of the site, or balconies which will also assist in articulating the building facade. Where buildings are set back from the street, ensure that this space is well landscaped and not dominated by curtilage carparking.

Create a distinct identity for the principal gateway streets in the Riverside Quarter, such as the completed IRR section, Furnival Street, Corporation Street and the Wicker, with boulevard planting and carefully designed public realm details in either natural or manufactured materials.

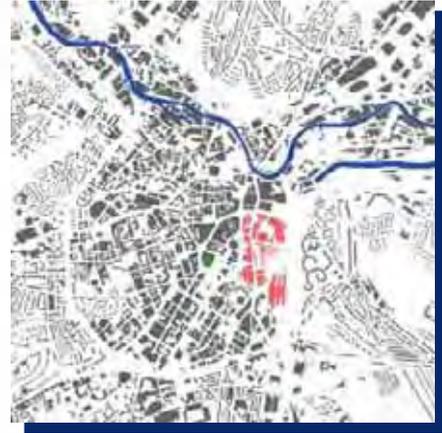
Effective connections for pedestrians and cyclists from Riverside to Victoria Quays, Castlegate and the Cathedral Quarter are vital. The IRR project will create opportunities to overcome the severance currently experienced by the heavy traffic of Castlegate, Bridge Street and West Bar. Strengthen these linkages through themed public realm designs.

Embrace the potential of the river as a place for recreation and exploration. Develop the existing network of riverside connections with additional pathways, raised boardwalks (where buildings are constructed to the river bank) and pedestrian bridges. Continue the program of themed riverside trails and public artworks which reflect the river's role in Sheffield's history and evolution.

Establish Nursery Street as a riverside boulevard, with a slow traffic environment enabled by the IRR completion. Reclaim this section of the riverbank as a linear park, to become a vital green space in the quarter.

Here, and elsewhere along the riverbank, foster the river's natural heritage with wilderness planting. In addition to this, encourage wildlife back to the river by initiating a program to improve the water quality.

Sheaf Valley





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Listed Buildings	 Character Areas
 Landmarks	 City Centre Conservation Area
 Views	

Significant Buildings

- 1 The Old Queen's Head Public House
- 2 The White Building
- 3 Head Post Office and statue of King Edward VII
- 4 Howard Hotel
- 5 Railway Station

Character Areas

- A Fitzalan Square



Character

The Sheaf Valley lies along the course of the now culverted Sheaf River, rising west from the valley floor. The quarter is bound on the eastern edge by the railway tracks, and the busy Arundel Gate to the west. The area looks across the railway to Parkhill, where the 1960s high rise flats form a landmark back drop.

The quarter developed as an industrial centre in the early 19th century, with timber yards and water powered saw mills situated along the river. Later the industry expanded to the metal trades and, up until the devastation of the quarter during the war, it was mainly comprised of factory buildings.

In the 1860s the Sheaf River was culverted to enable the construction of the Railway Station and the railway connection from Sheffield to London. As a result, Sheffield lost its connection with the river that had given the city its name. The course of the River Sheaf is now marked by the heavily trafficked Sheaf Street and the railway tracks running through the centre of the quarter.

Postwar reconstruction has seen the Sheaf Valley evolve with a greater diversity of land uses including large business, shopping and recreational developments such as the Adsett Centre, the Archways Shopping Centre and the striking Ponds Forge International Sports Centre, built in 1991 for the World Student Games.

The quarter is home to the Sheffield Hallam University, with its collection of buildings and small urban spaces centred around Pond Street and Sheaf Square. The university buildings are large scale and in some places create a hostile environment. However, the small pubs and open spaces in this vicinity generate pedestrian movement and activity.

Sheaf Valley is the transport hub of Sheffield's city centre and one of its principal gateways for both vehicles and pedestrians. Both the railway and bus stations are located in the quarter and the Howard Street link is a principal pedestrian route into the city centre.



Howard Street link into city centre.



Sheffield Hallam University.

Park Square, Sheaf Square and Granville Square are important vehicular arrival points into the city centre. Arundel Gate, Sheaf Street and Suffolk Road are key connections in the city centre's road network and major gateway routes. Vital pedestrian linkages are generated from the bus and railway stations to the city centre, around the university and up to Castle Market. However, the quality of the public realm presents an illegible and alienating environment. The heavy trafficked Sheaf Street divides the quarter while the traffic circulating through Sheaf Square creates a seemingly impenetrable barrier along the principal route from the station. Pedestrian movement is further inhibited by the disconnected series of crossing points and ill-placed barriers.

A contributing factor to the poor legibility of Sheaf Valley is the lack of cohesion in both the public realm and built form. The streets are wide and open and many of the buildings are large in scale and of a nondescript postwar style which generally fails to make a positive connection with the streetscape. The quarter is not composed of the tight street patterns and fine urban grain characteristic of many other parts of the city centre. As a result, most of its streets and spaces lack a sense enclosure and continuity.

The principal pedestrian thoroughfare of Howard Street comprises a number of isolated spaces of quality, including Hallam Square - recently completed as a part of the Heart of the City Project and now a busy gathering place for students - as well as pockets of soft landscaping. However, these spaces have been designed in isolation and their positive contribution to the quarter is undermined by the poor quality of the surrounding streetscapes.

Generally, building heights within Sheaf Valley range from two to four storeys. Taller buildings include the university tower of eight storeys and the ten storey Sheaf House, proposed for removal. Street surfaces vary from traditional tarmac around Fitzallan Square to man-made pavers and slabbing in the more modern areas near the university and Pond Street.

Several heritage buildings have been preserved, most notably the Railway Station which is a fine example of early 20th century railway architecture. A specific character area in the quarter is *Fitzallan Square* which has retained a collection of 19th and early 20th century buildings, including the listed Post Office and the White House. The quarter also contains some characteristic old pubs, including the Old Queen's Head Public House, circa 1475, and these are a focus for the life and activity of the university and the neighbouring CIQ.

The principal buildings in Sheaf Valley are:

- The Old Queen's Head public house;
- The White Building;
- Head Post Office and statue of King Edward VII;
- Howard Hotel;
- Railway Station.



Pond Street



Sheffield Hallam University



Railway Station.



Howard Street link.



Hallam Square.



Fitzallan Square.

Influences

The Sheaf Valley has been designated within the UDP as:

- A local Shopping Centre at the North West of the quarter;
- part of the green belt to the east and south of the quarter;
- Remaining area designated for Business Institution or Leisure.
- Small pocket designated for use as a Business Area

The masterplan outlined a number of key strategic projects within the Sheaf Valley which are vital in ensuring Sheffield's position as a leading UK city and underpinning its growth as a technology hub. These projects are of a scale and significance that will see the face of the quarter changed irrevocably.

e-campus

Located between the station and the university, the e-campus will accommodate IT related and knowledge based industries. The phased development of the site will allow the gradual relocation of the existing bus station.

Railway Station Gateway and the new transport hub

The Railway Station is proposed to be redeveloped and modernised. In conjunction with this project, sites around the station for redevelopment or transformation into quality public spaces will be unlocked and strong pedestrian connections created to link the station to the city centre.

The function of the existing bus station on Pond Street will eventually be replaced with smaller bus interchanges strategically spread throughout the city centre, as outlined in the Masterplan Transport Strategy.

Sheaf House and Dyson House are proposed for demolition or partial demolition and the site opened to create a station forecourt as a new civic space - Station Square.

Howard Street and Sheaf Square

Sheaf Square will be redesigned as the principal gateway to the city centre and Howard Street as the pedestrian spine linking the station to the city centre.

Pond Street

Significant retail and hotel developments are earmarked for the northern section Pond Street. To accompany these developments and the e-campus, the street is to receive a pedestrian upgrade.



RailwayStation Link (Koetter Kim).



Sheaf Square (SCC).



ecampus (Source: Sheffield 1).

Vision

The delivery of the key projects envisioned in the masterplan will see the Sheaf Valley become the technology and transportation hub of Sheffield. Through the combined strengths of the e-campus and the Sheffield Hallam University, as well as the link into the activity of the neighbouring Cultural Industries Quarter, the Sheaf Valley will become the focus of innovation, learning and development within Sheffield. The projects will showcase Sheffield's trend towards excellence in contemporary architecture and urban design. New and refurbished buildings will be interconnected by a series of well designed public spaces and pedestrian links, focusing around Howard Street and Sheaf Square.

Foremost, the realisation of the e-campus will firmly establish Sheffield as a centre for IT related and knowledge based industries in the UK, and Europe. As a purpose designed IT business district, the e-campus will generate a new critical mass of economic activity in the city centre. The layout of the e-campus will be completely flexible so to cater for companies of all sizes and to adapt to the changing needs of its inhabitants. The e-campus will be designed as a series of striking contemporary buildings and landscaped open spaces linking into the activity of the neighbouring university. The design quality of the complex will reflect its high profile image and create a landmark feature at the eastern gateway to the city centre.

As the most important commuter entry to the city centre, the Railway Station will be developed as an interchange for rail and bus transport, establishing its role as the city's principal business link to London, Birmingham and Manchester. The historic station building will be enlarged and modernised, with its significant features retained and incorporated into a scheme providing an extended glass canopy for meeting points and a taxi stand.

As the first in a series of linked spaces leading to the city centre, the forecourt of the station will become a gateway civic space, Station Square, created through the demolition of Sheaf House/ redesign of the lower level of Sheaf House.

With the completion of the IRR project reducing traffic flow on Sheaf Street, Sheaf Square will be redesigned to create a strong and direct link into the Howard Street pedestrian spine, leading to the city centre. Whilst still remaining a busy vehicular connection, traffic will be adequately calmed to create clear and prioritised crossing points for pedestrians. Together with significant public realm improvements and boulevard planting, Sheaf Street will no longer have the effect of severing the station from the city that it serves.

Howard Street and Pond Street will be transformed with the activities of the university and the student union, the e-campus and the CIQ permeating the quarter. A strong and cohesive pedestrian environment will nurture a vibrant street level scene of pubs, bars and small shops, merging with the cultural life of the CIQ. The major growth and changes in the Sheaf Valley will be accompanied by the redevelopment of significant sites along the Arundel Gate, including the *Odeon* and the *Roxy*. Benefiting from their strategic location between the city centre and the activity in the lower part of the quarter, they will become a focus for larger scale business, retail and leisure uses.

Comparator Projects



Pfizer Office, Surrey

This high tech research facility set in garden surrounds illustrates how landscaping can create a high quality environment, which could be applied to the design of the e-campus.



Peckham Library

A bold and distinctive form with colourful finishes houses a variety of educational and community functions. This style of contemporary architecture would reflect the energy and innovation of the Sheaf Valley.



Hampden Gurney C of E Primary School, London

This style of distinct high-tech building could become a feature of the quarter, with its unique facade treatment, and throw light onto the street at night.

Principles

Degree of intervention

Sheaf Valley has the potential for dramatic change, therefore, the degree of intervention recommended is *Reinvention and Reconfiguration*.

Activity

Existing activity nodes within the quarter, such as the Station, the University and the shopping and leisure facilities, should be enhanced by new development and public realm improvements to create a more pedestrian focussed environment.

Architectural style and materials

Contemporary architecture and the use of modern materials should be encouraged particularly at the e-campus. With few sites of historic significance, Sheaf Valley should welcome bold and innovative designs.

New buildings in Fitzalan Square should be designed sensitively to respect this historic precinct. Here, building height should maintain the existing heights or adopt appropriate setbacks so that the scale of historic buildings is not overwhelmed.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

A Fitzalan Square, building materials should be sensitive to the character of that area. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2).

Building form and height

Building heights will generally be contained at around 4/5 storeys in the valley bottom with the potential to 8 storeys where it can be demonstrated that it would not have an adverse impact on views and the city skyline. Greater heights should be considered in terms of site context and the response of individual proposals to local design and amenity conditions.

Encourage strong built form at the edge of main routes, i.e. built form along Sheaf Street should be 4/5 storeys with development rising to 8 storeys towards Pond Street and Arundel Gate. It is essential that new building along these routes address their function as gateway structures.

Tall buildings, i.e. those over 15 storeys, should be confined to nominated gateway sites and introduced selectively in accordance with the strategic guidance of Part 3.2.

Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Public realm

Focus public realm improvements on creating the pedestrian connection from the new Station Square, through Sheaf Square and Howard Street to the city centre. As the most important pedestrian gateway in the city, it is essential that this route is clear, direct and strong in its design.

- Ensure that the principal route from Station Square affords sightlines through Sheaf Square and up the Howard Street hill.
- Gateway buildings at Sheaf Square, sited on either side of Howard Street and Surrey Lane, could be used to define the entry to this space.
- Remove the open lot carparking to allow the creation of this pedestrian space.
- Use of manufactured materials in these spaces must not detract from the natural materials palette of the Heart of the City.
- Create a planting theme in Howard Street that serves to soften the space without impeding sightlines.

Create a series of finer-grain pedestrian spaces leading from the Howard Street spine which feed into the university, e-campus and CIQ. Consideration should be given to the pedestrianisation of the area between Pond Street and Harmer Lane as part of the e-campus development.

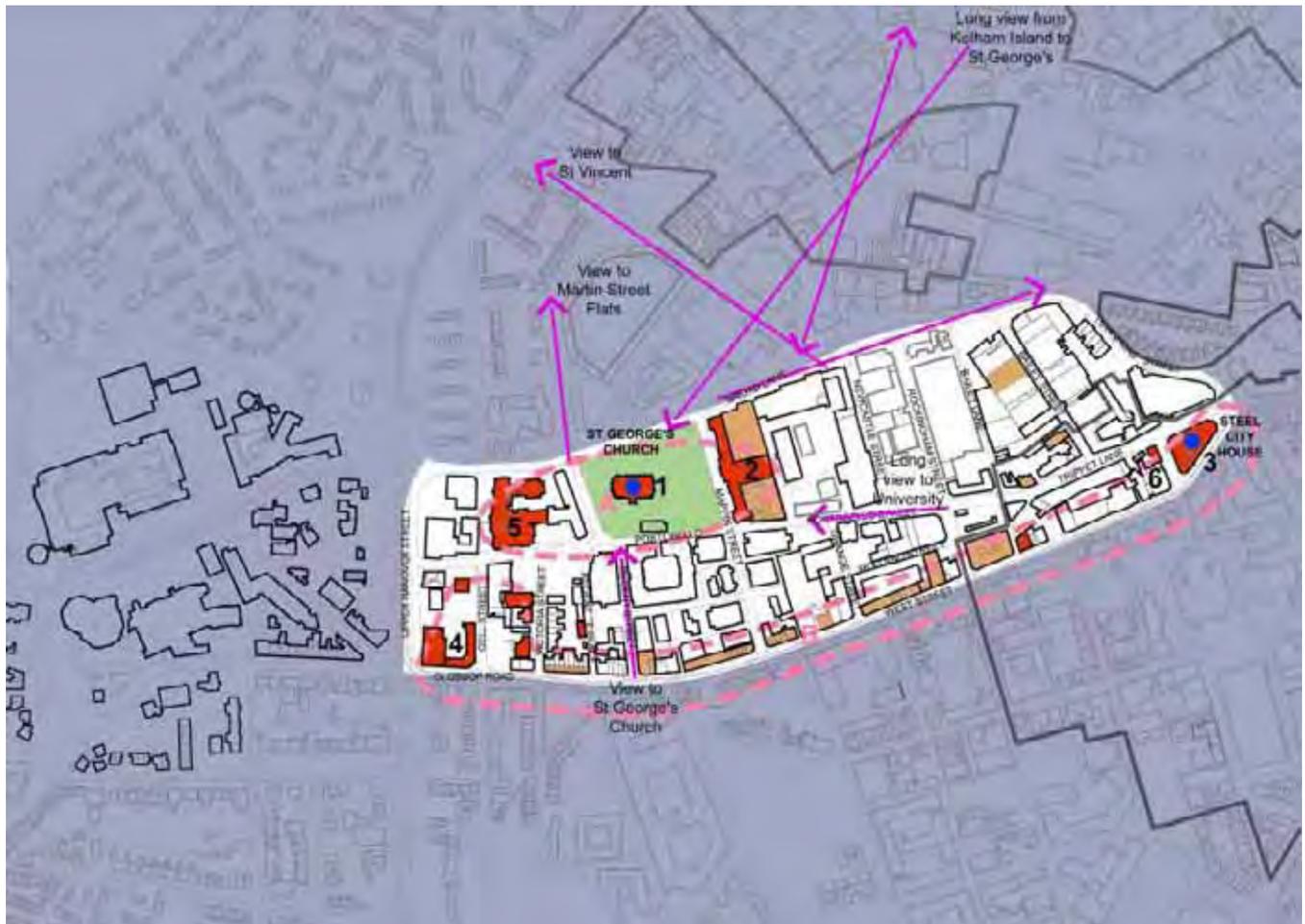
Promote public realm improvements at Flat Street to improve connections to Castle market and ensure that new development addresses the street.

Consider innovative solutions to overcome the level changes leading up to the Arundel Gate. This could include systems of ramps and steps, designed for sculptural effect as well as accessibility, or mechanised means such as public escalators.

The Sheaf Valley quarter will generally adhere to the material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) with the exception of the main pedestrian route between the railway station and the Heart of the City which will adhere to the Primary Zone palette of materials and street furniture set out in these tables (refer diagram 3.3).

St George's





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	 City Centre Conservation Area
 Listed Buildings	

- Significant Buildings
- 1 St. George's Church Lecture Theatre
 - 2 Mappin Building
 - 3 Steel City House
 - 4 Somme Barracks and Drill Hall
 - 5 Jessop Hospital
 - 6 23, 25, 27 Trippet Lane

- Character Areas
- A St. George's Churchyard
 - B West Street



Character

The St. George's Quarter is located on the ridge of high ground separating the Don and Sheaf Valleys, north west of the city centre. The area to the east of the quarter is within the designated City Centre Conservation Area. The ring road and its roundabout at Brook Hill create a formidable pedestrian barrier to the west of the quarter.

The quarter comprises the eastern part of the University of Sheffield campus. A nationally recognised institution for teaching and research, the University activities in the quarter are focussed around the landmark of St. George's Church, now a lecture theatre. There are a number of buildings throughout the quarter which are used by the University, however, this part of the campus does not have a collegiate atmosphere. Most of the University buildings are used as laboratories or lecture theatres and, with limited opportunities for ground level activity, they do not foster interesting streetscapes or urban spaces.



St. Georges Church.



Ring Road at West Street.

There is a variety of architectural styles in the St. George's Quarter. The eastern part of the quarter is a typical mix of early 20th Century housing and industrial units. There are several buildings of historical significance including the Mappin Building, Steel City House and the grand mass of the former Jessop Hospital. Otherwise, the built form generally comprises 1960s developments which have been utilised as office and lecture space.

The buildings in the west of the quarter are generally designed to a high quality and some are monumental in scale, ranging from the Edwardian period to modern contemporary structures. This quality is not reflected in the recently developed student flats which are pastiche in their architectural style and do little to improve the quality of the urban environment. Building materials tend to be red or brown brick, buff stone, buff faience, painted render, modern cladding on external walls and slate or metal sheet for roofing.

The quarter also retains a limited industrial presence, principally at Trippet Lane and Rockingham Street in the east. Here, the urban form is more fragmented due to the industrial buildings, gap sites and poor quality public realm.

Glossop Road and West Street offer a degree of vibrancy in the quarter with their shops, pubs and cafes. At this point, the activity of the Devonshire Quarter's urban village merges with St. George's.

Buildings in St. George's are generally 2-4 storeys, with some newer interventions reaching up to 10 storeys. While there have been some successful conversions of older buildings and several new developments, no attempt has been made to integrate these buildings with the street.

St. George's suffers from poor legibility and permeability for both the pedestrian and cyclist. The university campus itself is fragmented by the ring road, particularly at Western Bank and Upper Hanover Street. As with much of Sheffield City Centre, many of the external spaces in the quarter are monopolised by on street carparking, despite the area being well served by public transport. The connections between public transport stops and the university buildings are unattractive, with characteristic blank facades and a poor quality public realm. As a result, the streets and through routes of the quarter offer no incentive for people to stop and spend time here.

There are a number of important gateways within St. George's, for both pedestrians and vehicles. The Brook Hill/Broad Lane roundabout is a key entry point from the west and, together with Glossop Road, is a principal pedestrian thoroughfare for Sheffield University Students. Rockingham Street connects the quarter with the city centre.

There is small group of urban spaces in this vicinity, namely Weston park, St. George's Church and Devonshire Green which, if safely connected and better maintained, would provide an attractive open space network. There are also some pocket parks, however, they tend to be located by the busy dual carriageways and are poorly maintained.



Mappin Street.



Characteristic blank facades.



Modern pastiche architecture.



Greenspace surrounding St. Georges Church.



Former Jessop Hospital



Vista of landmark building to assist legibility .

The open space network will be enhanced by the redevelopment of the Mappin Gallery and Weston Park to provide a dynamic centre for education within Sheffield museums and galleries. This will be undertaken with the cooperation of the Trust, the University and the Union of Students to create an exciting urban space.

Public realm materials in this quarter generally consist of tarmac paving and concrete kerbs with buff concrete paving around the university building.

The character areas within the quarter are

A St. George's. This comprises the St. George's Church lecture theatre, the Jessop Hospital and the Mappin Building, which form a group of architecturally and historically significant buildings.

B West Street. West Street is the dividing line between the Devonshire and St. George's quarters and is one of the historic streets of the city. Much of the nineteenth century development remains, and there are a number of good commercial blocks with shops on the ground floor and offices above.

Within the St. George's Quarter are the following principal buildings:

- St. George's Church Lecture Theatre
- Mappin Building
- Steel City House
- Somme Barracks and Drill Hall
- Jessop Hospital
- 23, 25, 27 Trippet Lane, former cutlery works

Influences

The Sheffield University area has been designated within the UDP largely as an Institution Education Area. Ancillary activities identified to complement this major activity are:

- Glossop Road/West Street as a local shopping area.
- City Centre Housing Priority Zone in west of the quarter.
- Area of Special Character with some as a designated Conservation Area.

A 'New Vision and Strategy for the External Environment' was developed by Scott Wilson (2001). These initiatives, which are proposed and driven by the University, promote the creation of a recognisable city quarter. Three key approaches are adopted:

- The Connected Campus, which aims to promote legibility, walkability and connectivity with other quarters.
- The Green Campus, which will link the University to nearby parks, promote strategic planting along main spines and contribute to the creation of an open space network within the city.
- The Built Campus, which promotes better interaction and connection between the buildings and the public realm.

Sheffield City Centre

part 4.10

Vision

With the University of Sheffield as its focus, the St. George's Quarter will become an integral part of Sheffield's regeneration as a city driven by a new knowledge based economy.

The University will continue to grow as a centre for excellence in the fields of medicine, biotechnology and law, in addition to its renowned research programmes in the faculty of engineering. Together with Hallam University, the University of Sheffield will secure the city's reputation as a centre for learning, technology and creativity.

The meeting of the St. George's Quarter and the city centre will be celebrated by the development of a diverse mixed use area with a strong residential component, promoting a safe and populated environment throughout the day and night. The activity of the quarter will merge with the vibrant urban village in the Devonshire Quarter, and the growing neighbourhood of St. Vincent's. The further development of housing for University students and academic staff will see the creation of busy and vibrant streets.

St. George's will develop a distinctive and dense urban character with the redevelopment of vacant and underused sites to accommodate the demands of the growing University. The expansion of the University will see the restoration of the former Jessop Hospital as a part of its campus, which is proposed to house the Arts and Sciences Departments. The proposed multi-million pound development of the Resources and Visitor Centre is an example of the University's investment in the city centre and its contribution to the new vitality of the St. George's Quarter.

Innovative ideas for new buildings in the quarter, developed in collaboration with the students of the architecture school, will result in the creation of a nationally renowned city campus, whilst confirming the reputation of its School of Architecture as one of the most forward thinking and competitive in the UK.

New development will see ground floor activity being returned to the street in the form of university offices, foyers and small urban spaces as casual meeting places. The east of the campus will provide student accommodation with semi-public courtyards and a small cluster of ancillary facilities at the core to encourage day and evening activity and to create a collegiate atmosphere within the University.

St. George's will become a pedestrian focussed enclave within the city centre. Safe pedestrian connections will be created throughout the quarter, accessible to all user groups, particularly at its key gateways. This will provide valuable links between Weston Park, St. George's Church and the city centre, as well as the urban villages of the neighbouring quarters.

The evolution of St. George's as a vibrant and pedestrian focussed inner urban area will be a vital part of the growth of the University as one of the UK's leading institutions of higher education.

Comparator Projects



Devonshire Square, London (Bennetts Associates)

The modern office development on Devonshire Square offers a degree of visual interaction between the internal and external spaces. An intimate forecourt has been created which provides a human scale to the development and allows for a level of social interaction. Buildings which are open and transparent at street level in this way would benefit the pedestrian environment within the St. George's Quarter which is at present characterised by blank, inactive facades.



Sidgwick Site, Cambridge

The creation of pedestrian spaces and connections within a university campus provides safe and accessible routes for all students which can also be utilised as informal public spaces for social interaction. There is a need to create such spaces in Sheffield University's campus. A scheme similar to the one illustrated could be implemented in the St. George's Quarter to link the various faculties of the university and create a more collegiate environment.

Principles

Degree of intervention

Repair and Recovery - this will see the enhancement of its existing function as a city university campus, conservation of its important historic buildings and the promotion of exciting new architecture.

Activity

A mixture of uses should be promoted within the quarter to encourage the presence and activity of the general public within the university campus.

Architectural style and materials

A variety of architectural styles are to be encouraged in this quarter. New development should embrace contemporary architectural styles and materials.

Within proximity to other historic buildings and in areas of sensitivity, namely the residential groupings in Gell Street, Victoria Street, Regent Terrace and Regent Street, new development should respect the scale of existing historic buildings.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

In the distinct character areas of the quarter building materials should be sensitive to the character of that area. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Building form and height

Buildings should generally conform with the existing height of 2-4 storeys. Larger buildings may be acceptable on gateway or corner sites where it can be demonstrated that there will be no impact upon the streetscape context or amenity.

The existing landmark of the St. George's Church, its surrounding green space and the former Jessop Hospital opposite must be conserved and enhanced. All new development in this vicinity should respect the scale and visibility of these buildings and green space so that they are retained as landmarks within the quarter.

There are opportunities to create landmark structures or introduce tall buildings at city gateways of the Brook Hill/ Broad Lane roundabout or the Glossop Road junction.

Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).

Public realm

The Cathedral quarter will generally adhere to material palette and street furniture suite for Primary Zones as set out in table 5.1 and 5.2 respectively (part 5.1) with the exception of the area between Queen Street and West Bar which will adhere to the Secondary Zone palette of materials and street furniture set out in these tables (refer diagram 3.3).

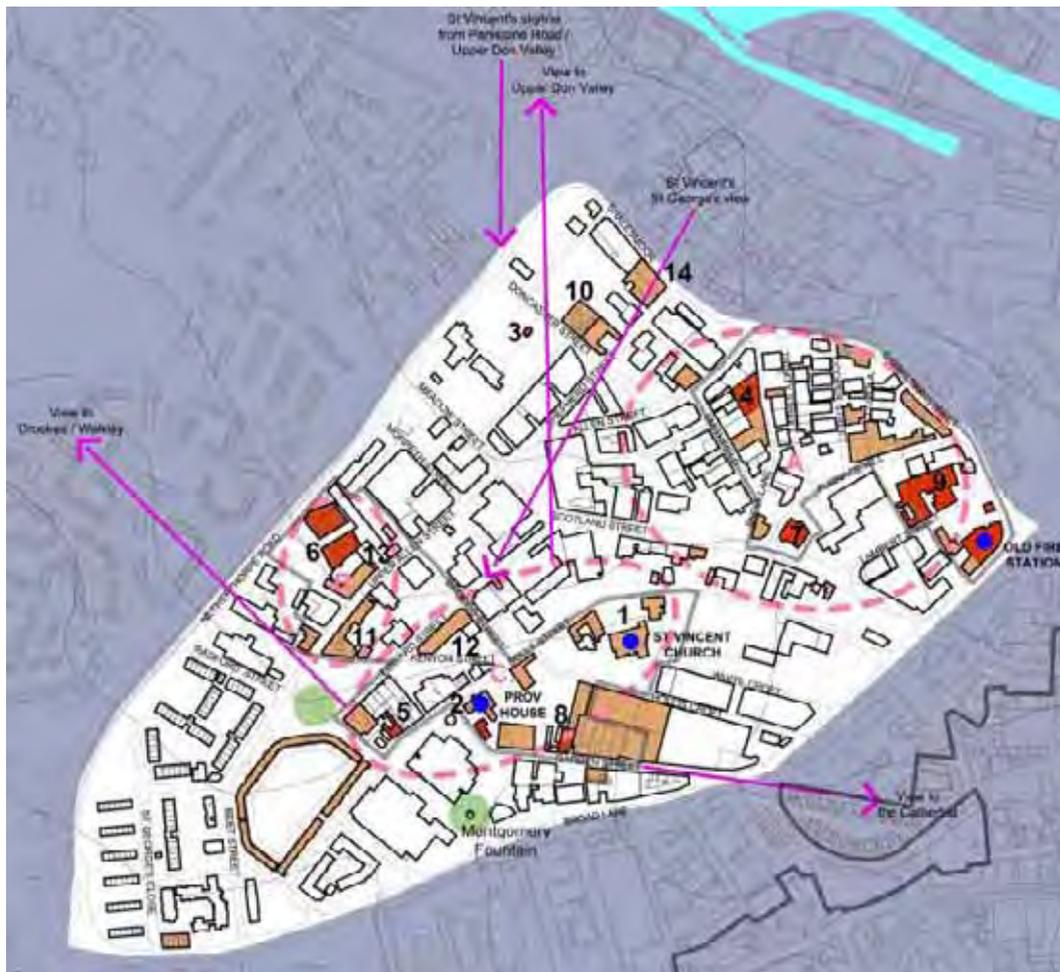
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Example of the pastiche architecture

St. Vincent s





Quarter Analysis

KEY

 Public Spaces	 Unlisted Significant Buildings (Contributing to the Character of the area)
 Views	 Character Areas
 Landmarks	 City Centre Conservation Area
 Listed Buildings	

Significant Buildings

- | | |
|---|------------------------------|
| 1 St. Vincent's Church and associated buildings | 7 Scotland Street Chapel |
| 2 Provincial House | 8 52- 56 Garden Street |
| 3 Cementation Furnace, Doncaster Street | 9 John Watts Cutlery Works |
| 4 Kutrite Works | 10 JW Bartholomew premises |
| 5 216 & 218 Solly Street | 11 Stephenson Blake premises |
| 6 35 & 54 Well Meadow Street | |

Character Areas

- | |
|----------------|
| A Furnace Hill |
| B Solly Street |
| C Well Meadow |



Example of industrial heritage.



Derelict buildings - Hollis Croft.

Character

The St. Vincent's quarter is located in the north west of the city and rises from the Don Valley basin in the south west, affording views to the northern hills and the dry ski slope. Its topography has resulted in many of its streets being developed on steep gradients with slopes up to 1:8 in some parts of the quarter.

The quarter retains much of the original 18th and 19th century industrial street pattern, but has suffered as a result of slum clearance and war damage have removed most of the evidence of the original public realm and built form within the quarter. Many of the cleared sites are being used as carparking or service areas for adjacent businesses, offering the opportunity for infill development. The area originally consisted of a dense mix of traditional steelwork industries and back to back terraces. Today, it remains predominately industrial in character with a pocket of 20th Century social & student housing in the southwestern corner.

St. Vincent's retains a number of industrial buildings of significance. This includes the Cementation Furnace in Doncaster Street and a variety of cutlery workshops and residences throughout the quarter. Otherwise, the remainder of the quarter contains a large proportion of 20th Century industrial buildings and residential units.

The St. Vincent's Church at Solly Street is a landmark within the quarter and on the city centre skyline. The church was once the community focus for the Irish immigrants who settled in the city in the 19th century. Unfortunately, the church buildings are mostly vacant and its grounds are now utilised for car parking.

The distinct character areas of the St. Vincent's Quarter are:

A Furnace Hill. This area comprises a network of narrow streets and lanes, still densely built up with works and commercial premises, which has a distinct character.

B Solly Street /Garden Street /Hollis Croft. The central section of Solly Street contains St. Vincent's Church and the group of associated buildings which dominate the area.

C Well Meadow Street. This street contains important examples of Sheffield's early industrial architecture. The two surviving complexes comprise houses, workshops and crucible furnaces, and are listed buildings.

Built form in the quarter varies. The Victorian industrial buildings are generally 2-4 storeys in height and constructed mostly of brick with stone detailing and Welsh slate roofs. The postwar developments largely reflect a more modern industrial character. These are generally 1-4 storeys in height and constructed of red brick, cement or modern cladding with industrial sheet metal flat roofing.

Residential development includes a range of public housing of flats and maisonettes. There is also some terraced housing on the western tip of the quarter at Broad Lane. The student accommodation on Solly Street makes a positive contribution to the quarter's environment, despite its pastiche architectural style, as it is relatively well maintained and provides colour to the otherwise bland streetscape. The older Edward Street flats are a distinct structure within the quarter, with their arched entranceways and the brick and stone detailing of the facades and large sheltered internal green space.

The public realm is in a poor condition throughout the quarter and consists mainly of tarmac and asphalt with stone kerbs still evident in parts. There is no street furniture within this quarter except basic street lighting, which is a reflection of its predominant industrial land use. With the exception of the Edward Street flats and the student housing on Solly Street, there is little evidence of an effective public/private realm interface in the residential area.



Modern industrial buildings.



St. Vincent Church with cars dominating the foreground.



Public House - existing local amenities.



New student housing on Solly Street.



Run-down residential area on Upper Allen Street.



The listed Edward Street flats.

There is a lack of public space in the quarter. The pocket park at Kenyon Street serves the entire residential area and is poorly designed and maintained. The abundance of unofficial car parking along the ridge at Solly Street currently detracts from the superb panoramic views across the city.

The St. Vincent's Quarter has a number of important city centre gateway sites and routes. Hoyle Street, West Bar and the roundabouts on Tenter Street are key vehicular entry points. Gibraltar Street, Broad Lane and Tenter Street are major gateway routes.

The significant buildings in the St. Vincent's Quarter are:

- St. Vincent's Church and associated buildings
- Provincial House
- Cementation Furnace, Doncaster Street
- Kutrite Works
- 216 & 218 Solly Street
- 35 & 54 Well Meadow Street
- Scotland Street Chapel
- 52 - 56 Garden Street
John Watts Cutlery Works
- JW Bartholomew premises, 46 Doncaster Street
- Stephenson Blake premises, Upper Allen Street

Influences

The St. Vincent Quarter has been designated within the Unitary Development Plan (UDP) as:

- largely as a General Industry Area;
- a housing Area containing an area of Open Space.
- as a Business Area and a Fringe Industry and Business Area.

An Action plan for of the Scotland Street/Shalesmoor Area, which includes the St. Vincent's Quarter, has been commissioned by the Council to assess the potential for the area's regeneration and to guide future land use and development.

The action plan proposes changes to land use policy to allow housing developments around Upper Allen St. / Solly St. and office development on Tenter St. frontage. A new public green space around St Vincent's Church is Proposed to create a community focus for the quarter.

The close proximity of the University of Sheffield makes St. Vincent's a potential location for expansion of the campus facilities and student accommodation.

Streets in the northern part of the quarter will be reshaped by the completion of the Inner Relief Road.

The parts of the Quarter which have locally significant buildings and precincts relating to the area's industrial heritage, or residential neighbourhoods must be protected in the transition from the metal trades to present day uses. Two new conservation areas proposed at Furnace Hill and Well Meadow St.

Sheffield City Centre

part 4.11

Vision

The St. Vincent's Quarter will become a vibrant and integral part of Sheffield's city centre. An intimate urban neighbourhood will evolve within the quarter, with St. Vincent's Church restored as the focus. Sensitive and innovatively adapted for reuse, the Church will be the landmark of the quarter and the centre of the St. Vincent's community. The landscaped church grounds will also offer a new green space in the heart of the quarter.

The traditional metal industry of St. Vincent's will gradually be consolidated in the north of the quarter, enabling the expansion of housing areas and a diversification of uses. Whilst some businesses may choose to relocate to modern premises in new industrial areas outside the city centre, others will consolidate around the Shalesmoor spine.

Mixed use activity will be concentrated in the heart of the quarter around Upper Allen St. / Solly St. This will see the many gap sites, parking lots and underused buildings taken up for redevelopment. In some instances the industrial heritage of the area will be reflected through the retention and adaptive re-use of historic buildings. Elsewhere, the quarter will be home to contemporary design innovation.

The primary routes within the quarter at Upper Allen Street, Scotland Street Solly Street will become mixed use streets, providing activity and local amenities for residents, students and workers in the area. The spectacular views afforded from the Solly Street ridgeline will be maximised with new development and open spaces which embrace the quarter's dramatic topography and aspect.

With the managed expansion of Sheffield University into St. Vincent's, the quarter will become a part of the university's research and development ventures, as well as an ideal location for student accommodation. The streets within the quarter will be given a new life and vibrancy with student activities.

In the residential enclave at the southwestern tip of the quarter, high quality housing will be developed, catering for a variety of household types and tenures. New green spaces will see this area recreated as an attractive, high density 'garden suburb' within the city centre.

The completion of the Inner Relief Road will open significant redevelopment sites along Shalesmoor. The role of Shalesmoor, Tenter Street and Broad Lane as metropolitan gateways into the city centre will also be reinforced with a new strength and consistency of built form along these important routes.

Throughout the quarter, infill developments and public realm improvements will see the creation of an attractive urban environment. The streets of St. Vincent's will be relieved of the proliferation of parked cars with a more co-ordinated approach towards carparking. A strong pedestrian focus will enhance connections to the neighbouring quarters, including the activity of the Kelham riverside, St George's and the Cathedral Quarter.

Comparator Project



Lillington Street, London (Darnbourne & Darke)

This residential postwar development includes a range of community facilities such as a library and shops. The aesthetics and scale of the scheme were guided by the original building on the site, the church of St. James-the-less. The blocks are designed to address the street whilst also providing communal space in the form of internal courtyards and balconies as private space for the residential units. St. Vincent's would benefit greatly from a modern interpretation of these urban blocks which would complement the existing Edward Street flats to create a vibrant and accessible urban neighbourhood.



Tesco's, Ludlow (McCormac Jamieson Prichard)

The accepted rectangular shape of town supermarkets is manipulated in this design to ensure it sits comfortably in the topography and reflects the medieval street pattern of historic Ludlow. This is an example of how a local convenience building could be introduced into the St. Vincent's Quarter to respect its natural character and add interest and variety to its streetscapes.

Principles.

Degree of Intervention

The St. Vincent's Quarter is in a state of transition and opportunities for dramatic change will be presented. The degree of intervention recommended for most of this quarter is therefore *Repair and Recovery* due to the industrial heritage contained within it. At St. George's Close a process *Reinvention and Reconfiguration* is recommended to improve the existing residential area.

Managing change

To manage change within the quarter and to ensure that new developments and land uses make a positive contribution, a pro-active strategy should be developed. The implementation of this strategy could be managed by a development team including: SCC, NUCA and other partners specifically established for this quarter.

Activity

Mixed use development should include local amenities such as shops, laundrettes, post-office etc. Ancillary University uses such as print shops are also encouraged.

The provision of active frontages at street level will be encouraged to increase pedestrian activity and provide natural surveillance to enhance safety on key routes.

Architectural Style and materials

Encourage the innovative reuse of vacant buildings to preserve industrial heritage whilst establishing a new identity for the quarter.

Otherwise, innovative and contemporary infill developments should be encouraged. The use of modern materials in the built form such as steel, timber and aluminium will be acceptable.

In the vicinity of the important groupings of industrial and residential buildings, the scale and material finishes of new development should reflect that of the surrounding context.

Housing should be designed to a consistently high standard to accommodate a positive mix of tenure types and create an inclusive community.

Detailed guidance on building design, orientation and materials is set out in Part 3.2 Guidance - Architectural Quality.

In the distinct character areas of the quarter building materials should be sensitive to the character of that area with the use of red brick and stone encouraged. However modern materials will be permitted where they to have negative impact on character of area. Outwith these areas modern materials will be permitted. These should be sourced locally and from sustainably managed resources whenever possible to contribute to the sustainable development of the quarter (refer part 3.2)

Building heights

Generally, infill developments are to respect the existing building height of 2-4 storeys and the tight street pattern.

Along the Broad Lane, Tenter Street and Gibraltar Street edges, strong built form will be required to emphasise the gateway aspect of these streets. At nominated the gateway sites of Hoyle Street, the Tenter Street roundabouts and Brook Hill/Broad Lane, there are opportunities to introduce tall buildings.

Within the industrial hinterland of the quarter, around Scotland Street, new developments should generally be a maximum of 4 storeys in height so as to retain views from and towards the Solly Street ridge. on steep sites there may be scope for a wider variation to create a lively townscape.

Refer 'Creating a sense of Enclosure' in architectural guidance (page 54).



Adaptive reuse of a historic building

Public realm and open space

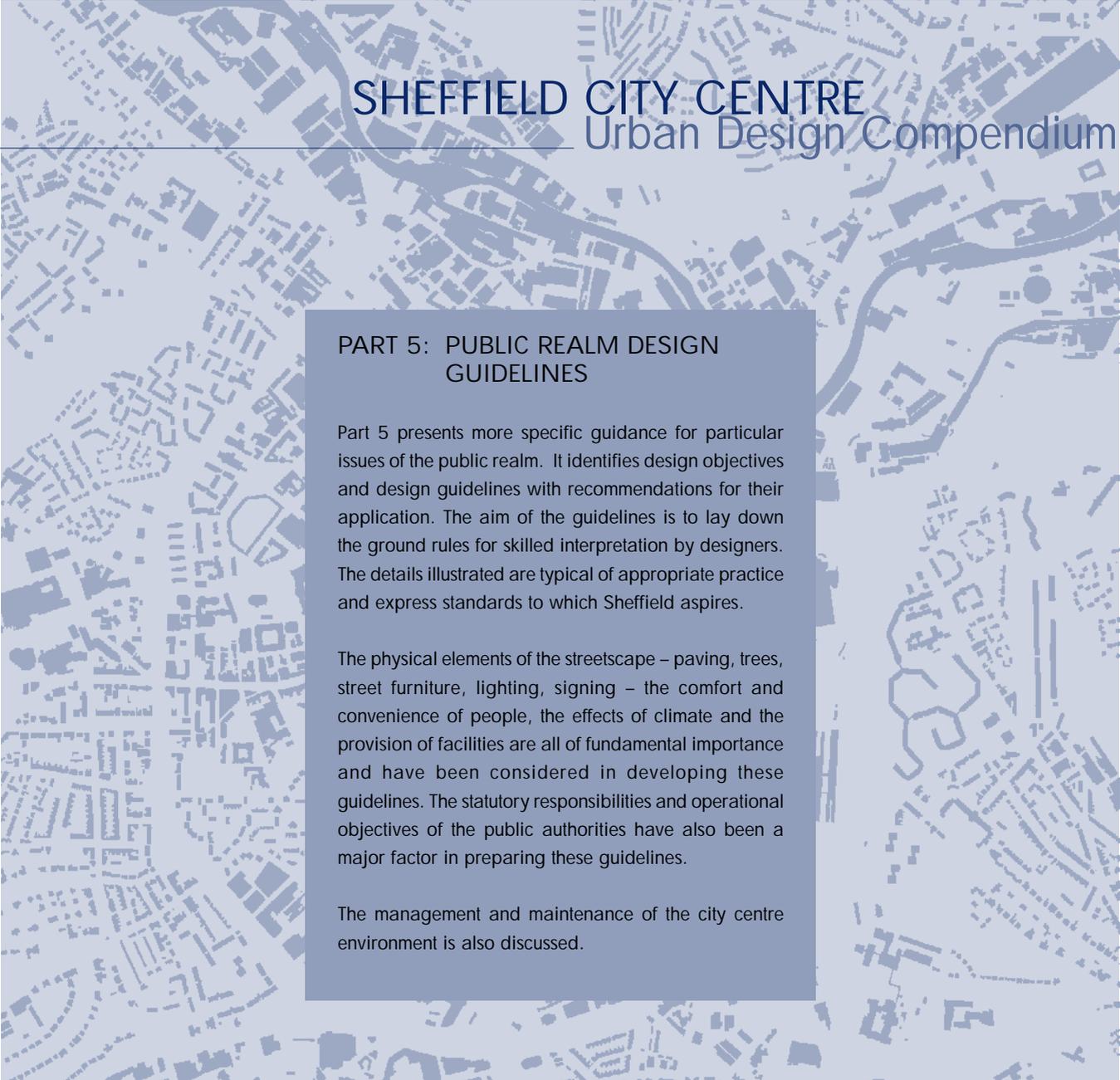
Creation of attractive new public spaces to provide a community focus and exploit views afforded by the topography of the quarter.

The St. Vincent's quarter will generally adhere to material palette and street furniture suite for Secondary Zones as set out in table 5.1 and 5.2 respectively (part 5.1).

The public realm in the residential areas should be simple in design and incorporate soft landscaping to create a pleasant pedestrian environment. Communal private spaces should be provided in residential blocks.

A carparking management plan is required to rationalise and consolidate parking throughout the quarter. Commuter parking must be discouraged.

Carparking should be provided as basement or ground floor parking in new commercial developments.

The background of the page is a light blue, semi-transparent map of Sheffield City Centre. The map shows a dense network of streets, buildings, and the River Sheaf winding through the area. The title 'SHEFFIELD CITY CENTRE' is written in a large, bold, white sans-serif font across the top, with 'Urban Design Compendium' in a smaller, white sans-serif font directly below it.

SHEFFIELD CITY CENTRE

Urban Design Compendium

PART 5: PUBLIC REALM DESIGN GUIDELINES

Part 5 presents more specific guidance for particular issues of the public realm. It identifies design objectives and design guidelines with recommendations for their application. The aim of the guidelines is to lay down the ground rules for skilled interpretation by designers. The details illustrated are typical of appropriate practice and express standards to which Sheffield aspires.

The physical elements of the streetscape – paving, trees, street furniture, lighting, signing – the comfort and convenience of people, the effects of climate and the provision of facilities are all of fundamental importance and have been considered in developing these guidelines. The statutory responsibilities and operational objectives of the public authorities have also been a major factor in preparing these guidelines.

The management and maintenance of the city centre environment is also discussed.

5.1 Public Realm Design Guidelines



Overall Aspirations

The guidelines contained within this section are based on design principles drawn from the Compendium's Public Realm Strategy (3.3). These principles can be summarised as follows:

- To improve the quality of environment of the city centre to a standard commensurate with, or superior to, its national and international comparators;
- To build on work achieved to date to create a distinctive public realm for Sheffield;
- To implement a coherent and consistent design strategy for the improvement of the public realm;
- To establish standards of design to achieve a quality environment that is:
 - attractive, hospitable and safe;
 - appropriate to Sheffield;
 - robust, simple and elegant;
 - valued and well cared for;
 - distinctive and sometimes exciting;
 - of a high standard of craftsmanship; and
 - presents an image of Sheffield as a confident and progressive city.

The design principles and recommendations contained in part 3.3 of the Compendium have been interpreted in a series of guidelines. When applied to new developments, these guidelines should allow for a contemporary approach which encourages creative and innovative contributions in the redesign of Sheffield's public realm and promotes the highest standard of design quality.

The aim of improving the environmental quality and design of streets and spaces must include the reduction of clutter within the streetscape, the introduction of fundamental characteristics of the philosophy of the design - boldness, simplicity, style and elegance - into the streets. The public realm guidelines have been considered under the following headings:

- Materials and Surfacing;
- Street furniture;
- Trees / Planting;
- Lighting;
- Signing;
- Climate and Structures;
- Access & Movement;
- Water;
- The Visual Arts;
- Accessibility.

The explanation of the design approach is illustrated by street furniture elements specifically designed for Sheffield's city centre, successful public realm projects from the city and examples of comparator work from other cities.



Pedestrian street is designed to allow access for delivery vehicles.



Access to underground utilities should be integrated into the design.



Clear delineation between pavement and carriageway.

Materials & Surfaces

- Common themes, design approaches and a palette of materials should be identified for elements of the external environment in Sheffield city centre.
- Junctions between spaces should not be abrupt and a degree of continuity is desirable.
- The hierarchy of spaces should be reflected in the quality of materials, however, the importance of certain spaces may be reinforced through the use of additional innovative or artistic paving features.
- Paved surfaces should be simple, robust and complement adjoining architecture and street furniture. Changes in paving colour and texture should be restricted. Exceptions can be made for particular purposes - to highlight important entrances, denote ownership or impart interpretive information.
- Pavements, open spaces and traffic calmed areas should:
 - be simple and avoid meaningless patterns in the floorscape;
 - be used to delineate boundaries and highlight features;
 - maintain scale;
 - be used to signal direction or segregation;
 - incorporate, if required, the layout of gullies/channels into the paving design and use only those systems designed to take maintenance issues into account;
 - ensure that street furniture, grilles, covers and gullies are orientated to avoid awkward junctions and cuts;
 - where necessary, be designed to accept vehicle loading.
- The relationship of carriageway to pavement width is a very important criterion to the integrity of Sheffield's streets. There is a limit to the extent that a pavement can be widened and, in most circumstances, it will be necessary to retain at least the width of two lanes within the carriageway to maintain the visual balance of the street as well as allow all of the street's functions to occur.

- Most carriageways are surfaced with hot rolled asphalt. In certain locations, the use of the subtly toned coloured asphalt could be considered to highlight important routes and spaces, or delineate and link streets and spaces.
- In major (and occasionally minor) streets and spaces, hot rolled asphalt with a high density of granite chip provides an unobtrusive surface for carriageways in central locations. The granite chips provide an important colour contrast with a high degree of reflectivity. However, their skid resistance qualities are reduced with polishing by vehicle traffic.
- Bus lay-bys, parking bays, disabled parking and taxi stances should be delineated from the main carriageway by a material change. Yellow lines are particularly obtrusive on paving and diminish greatly the benefits of good quality materials.
- All areas in the public realm should be accessible and Local Authorities have a duty to provide access requirements for mobility impaired people.
- The line of the kerb can be as significant in subdividing the floorscape as the definition of storeys are in subdividing a building. It is an important factor in the perception of the scale of the street, in providing a “plinth” for buildings, and should be retained wherever possible.
- Where kerbs are made flush, the line of the kerb should be retained to provide visual delineation.
- Paving trims or edging should form part of the overall design of the paved surface:
 - to delineate uses, boundaries and spaces;
 - to denote changes in level;
 - to act as functional markings on paving surfaces;
 - to act as margins to buildings and features;
 - to delineate between public and private spaces.
- As a design feature, kerbs and edges should be used as a common element, unifying and linking streets and spaces throughout the city centre in terms of materials and detailing.



There is a variety of ways to organise the street hierarchy and improve permeability for the pedestrian.



Innovative traffic light design.



Seat with plaque integrated into the design (source:SCC).



Cycle Stand (source: SCC).

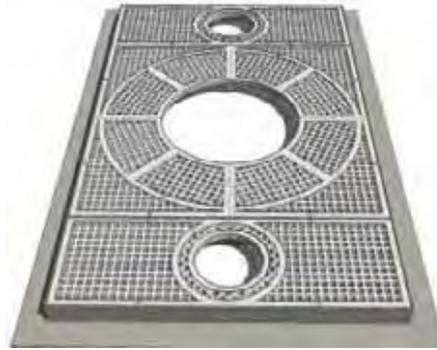
Street Furniture

- Sheffield City Council has appointed Asquith Design Partnership to design a new suite of street furniture for the City Centre. The suite is exclusive to Sheffield with the copyright being held by Sheffield City Council. The suite of furniture builds on Sheffield's international reputation for excellence in metalwork design and manufacturing.
- The general suite of street furniture is in stainless steel with a special bronze suite for the Heart of the City Area. Tree grilles and drainage channel covers are a unique Sheffield City Council design manufactured from ductile iron.
- The full range of the approved street furniture suite is described in Table 5.2. The items included are:
 - Seats;
 - Bins;
 - Bollards including removable option;
 - Sign Bollards;
 - Handrails / Motorcycle Stands;
 - Lighting Columns;
 - Banners, Planters and Hanging Baskets;
 - 'Connect Sheffield' Signage / Information Boards / Dataweb Kiosks;
 - Canopies / Bus Shelters;
 - Tree Grilles and Drainage Covers;
 - Help Points.

The position of street furniture can be used to define space and guide pedestrian movement.

- Furniture should be placed with care and restraint in order to respect the civic character of the public realm and avoid excessive street clutter.
- Street furniture should be carefully placed / designed so that conflicts with pedestrian desire lines are minimised. There must be adequate movement zones around / between items of furniture for both pedestrians and wheelchair users.
- The placing of street furniture must respect Highway Authority requirements such as minimum distances from carriageway kerbs, avoiding obscuring sight lines etc.

While there is a general requirement for the approved suite of street furniture to be used on all streets in the City Centre, places of special character can have unique furniture designed for that space where appropriate. In this case standards of design, materials and craftsmanship must be at least as high as the standard suite and should respect the character of the standard suite.



Sheffield designed ductile iron tree grilles (source: SCC).



Incorporation of information points into the street furniture reduces the need for signing poles (source: SCC /ADP).



Street furniture should be simple and elegant (source: SCC /ADP).



(source: SCC).



Planting can add interest, ameliorate the microclimate and soften an urban street or space.



Trees / Planting

Trees can create attractive soft relief in extensive built up areas and add a dimension of human scale. Street trees are very popular with the general public. Today's concerns about the environment also support the introduction of vegetation to our cities to help curb pollution and provide an ecological resource. Planting used in appropriate locations can help to ameliorate the effects of the climate by reducing wind speed and raising ambient temperature.

- Experience of Sheffield's 1970s public realm schemes suggests that remnant corners of land were addressed through the use of gratuitous planting. Many of these planters now create a security or maintenance problem.
- The controlled use of elements of soft landscape such as planters, hanging baskets or window boxes should be used, where appropriate, to highlight significant buildings and provide seasonal colour. These should be sensitively located, particularly in the vicinity of historic buildings, and an integral part of the streetscape design. However, tree planting in ground should be the priority.
- Landscape works must be well-maintained to ensure they instil a sense of ownership and civic pride within the city. The quality of the containers is very important and the conscientious maintenance of the planting is fundamental to their success.
- Bedding is a type of planting which should be encouraged. These displays may be expensive to maintain, but the colour they provide and the positive response from the public suggest that it should be encouraged as a special feature in public parks and squares.
- Where trees are to be introduced, they should complement the surrounding urban form. For example, in the CIQ tree planting should be restricted to reflect the modern industrial nature of the area.

- In areas with a strong geometry such as the Devonshire and Charter Row areas, the formal arrangement of trees in a strong and consistent shape is most appropriate.
 - Trees should be used to create maximum impact without creating a visual barrier. This is particularly important in the spaces surrounding civic or significant buildings, where care should be taken not to obscure the grand historic architecture of Sheffield's city centre.
 - The position of trees should be carefully considered and should help soften the hard outline of a building or emphasise the importance of a space creating a focal point.
 - Groups or formal rows of trees can make a valuable contribution to the relationship between a streetscape and a building and should be used to reinforce the form and structure of streets and spaces.
 - Tree planting should be functional as well as aesthetic, with the range of species limited and the planting principles bold and simple.
 - Care should be taken not to obscure lighting, signs or important views.
 - Care should be also taken to avoid disturbance of public utilities.
 - Responsibilities for further maintenance should be established prior to planting.
 - Selection of tree species for specific locations within the city centre must take into consideration the following points:
 - location within city centre;
 - orientation;
 - function of the trees;
 - proximity to buildings and features;
 - adjacent tree planting.
- Trees should be considered where:
 - there is a setback in the building line;
 - the scale of the street is such that trees can be used as a space forming element, defining movement and change in use;
 - there are pedestrianised areas;
 - the urban fabric of the street is disjointed and trees can be used as a linking and unifying element.
 - Trees should not be used where they will:
 - obscure important facades or features;
 - interfere with the urban form of the city centre;
 - screen significant views;
 - be unable to grow to maturity.
 - In all instances, the range of species selected should be limited, with a change in species used only to highlight junctions, special urban features or buildings, or to define routes and spaces.



Street lighting should be decorative as well as functional.

Lighting

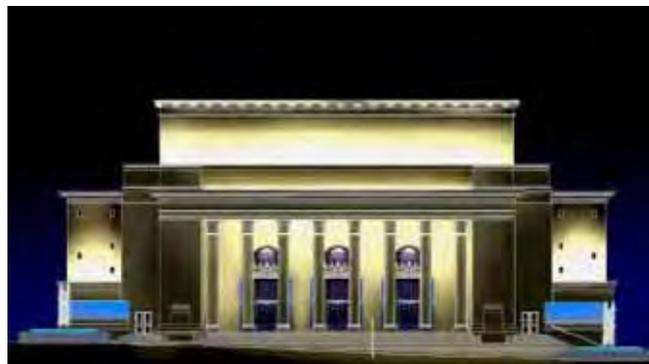
The design of the public realm must be able to support after hours activity as well as providing safety and security. Lighting is an important influence on the character of city streets and spaces, as well as a basic security requirement during the hours of darkness. There is a need to reappraise the overall visual coherence of Sheffield city centre's lighting and examine the opportunities to further enhance the quality of the environment after dark. Many of the recent improvements in street lighting have primarily been designed to meet road traffic specifications, yet many streets and spaces support a range of activities which could benefit from the introduction of a variety of supplementary forms of lighting. Action is required to:

- Enliven the whole of the centre in a visually coherent and interesting manner;
- Encourage creative thinking in the use of street, building and advertisement lighting within the city centre;
- Ensure that the city streets and spaces are sufficiently well lit to promote personal safety;
- Encourage the appropriate use of decorative and seasonal lighting;
- Employ lighting which is appropriate to predominantly pedestrian spaces;
- Promote policies to encourage well lit shopfront window displays.

- In all city centre streets and spaces, lighting must take account of the statutory requirements of the Roads Authority to provide levels of illumination required by trafficked streets and ensure safety and security:
 - The 'basic' street illumination from standard facade mounted high-pressure sodium fittings should be supplemented by various forms of flood lighting, low-level and amenity lighting, together with the ambient light from shop fronts, signs and windows;
 - Lighting fixtures, fittings and columns should, wherever practicable, be incorporated into existing or proposed columns, street furniture and features to reduce the street clutter and the impact of columns in the streetscape and also to provide varying effects and further visual interest;
 - Where lighting columns are proposed, these should be designed to be in scale with their setting and relate to pedestrians;
 - Amenity light sources can contrast in colour with the standard street lighting source;
 - Fittings should seek to combine facilities such as coloured lights, uplighters and low-level beams;
 - Uplighters can be used to enhance features and low-level beams can be used to spread a wash at street level;
 - Light pollution should be avoided as much as possible.
- Consideration is to be given to amenity lighting to ensure that there is ample provision for any special events which may take place throughout the year. Activities such as festivals continue through the hours of darkness and require more illumination than that provided by regular street lighting. This is a further aspect of city centre management where coordinated efforts from the public authorities yields improvement.
- There is also a desire to have lighting which relates in scale to the pedestrian and which can be used to highlight features, floodlight buildings and generally create a strong and memorable atmosphere during the hours of darkness. For example within the Devonshire Quarter soft lighting would be required to enhance the restaurant culture developing in the area.



An effective lighting strategy can bring character and warmth to a space in the hours of darkness (source: SCC /SVA).



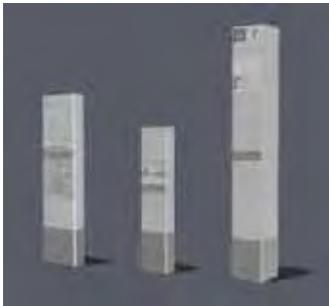
Lighting concept for Barkers Pool (source: SCC).



Pictograms can be easily interpreted by most user groups (source: SCC & City ID Ltd).



Signing systems provide the primary orientation tool for visitors (source: SCC).



Attractive new signing posts designed for Sheffield city centre (source: SCC & City ID Ltd).



Photomontage showing how the signs will look insitu (source: SCC & City ID Ltd).

Signing

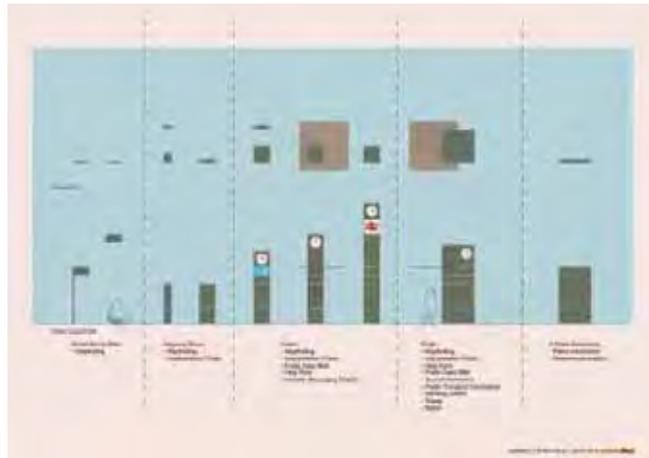
The design and organisation of pedestrian signs is an essential element in an integrated and user-friendly town centre. Both residents and visitors to cities use pedestrian signs to find their way about. For residents, such signs usually serve as reminders or updating of information along a chosen route, whereas for visitors, the sign system provides primary orientation and directional information.

However, a sign system is only one of several mechanisms that are used - often concurrently - by people moving about the city. Printed maps and plans are perhaps the most popular method and are frequently supplemented by verbal confirmation from passers-by. People should be able to rely on 'instinctive' wayfinding using familiar landmarks. There is a need to emphasise the landmarks and carefully site new developments in the city to aid legibility.

Although pedestrian signs may provide useful and meaningful information in some instances, generally Sheffield's sign system has been poorly designed and implemented, resulting in a confusing sign system for both vehicular and pedestrian traffic. The new system created by the Connect Sheffield projects will rectify this problem.

- To be effective, any sign system should convey the minimum level of information necessary to ensure a maximum degree of simplicity and clarity for the user.
- The establishment of graphic links between signing systems and visual identities can help visitor confidence by providing reassuring references around the city. At night, legibility of the city can be enhanced by the use of appropriately coloured, designed and illuminated signs.

- Successful graphic links may be almost subliminal, using simple and common elements to establish the relationships between diverse features in peoples' minds. Examples include:
 - typeface;
 - colour;
 - shape and proportion of signs;
 - manufacturing material;
 - use of pictograms;
 - application of a logo or city crest.
- There should be a balance between the statutory requirements for traffic signs and the avoidance of visual clutter. Because of the street layout, Sheffield faces the problem of having a plethora of signs at every junction to alert people to the requirements along each street block.
- There are three types of traffic signs which should be used within the city centre and be coordinated for entire streets:
 - directional signs;
 - warning signs;
 - regulatory signs.
- Particular effort should be given to minimising the number of traffic and regulatory signs required to direct traffic and reduce the potential for confusion.



Consistency in the design of signs allows them to be easily identified and aids legibility (source: SCC & City ID Ltd).



Incorporation of maps and plans aid understanding (source: SCC & City ID Ltd).



Sheltered access to underground - Buchanan Street, Glasgow.



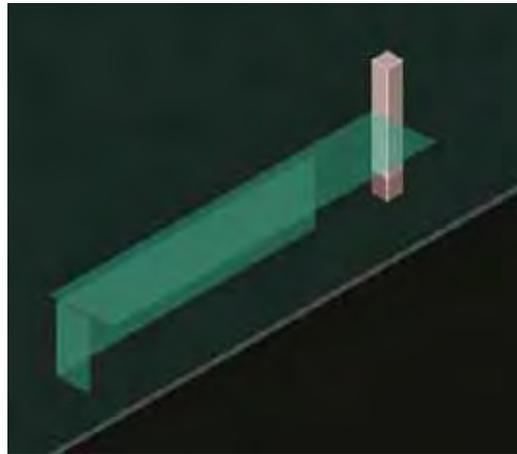
This temporary tourist information unit offers shelter for its users.

Climate & Structures

Many outdoor activities can be made more comfortable by reducing the impact of wind, rain, heat or cold. Activities such as window shopping, waiting for buses and taxis, queuing or congregating outside places of leisure and entertainment or using cash points, phone booths and information points, are examples of streetscape activities which could be made more comfortable by the control of climate.

- Spaces in the city centre should be designed to take full advantage of good climatic conditions, and create opportunities for further public life. This can be achieved by introducing informal street seating and encouraging cafes and restaurants to spill out into the street – ‘al fresco’ style.
- New structures in the streetscape should enrich the environment by introducing high quality structures of distinctive and appropriate design. Shelter should be provided in places where it is needed such as transport stops and shopping streets. The following section offers examples of installations which could be considered within the city centre:
 - Covering walkways - the busiest pedestrianised streets could have centrally positioned walkways with vertical glazing to screen from wind driven rain.
 - Telephone kiosks - although the kiosk itself is covered, the sheltering of those waiting to phone is seldom considered. A canopy over a number of booths would reduce the inharmonious visual impact caused by the variety in kiosk design of the various communication companies.

- Transport rests - at transport stops and interchanges, covered areas could be provided to give shelter and information. Where appropriate this could also include a newsagent's kiosk, toilet facilities etc.
- Built-in colonnades - where possible, shop fronts could be recessed into the building to give shelter for the consumers. This solution often has historical precedent within older towns.
- Attached colonnades/cantilevered canopies - a covered area attached onto building frontages as either a part of the original design or installed retrospectively.
- Building entrances - shelter should be offered to people who have to queue to enter places of leisure or entertainment. The experience of entering or leaving a building can be enhanced by a covered entrance.
- Arcades - a traditional solution with many well known exemplars. Arcades can be considered as part of larger developments.
- Pergolas - trellised areas that give some protection from wind and enhance the climatic experience in summer.



There are a variety of design options for the provision of shelters at transport stops and interchanges (source: SCC & City ID Ltd).



There are a variety of ways to incorporate the cycle network into the road hierarchy.

Access and Movement

Traffic management is a now crucial issue for every urban centre in terms of access to the city and circulation within. The ultimate aim of traffic regimes must be to maintain the vehicular access that is essential for the use and enjoyment of the city centre, while eliminating or reducing its adverse impacts.

- Aspects of traffic management which must be incorporated into the city's strategies are:
 - Increasing the use of public transport;
 - Prevention or limitation of car penetration into central streets;
 - Measures to improve driver behaviour and reduce speed;
 - On street parking control and rationalisation of off-street parking;
 - Adequate disabled parking provision;
 - Accommodation of service deliveries;
 - Provision for emergency services;
 - Taxi ranks provided in key locations;
 - Cyclist amenities;
 - Promoting pedestrian safety and priority.
- Traffic management schemes to improve vehicular access to the city and to reduce congestion must not be undertaken at the expense of pedestrian movement. Streetscape projects must be advanced only when they facilitate greater accessibility and pedestrian and cyclist friendly environments.
- Rationalise open lot car parks and consolidate parking in well-designed multi-storey car parks. These car parks could be located either inside the ring road or on the periphery of the main pedestrian routes of the city centre. Strategic location of car parks will increase footfall in the city's activity areas.
- The internal design of these car parks should create a safe, well lit internal environment which is welcoming for both driver and pedestrian. Consider free or subsidised parking to promote their use, keep parking off the street, and generate more pedestrian activity in the centre of Sheffield.

- Wherever possible, incorporate active edges at the street level of multistorey carparks to avoid blank facades. Multi-storey carparks must be set appropriately within the adjacent urban grain, with architectural detail and storey height in scale with adjacent development.
- Where open lot carparks are to be retained, they must be carefully landscaped and surfaced so that they complement their streetscape context. Low level perimeter landscaping can provide an edge to these sites and trees can be placed to break up large expanses of hard surface.
- The existing public transport network needs to be integrated and rationalised to provide a more efficient service and encourage increased use. The bus system should be integrated with the supertram network to improve connectivity between the bus and tram interchanges and railway station.
- Sheffield's cycle network must be maintained, improved and expanded. This includes provision of appropriately marked and signed cycle lanes on all major roads, or shared use of the footway when appropriate.
- Cycle routes should be identified by the use of contrasting surfacing materials to give the cycleway high visibility to the cyclist, vehicle driver and pedestrian. These materials should complement the adjacent pavement or road surface. Changes in surface material should be minimised and suitable for cyclists with particular attention paid to maintenance and reinstatement of cycle lanes.
- Cyclists must be provided with secure and well designed cycle parking stands and lockers at interchange points. Changing facilities in new developments will assist in promoting a cycling culture in Sheffield.



Cycle racks should be located close to entrances.



Water can animate a public space (source: Sheffield 1).



Peace Garden fountains (source: Sheffield 1).



Peace Garden fountains (source: Sheffield 1).

Water

For thousands of years people have used water as a celebration, to create a sense of occasion and to decorate principal public spaces. It introduces sound and movement to the public environment and when used by those who understand its properties, it can fascinate and delight.

Water is a magnet for people in the city. When included in public spaces and streets it can both animate a space and provide calm.

Sheffield can celebrate its historic affiliation with waterways by incorporating water into visual arts projects. The Peace Gardens offer an excellent example of how this can be achieved. Here, water has been used symbolically in this design to reflect the city's industrial processes:

- The bronze vessels which empty water into the cascades reflect the pouring of molten metal.
- The cascades and channels refer to the weirs and mill race and the channels lined with moulded leaf patterns are based on the water plants found in Sheffield's rivers.
- The fountain symbolises the energy and power of the industries of the city.

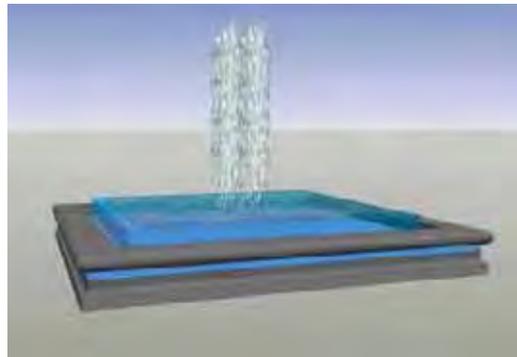
The tactile design of these water features can also be seen to promote a casual interaction between the citizens and visitors to the Peace Gardens.

In the future design of water features, the following points should be considered:

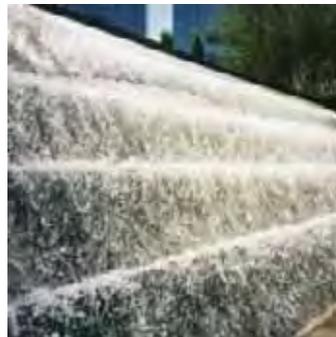
- Any water feature should be fully integrated into the overall street or public space design layout by using simple, bold features constructed of high quality materials. Water features can take the form of:
 - tracks of water linking or defining spaces and features;
 - fountains;
 - cascades.
- Water is notoriously difficult to use successfully and to maintain properly. Careful consideration must be given to its siting, form and the micro-climate within which it is to be located. The scale of streets and spaces and their character together with the effects of wind, light levels and litter, should be considered at individual locations to determine the appropriateness and form of water.
- Water both reflects and refracts light. These characteristics are often more effective in bright sunlight, but equally can provide contrast and stimulation in the hours of darkness when incorporated into an innovative lighting scheme. It should be introduced into streets or spaces in a form which is appropriate to the individual setting:
 - as a highlight or landmark;
 - to provide interest and a contrast in noise and light;
 - to enhance the user experience and quality of the space.
- The maintenance and management of water features and water quality in the city requires an intensive and sustained regime. The process of water management and the maintenance level required must be fully understood in the initial stages of design to inform its successful inclusion in streets and spaces.
- Wherever possible new water features should link to the existing rivers and brooks. The possibility of deculverting the River Sheaf and Porter Brook should be explored.



Effective lighting can create ambience in a public space in the hours of darkness (source: Sheffield 1).



Concept for new fountains at Barkers Pool (source: SCC).



Water provides interest and contrast (source: Sheffield 1).



Innovative designs will represent the importance of water to Sheffield's existence (source: Sheffield 1).



Art & Architecture.



Plaque signifying the city's industrial heritage - The Moor.



Channels in the peace garden make reference to the mills and rivers of industrial Sheffield (source: Sheffield 1).



Banners at the Millennium Gallery (source: Sheffield 1).

The Visual Arts

Sheffield City Council has actively encouraged public art programmes since the 1980s. The publication 'The City and Art: A Public Art Strategy for Sheffield 2001-2004' outlines Sheffield's approach to integrating public art within the city and uses the success of existing programmes as exemplars for future projects.

Sheffield's Public Art Strategy describes public art as "the integration of work by artists and craftspeople into public buildings and spaces". The integration of a public art scheme into a development can create character and identity and reinforce a sense of place. Art in the public realm can be informative and thought provoking, or offer a pleasing distraction from reality. It can also spur community involvement in the design of the urban environment.

In the broader context, public art projects can become an important part of any strategy to further urban regeneration, attract inward investment and encourage interest and pride in the outdoor environment. However, successful public art projects need a setting of high quality architecture and public space. Art can rarely improve a dull, flawed townscape.

Until the beginning of the twentieth century, it was commonplace for visual art to echo the language of architecture and the environment, to celebrate the functions of the city and the achievements. Artists today look further afield to find inspiration for projects to enhance the quality of city spaces and many are controversial or challenging in their design and content. However, the most successful pieces of public art generally have a local basis which engages the community.

The Public Art Strategy must be used as the foundation for the development of all new public art proposals. In addition, the following should be considered as part of public art proposals :

- Public art can be used as a means of highlighting the significance of a building or space, act as a focal point or signify a gateway. Strategically sited, public art can allow users to identify places and help to improve the legibility of the urban realm.

- Public artworks can also be woven into the finer grain details of the public realm, for example as carefully sculpted tree guards, railings, signage or street furniture. Used in this way, it becomes an expression of Sheffield's legacy of innovation and quality craftsmanship.
- A public art fund could establish a programme of major public art schemes. Following from this, partnership funding could be obtained from the private sector for the development of additional smaller scale projects.
- Commission permanent work involving local artists in hard and soft landscaping, street furniture, sculpture and lighting. These could include interpretive pieces which complement or express the architecture and environment of the city centre and the character of its citizens.
- Interactive visual arts using light and sound can further engage interest and add life to public spaces.
- A changing programme of temporary artworks can also stimulate interest. This could be in the form of rotating exhibitions by local artists and designers.
- Flags and banners provide vivid splashes of colour and movement within a city centre street scene. These can often be utilised to promote civic events, exhibitions or attractions. It is important that these visually powerful elements are integrated into the overall streetscape scheme. It may be appropriate for artists and graphic design studios to be closely involved with the city and streetscape design team in developing a coordinated approach to such elements.
- The public could have access to artists and the organisers of the visual arts programme with the provision of a telephone comment line, outreach programmes, active participation and artists in residence projects.

Accessibility

The quality of the buildings, streets and spaces of a city affects the quality of life for all groups in society. Therefore, the design of any development must be sensitive to the needs of users with disabilities, parents with young children and the elderly.

The Sheffield Accessible Environment Strategy states that “a person is not disabled until society sets a pattern of behaviour or a template for the design of its buildings and spaces that excludes them”. For an urban space to be successful it must be safe and accessible for all user groups.

The design principles for improving the quality of the public realm and the built form for all users have been outlined below in terms of ‘The Street and Movement’ and ‘The Built Form and Access’. However, the overall guiding principle must be to ensure that disabled groups are consulted.

The Street and Movement

The design requirements of any street are as follows :

- Pavements and walkways should be of a sufficient width to allow the unimpeded passage of wheelchairs and pushchairs.
- Pedestrian walkways must provide a dropped/sloping kerb to ensure easy and safe crossings points.
- Street furniture should not reduce the width of the pavement to a degree that the movement of wheelchair users and pushchairs is impeded.
- Street furniture should be strategically placed at regular intervals in order to provide a degree of legibility for the visually impaired.
- Where possible, signs should be located within the reach of the pedestrian and have tactile lettering.
- Signs should consist of clear text and pictograms which contrast with the background to ensure clarity and legibility.

- Stepped areas must ensure that a suitable alternative is provided for disadvantaged users in the form of a ramp.
- Lighting should ensure visual acuity and provide security for all users.
- Any manhole covers should be flush with adjoining surfaces.

The Built Form and Access

From 2004, The Disability Discrimination Act (1995) will incorporate regulations which require building owners/occupiers to provide dignified access for disabled users. It is essential that new developments integrate such access at the design stages.

- For existing buildings, changes in level between the street and ground level should, wherever possible, be accommodated within the building envelope to avoid ramps projecting onto the footway.
- Steps should not be used as the key focus of important desire lines as this creates visual barrier to disadvantaged users.
- Whenever possible, entrances should be at grade to limit any adverse effects on the visual and physical quality of the streetscape. Where entrances are not at grade ramps and stairs with suitable rest platforms and handrails should be incorporated. Ramps should have small kerbs on exposed sides to ensure the safety of the user.
- Doors to buildings should be of adequate width to allow wheelchair users easy access. Wherever possible automatic doors are preferred. If not possible, consideration must be given to the opening direction and force required to open it to ensure that it can be operated by all user groups.
- Disabled car parking spaces should always be provided even in areas where private cars are normally prohibited. Parking spaces should be on level ground as close to facilities and amenities as possible. Wherever possible, covered parking should be provided to ensure the comfort of the user.



Dropped kerb at a pedestrian crossing.



Ramps make buildings accessible to all (source: SCC).



Disabled car parking.

Summary of Design Guidelines

The ordering principle for the city centre's streets and spaces was established in section 3.3 and identifies three levels within the hierarchy of streets and spaces throughout the city centre. The corresponding matrix of recommended treatment in relation to the design guidelines is summarised below.

Table 5.1 Materials Palette

Order of streets and spaces	Footways	Carriageways	Kerbs / Channel Blocks	Street Furniture & Signs	Trees / Planting	Lighting	Water	Visual Arts	
Primary	Hard Pennine Sandstone. Service covers fully integrated into paved surfaces.	Granite setts on streets of special character. Elsewhere hot rolled asphalt with green aggregate in clear binder. Pedestrian crossings to be paved in large grey/ black granite blocks as on Surrey street.	Kerbs: Granite /Mid Grey colour to contrast with carriageway surface. Channel blocks: dark grey /black.	<ul style="list-style-type: none"> • SCC Bronze palette for Heart of City. • SCC Stainless Steel palette elsewhere. • SCC ductile iron tree grilles and drainage covers (see table 5.2). • Signage to 'Connect Sheffield' approved product range. 	Street trees to be semi-mature to SCC specification planted in extended pits using approved structural soil system. Planting to be innovative and to achieve highest standards of design and maintenance.	Premium Quality Appropriately scaled carriageway lighting on tapered columns. Building mounted lighting where possible. Lower tapered columns for extra wide footways and pedestrian areas. Supplementary low level amenity lighting.	Premium quality special design at civic scale.	Site specific commissions using highest standards of materials and achieving highest standards of craftsmanship. May be incorporated into functional elements of the streetscape.	Canopies relating to transport facilities to PTE / SCC approved model. Bespoke canopies to be of highest standards of design and to be sensitive to architectural context.
Secondary	Generally using approved 'Sheffield Flag' high quality ground surface to approved SCC specification. Service covers fully integrated into paved surfaces	Stone Mastic Asphalt. Pedestrian crossings to be black imprinted tarmac with pattern to match large granite block crossings on primary streets	Kerbs: Granite, Mid Grey colour to contrast with carriageway surface	SCC Stainless Steel palette. SCC ductile iron tree grilles and drainage covers. Signage to 'Connect Sheffield' approved product range.	Street trees to be semi-mature to SCC specification planted in extended pits using approved structural soil system. Planting to be innovative and to achieve highest standards of design and maintenance.	Premium Quality Appropriately scaled carriageway lighting on tapered columns. Building mounted lighting where possible. Lower tapered columns for extra wide footways and pedestrian areas. Supplementary low level amenity lighting.	Premium quality special design at civic scale.	Site specific commissions using highest standards of materials and achieving highest standards of craftsmanship. May be incorporated into functional elements of the streetscape.	Canopies relating to transport facilities to PTE / SCC approved model. Bespoke canopies to be of highest standards of design and to be sensitive to architectural context.
Ring Road & Distributor Roads	Silver Grey Granite aggregate concrete blocks with green/ grey granite trims/ Channel blocks. Areas of paving under canopies/ building overhangs or adjoining shop fronts to be paved with granite on reinforced sub-base with grouted joints, service covers fully integrated	Stone Mastic Asphalt. Pedestrian crossings to be black imprinted tarmac with pattern to match large granite block crossings on primary streets.	Mid Grey Granite.	SCC Stainless Steel palette. SCC ductile iron tree grilles and drainage covers. Signage to 'Connect Sheffield' approved product range.	Street trees to be semi-mature to SCC specification planted in extended pits using approved structural soil system. Planting to be innovative and to achieve highest standards of design and maintenance.	Premium Quality Appropriately scaled carriageway lighting on tapered columns. Building mounted lighting where possible. Lower tapered columns for extra wide footways and pedestrian areas. Supplementary low level amenity lighting.		Site specific commissions using highest standards of materials and achieving highest standards of craftsmanship. May be incorporated into functional elements of the streetscape.	Canopies relating to transport facilities to PTE / SCC approved model. Bespoke canopies to be of highest standards of design and to be sensitive to architectural context.

Table 5.2 Street Furniture Suite

ITEMS	PRIMARY	SECONDARY	INNER RELIEF ROAD AND
Seats	Heart of the City Area: SCC bronze suite (Asquith Design Partnership – ADP) Elsewhere: SCC stainless steel suite (ADP) Artist Designated Special Seating: is encouraged in places of distinctive character.	SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).
Bins	Heart of the City Area: SCC bronze suite (ADP). Elsewhere: SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).
Bollards	Heart of the City Area: SCC bronze suite (ADP) including removable bollards where appropriate. Elsewhere: SCC stainless steel suite (ADP) including removable bollards where appropriate. Illuminate with LED ground lighters in places of special character. Sign Bollards: to be used to reduce signage clutter as appropriate.	SCC stainless steel suite (ADP) including removable bollards where appropriate. Sign Bollards: to be used to reduce signage clutter as appropriate.	SCC stainless steel suite (ADP) including removable bollards where appropriate. Sign Bollards: to be used to reduce signage clutter as appropriate.
Handrails / Guardrails	Heart of the City Area: SCC bronze suite (ADP). Elsewhere: SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).
Cycle / Motorcycle Stands	Heart of the City Area: SCC bronze suite (ADP). Elsewhere: SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).
Planters	Heart of the City Area: SCC bronze suite (ADP). Elsewhere: SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).	SCC stainless steel suite (ADP).
Tree Grilles	SCC ductile iron grille with extensions for up-lighters.	SCC ductile iron grille with extensions for up-lighters.	SCC ductile iron grille with extensions for up-lighters.
Tree Guards	SCC ductile iron grille with extensions for up-lighters.	SCC standard to be developed.	SCC standard to be developed.
Drainage Grilles	SCC ductile iron grille for channels. Bespoke radiused versions where required.	SCC ductile iron grille for channels.	SCC ductile iron grille for channels.
Lamp columns	SCC ductile iron grille for channels. Bespoke radiused versions where required.	Tapered black painted columns of appropriate height. Tapered black painted columns of appropriate height.	Tapered black painted columns of appropriate height.
Banners and Hanging Baskets	Tapered black painted columns of appropriate height. Supplementary lower height columns for extra wide footways and pedestrian areas. Special premium quality lighting columns for places of distinctive character.	Develop Standards	PTE / SCC standard shelters / canopies for transport related shelters. Bespoke canopies to of premium design quality.
Canopies / Bus Stops / Shelters	PTE / SCC standard shelters / canopies for transport related shelters. Bespoke canopies to of premium design quality.	PTE / SCC standard shelters / canopies for transport related shelters. Bespoke canopies to of premium design quality.	PTE / SCC standard shelters / canopies for transport related shelters. Bespoke canopies to of premium design quality.
Help Points	SCC stainless steel suite (ADP or incorporated into 'Connect Sheffield' signage.	SCC stainless steel suite (ADP or incorporated into 'Connect Sheffield' signage.	SCC stainless steel suite (ADP or incorporated into 'Connect Sheffield' signage.
Signage / Information Boards	<ul style="list-style-type: none"> 'Connect Sheffield' suite Use ADP sign bollards where appropriate Bespoke signage for places of special character. 	<ul style="list-style-type: none"> 'Connect Sheffield' suite Use ADP sign bollards where appropriate Bespoke signage for places of special character. 	<ul style="list-style-type: none"> 'Connect Sheffield' suite Use ADP sign bollards where appropriate Bespoke signage for places of special character.
Dataweb Kiosks	'Connect Sheffield' suite	'Connect Sheffield' suite	'Connect Sheffield' suite
Telephone Boxes	Work with service providers to achieve sympathetic selection of types, location and integration into floorscape.	Work with service providers to achieve sympathetic selection of types, location and integration into floorscape.	Work with service providers to achieve sympathetic selection of types, location and integration into floorscape.
On Highway Advertising	Carry out review with aim of reducing both insensitive placement and excessive street clutter.	Carry out review with aim of reducing both insensitive placement and excessive street clutter.	Carry out review with aim of reducing both insensitive placement and excessive street clutter.

5.2 Management and Maintenance



Source: SCC

Introduction

The strategic public realm guidance promotes investment in the city centre's spaces, buildings and streets. However, the value of this investment is reduced if the urban environment is not managed and maintained effectively to promote a positive image of the city.

Within the urban environment, projects have to be considered not only in terms of their implementation, but their future maintenance and care. Design and maintenance need to be considered together if the streetscape environment is to add value to the image and perception of the city.

The development of common objectives and a co-ordinated programme for management and maintenance among the various public agencies is essential to achieve and sustain improvement to public spaces and ensure continuing corporate investment in the city.



Peace Gardens.



Management

City Centre Management

To maintain an attractive and clean urban environment, the city centre manager works with shopkeepers, businesses and the general public to encourage the continuing economic success and attractive appearance of streetscape projects. The city centre team should monitor cleansing operations, seek to improve the methods used and raise user awareness of the value of the public realm.

Public Awareness

At present, the amount of litter and staining evident in Sheffield's streetscape indicates a general lack of care for the urban environment.

There is a recognised problem with litter in many city centres, particularly in pedestrian through routes, and around areas which have late night bars and clubs. The image of a littered city creates a negative impression, while a litter free environment can positively influence behaviour. 'Clean streets' will, with time, develop a sense of pride within Sheffield's citizens.

An awareness campaign must be promoted in the city's schools, in the local press, and at public events to communicate the importance of the public realm in our daily lives. Projects should be run within the schools to proactively involve children to care for their urban environment.

Street Management - Having a Presence

Sheffield, like some other cities, has introduced a team of people – city centre ambassadors - to assist in the management of its streets. These representatives are dressed in a recognisable uniform and are employed to help people find their way around the city centre. Such initiatives give the management of the street a higher profile and raise public awareness.

Design Manuals

The proposed maintenance procedures for any streetscape project should be compiled in a manual prior to completion of the contracted works. The manual should:

- incorporate the agreed procedures for maintenance works;
- identify the exact materials to be used;
- provide the names and contact information for all suppliers;
- outline procedures for reinstatement works by Public Utility companies.

Amenity Lighting/CCTV

Streetscape projects can be strengthened by the implementation of a successful lighting scheme, which can enhance its character and prolong hours of use of the city's streets and spaces. The introduction of lighting can increase the perception of safety in the area.

In addition, the introduction of close circuit television (CCTV) to streets and spaces has been proven to reduce vandalism and crime. By integrating lighting solutions with monitoring equipment and help buttons, an area's safety is substantially increased.

Continuing Design Involvement

It is recommended that designers be involved in the aftercare of the streetscape projects in order to promote co-ordination and continuity of design aims. The vision for the project can then be maintained.

Maintenance

The maintenance of the public realm is twofold:

1. *The maintenance of the materials in the streets, including:*
 - reinstatement of paving surfaces to the standard and specification of the original works;
 - co-ordination of public utilities - both in the design process to promote creative resolutions to the integration of services and access points, and in the programming of services;
 - responding immediately to failures in the materials (i.e. vehicle overrun causing cracking to slabs) to ensure the safety of users of the space is maintained, and that the problem does not spread;
 - a stockpile of paving materials must be set aside to ensure that stock is available for reinstatement work and repair.
2. *The general upkeep of the environment including:*
 - litter and refuse collection, both from the streets and from the bins;
 - removal of flyer postings;
 - cleaning of the street (washing, specialist steam cleaning for chewing gum on pavements, removal of oil staining);
 - removal of graffiti.

'Zones' for Streets

While littering may appear harmless, it jeopardises the success of projects and visually detracts from the street environment. The City Council is implementing the concept of zones, which equate to the expected standard of cleanliness for that area. The zones do not dictate the methods or frequency of cleaning/rubbish removal, but instead dictate the level of cleanliness to be achieved. The cleaning regimes for streets and spaces must take into account their use patterns and be adaptable to weather conditions.

Impact of Cleaning Methods - Paving the Way

The impact of cleaning methods must be considered when establishing a cleansing regime for the streets. Many materials and laying methods need time for the joints to seal and for the pavements to become more impervious. Vacuum suction and high pressure hoses should not be used in the initial months of a project's life, with operations restricted to manual sweeping.

'Streets Ahead', a publication produced by Scottish Enterprise, offers technical guidelines for quality streetscape projects, and provides the following checklist for aftercare:

- contractors should attend to emerging defects immediately;
- the maintenance advantages of flexibility laid surfaces should be considered;
- flexibility laid surfaces should be allowed time to mature;
- avoid the use of vacuum suction operations where there is risk of disturbance to a surface;
- the method of street cleaning should follow the requirements of the design;
- CCTV should be considered for town centre schemes;
- avoid the use of joint sealing bonding agents for prominent block paving surfaces;
- investigate the effect of using salt-grit for de-icing proposed surfaces;
- maintenance requirements should be specified, calculated and approved prior to implementation.



An effective street cleaning programme is essential in the creation of an attractive public realm.

Public Utilities

There is a need to improve and co-ordinate the activities of Public Utilities (PUs). Failure to reinstate street surfaces to the standard of the original finish is a significant issue – particularly where considerable investment has been directed to the improvement of the streetscape with quality materials.

Repairs to road and pavement surfaces are to be done with “prescribed material” to a “prescribed standard” and streetworks supervisors and operators have to prove themselves capable of organising and carrying out reinstatement work. The Streetworks Act is a positive instrument for achieving a higher standard of quality control. This is essential if critical decisions on the future quality of streets are to be determined.

Application

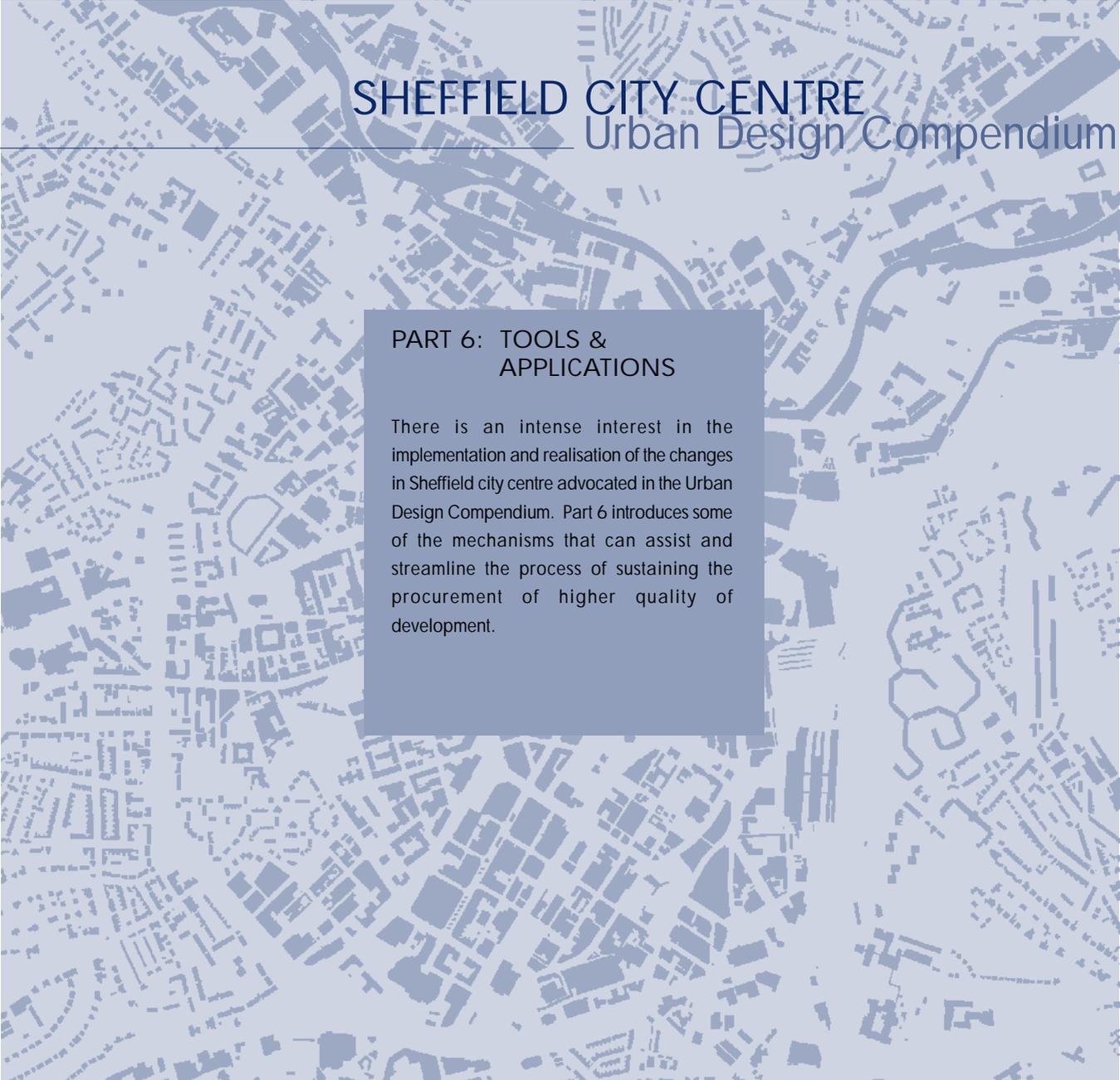
Action is required to:

- guarantee that original street surface materials are reinstated following works;
- apply the requirements of the 1991 Streetworks Act as the minimum standard for works in the City centre;
- co-ordinate public utilities activities in order that the disruption and inconvenience to city centre businesses and pedestrians is minimised.

Existing co-ordination arrangements should be extended to embrace the public authorities, PUs and the business community. There are a variety of approaches to establishing such a level of co-ordination for the city centre and some are examined later. However, one of the key tasks will be to change attitudes in the PUs towards their reinstatement activities.



Repair and maintenance should have minimum disruption on people's enjoyment of the city's streets and spaces.

An aerial photograph of Sheffield city centre, showing a dense urban layout with a grid of streets, numerous buildings, and a winding river (the Don) cutting through the city. The image is in a light blue monochrome palette.

SHEFFIELD CITY CENTRE

Urban Design Compendium

PART 6: TOOLS & APPLICATIONS

There is an intense interest in the implementation and realisation of the changes in Sheffield city centre advocated in the Urban Design Compendium. Part 6 introduces some of the mechanisms that can assist and streamline the process of sustaining the procurement of higher quality of development.

Introduction

The growing knowledge and 'virtual' economy has seen the pace of development quicken in recent years. Local authorities will find it increasingly difficult to prepare plans which will satisfy statutory planning requirements without creating a stalemate in the future development potential of their plan areas. This part of the Compendium offers advice on mechanisms for change within the scope of the planning and urban design process which will ensure the sustainable regeneration of Sheffield city centre.

A key objective shared by all is to attempt to take action in advance of market pressures and to anticipate the development process by the initiation and promotion of design guidance which is clear and unambiguous.

There is widespread guidance available from CABE and other organisations describing various design and development tools which can be used to ensure that the local authority is leading the design and development process in their locality. These tools include:

- consultation and engagement;
- design and development briefs;
- competitions;
- modelling;
- demonstration projects.

Consultation and Engagement

There is a need to involve local citizens in the design and development process if Sheffield is to sustain its transformation in the long term. It is the local community who will be living and working in the regenerated city centre and to ensure that the changes are well received and maintained there is a need to develop a sense of common ownership. To encourage this, local people should be treated as a joint client to ensure that local perspectives and needs are considered in the design process and reflected in the design solutions. If consultations with local communities and other groups are led by experienced professionals they have the potential to increase public understanding and awareness of the impacts and benefits of development proposals, reduce the potential for objections and increase the chance of long term success.

Sheffield City Council should formalise this arrangement by introducing guidance for developers to include public consultation in the design and development process. The introduction of such a scheme will encourage a culture which recognises and understands the value of good design across the whole spectrum of urban issues and may encourage citizens of the city to be more receptive of innovative design solutions.

There are a variety of ways in which public participation can be engaged including:

- The organisation of road shows, events and/or local festivals to seek public feedback. The majority of local people will have an idea of what developments they would like to see in their area. Small road shows and festivals offer the local community the opportunity to have their say in the development of their city. Interactive exhibitions will enable the council and the client to gauge the community's response and determine the feasibility of various design solutions. They will provide the target audience (the local community) with the opportunity to convey their ideas to the developer. In many instances the local community may offer a solution that the developer may not have considered, not having the benefit of local knowledge.

- Involvement of community activists in the design process will provide an instant link to the community. They should be encouraged to play a strong role in the organisation of public meetings and road show events to ensure that activities will appeal to the target audience.
- Involving local schools in the development process will generate local interest from all user groups. This can be achieved by establishing a small scheme where children use drawings and collages to create images of what they want in the city in which they live. These images could be used for leaflets and posters to encourage parents and families to read rather than disregard them.
- In addition to these participatory events the following methods of communication could also be used:
 - direct mail drops;
 - leaflet advertising;
 - promotion on site;
 - newspaper coverage.

When transforming ideas into a useable document they must be made inspirational through the use of direct images and clear text. One way of doing this would be to include some of the community's contributions in the final document. This would not only foster a continuing interest in the development process but would encourage future involvement if the community see that their views are being considered.

Continued communication will create positive partnerships with local communities and provide the designer with a better understanding of the local context which may result in provocative and inspiring images of what Sheffield could feasibly become.

Development Briefs

Development briefs offer local authorities the opportunity to play a pro-active role in the development process. They have the potential to provide “one of the most effective means of articulating the design principles for a site and implementing design policy” (DETR).

It is widely recognised that development briefs can stultify creativity if they are too prescriptive. However, at the same time they do require a certain degree of prescription to inspire, whilst ensuring that design proposals are suitable for the development site. A successful brief should endeavour to include the following elements:

- A clear statement of intent to ensure the designer is aware of the underlying vision for the development area;
- An initial urban design analysis of the area and development site – this offers the opportunity to provide local context information and highlight any constraints and important features which need to be retained or enhanced;
- Design objectives – these should be set out with an aim to inspire the highest possible design quality. Although these objectives should not be too prescriptive they should indicate design elements that will not be acceptable for that site;
- Indicative proposals – can be conveyed through images, diagrams or photographs to illustrate how local policies may be applied to the site. These proposals should be conceptual to encourage innovation in the actual design solution.

If prepared with insufficient conviction, uncertainty can be created and critical urban design objectives and exciting opportunities may be squandered by mediocrity. Both the preparation of the development brief and the assessment of consequent proposals should include consultations with experienced and reputed architects and designers and recognise the importance of community involvement.

Design Competitions

Sheffield city centre offers a number of opportunities where the promotion of national and international design competitions would be an appropriate way of raising design expectations and the interest of professionals and the public. Design competitions have in the past been effective in raising the quality in the urban design debate and had an influence on the enhancement of the civic reputation of the locality, for example:

- Paris has for many years pursued a policy of procuring the design of major public buildings and urban spaces through an international competition process. This has been championed at the highest political levels and has added immeasurably to national prestige as well as attracting to the city a whole new generation of cultural tourists;
- The Austrian city of Gratz offers a good example of how a city of a smaller scale can use the competition process to help establish an internationally recognised programme of architectural excellence. The city's achievements lead to its selection as European City of Culture 2003.

Design competitions can be organised directly by public authorities, private developers or a partnership of both. Many clients or promoters employ an experienced independent agency such as the RIBA to organise and conduct the process but ultimately, the process is driven by the requirements of the client group. The main requirements, if the best design talent is to be attracted, is to have a clear brief and a completely fair and transparent process.

The RIBA offers advice on a variety of standard competitive processes which can be followed when trying to find the right architect design solution for a development site. These include:

- Open Ideas Competition: This process allows the identification of a broad range of design solutions based on a conceptual brief provided by the client. Various solutions can be explored without a commitment to build.

- Competitive Interview: This will enable the developer to find the right architect or design team. A variety of consultants are invited to submit an expression of interest based on the tender brief. At this stage a broad project brief and a commitment to build is required.
- Open Project Competition: This aims to find a design solution. It involves a two stage process which in the first instance is open to all registered professionals who would submit a detailed project brief and a commitment to build. It would then be short-listed until the right design team and solution for the development site have been selected.
- Invited Competition: In this scenario the client selects a short-list of potential architects to find the best design solution for the development site. These architects submit a detailed project brief and the most suitable candidate is chosen based in their entry.

Other forms of competition frequently used at the moment are Design and Build and procurement by PFI/PPP, where design is a part only of the competitive submission, alongside cost and the offer of other services. In some cases this approach has proved useful to emphasise the primacy of design and quality of product but generally, the cost and transfer of development risk are judged to be of greater importance. It is therefore difficult to visualise how this method of procurement will be effective in promoting the quality aspired to in the Compendium unless there is positive discrimination in favour of design content.

It is not the intention that these processes are viewed as rigid rules of the competition process. Sheffield City Council and other potential client groups are encouraged to adapt and/or combine these approaches to suit the requirements of the client group and the project site.

In Sheffield local design competitions should be encouraged to showcase new talent and provide an opportunity for debate and dialogue amongst the general public. Given the right project and an inspiring brief, design competitions can provide a context for experimentation and innovation which often have spin-off benefits for other sectors of the community.

Use of Models

Throughout this study the importance of good communication in the urban design process and the need to present guidance and proposals in a clear and accessible manner has been highlighted.

One method of communication the Compendium advocates is the use of 3-d modelling when presenting and considering proposals for major urban interventions.

Interactive and manipulative modelling of development proposals has a key role to play in terms of visualising the impact of development on the overall form of the city, as well as the impact it will have on the immediate locality. Obvious examples are proposals for high buildings where the potential for overshadowing and the impact on the micro-climate need to be assessed, in addition to determining the effects on the streetscape and skyline.

The virtual city provides a framework for developing cities that goes beyond conventional static models. These models can provide a realistic impression of how a development would look in city context thus allowing the designer to test different design solutions while providing an accurate visualisation of the completed project. The effectiveness of the virtual city can be strengthened by combining the model with aerial photographs and streetscapes from the existing town centre to create realistic urban neighbourhoods and further aid the visualisation of a design concept. This tool provides an invaluable development control tool for the council as it offers new methods for evaluating the impacts of development proposals.

This approach to design provides an interesting and interactive means of conveying changes in city form to all user groups. It would provide an accessible and innovative method of engaging the community and would provide an invaluable educational tool. However, it would be important to provide free internet access points within the planning department and the local libraries to ensure that this is a facility accessible to all.

Demonstration Projects

Despite the best intentions and however well presented they are, exhibitions aimed at achieving high standards of design and implementation may not be sufficient and a more direct action may be needed.

Demonstration projects can be a way of explaining new ideas and of monitoring their impact or effectiveness. There are good examples from within Sheffield such as the Peace Gardens which illustrate the positive impact that the implementation of well chosen demonstration projects can have. They can encourage development by enabling people to visualise the potential of a place which may not have otherwise been apparent.

A wide range of benefits can be anticipated - from the suitability of particular delivery mechanisms, through the proving of design, construction and cost parameters, to the implications for future management and public acceptability.

These demonstration projects can take the various forms, for example:

- In the more successful areas of the city, such as the Devonshire Quarter, small scale public realm projects which enable sections of the quarter to be closed for festivals would be beneficial in ensuring the area continues to develop as a dynamic and vibrant part of the city.
- In areas such as the St. Vincent's Quarter, innovative and exemplar projects like the creation of a community focus at St. Vincent's Church should be used as a catalyst for the regeneration of these declining areas.

Whatever form these demonstrations projects take they should be responsive to the overall strategic vision for the city and the quarter specific guidance. Whilst it may be difficult to commit to long term capital investment, a programme of prioritised and well chosen, affordable projects will provide an opportunity to develop a base of expertise. They will offer experience in collaborative working amongst professionals and, most importantly, a vehicle for raising the awareness and engagement of the wider community.

Conclusion

These are some of the tools available which will help encourage the achievement of higher standards of design in Sheffield. Central to this process is the human and organisational resource provided by the principal stakeholders.

It is recognised that while these mechanisms for change will not apply to every project undertaken in the regeneration of Sheffield city centre, a programme should be put in place to ensure that they can be used when required.

The regeneration of Sheffield city centre should provide the opportunity to not only enhance and reposition the city's civic reputation, but to create a more design literate and empowered community. This we believe is the basis of a sustainable urban future.