

# Ironbridge Gorge World Heritage Site Public Realm Design Guide



**Colin Davis Associates**  
**August 2011**

# Foreword

The Ironbridge Gorge World Heritage Site, Public Realm Design Guide was commissioned to provide a cost effective and sustainable framework for the design, management and maintenance within the public realm of the World Heritage Site.

The quality of the public realm is an important component of the World Heritage Site. What it looks like and how it functions are all part of reinforcing local distinctiveness and about contributing to sustaining and enhancing the area and its community.

The purpose of the guide is to protect and where necessary improve the quality of the public realm by helping to reduce, correct and prevent uncoordinated and inappropriate construction details and materials as well as providing guidance to help coordinate the many agencies which are responsible for creating and maintaining the quality of street works.

# Acknowledgements

Colin Davis  
William Spencer  
Michael Vout

Colin Davis Associates  
Colin Davis Associates  
Telford & Wrekin Council

The World heritage Site Public Realm Guide is a joint partnership project between Telford & Wrekin Council, English Heritage and Shropshire Council.

Colin Davis Associates  
23 Southwood Gardens  
Esher, Surrey  
KT10 0DF  
020 8398 7837

# Contents

## Introduction

The Purpose of the Guide	4
What is the public realm?	5
How to use the guide	6
The Ironbridge Gorge World Heritage Site	8

## Part One: Defining the quality

General character	9
How the area has changed	9
Subdivisions within the World Heritage Site	11
Street character types	13
General Conclusions	17

## Part Two: The Guide

<b>Introduction</b>	<b>19</b>
---------------------	-----------

### Features

#### **Ground surfaces**

General	
1. Road surfaces (carriageways)	20
2. Pavements (footways) and footpaths	21
3. Kerbs	22
4. Verges	23
5. Drainage channels	24
6. Steps	25
7. Handrails	26

#### **Street furniture**

General	27
8. Signs	28
9. Lighting and cameras	30
10. Seats	32
11. Bollards and railings	33
12. Bins, boxes and machines	34
13. Structures, kiosks and bus shelters	36
14 Boundaries	37

#### **Planting**

General	38
15. Street trees	38
16. Planters and hanging baskets	39

#### **Public art**

17. Public art	40
----------------	----

### **Bringing it all together**

Appropriate design options for the character of each street	41
---	----

<b>Procurement, sourcing and workmanship</b>	<b>42</b>
--	-----------

<b>Part Three: Co ordination</b>	<b>43</b>
----------------------------------	-----------

## **Part Four: Appendices**

Construction details	44
Action to reduce sign clutter	46

# Introduction

## **The Purpose of the Guide**

The guide provides instruction and advice on the way in which the public realm in the World Heritage Site is designed, managed and maintained.

It builds upon the experience of English Heritage and its document *Streets for All West Midlands*.

The guide is intended as a reference manual of good practice for all those involved in the long chain of decision making, including councillors, highway, traffic and lighting engineers, landscape and urban designers, town planning and conservation staff, amenity societies, utility companies, including their many tiers of management, down to the people who are actually engaged in physical work to the public realm.

### **The guide:**

- identifies the elements that make the public realm distinctive: its landscape, materials and traditional detailing,
- addresses common problems that erode the distinctive quality,
- explains how good integrated design and management is necessary to deliver a better public realm.

## What is the Public Realm?

The term 'public realm' can be defined and understood in different ways. For the purposes of this guide it is defined as all the highway and hard surfaced spaces within the World Heritage Site which are freely accessible by the public. This includes all of the streets, roads, footpaths and public spaces. It does not include the green open spaces and woodland.

This guide specifically addresses the quality of:

- the ground surfaces
- the street furniture

It also reinforces the importance of addressing these issues together in a coherent and coordinated way. It is the combined effect of all features which give the public realm its overall quality and character.

Whilst the guide does not provide information about the architecture, buildings and large scale structures within the World Heritage Site they obviously form an extremely significant and substantial part of the physical, visual and functional context of the public realm and are therefore referred to within the guide where appropriate.

The public realm we see in the World Heritage Site today is the product and accumulation of many years of historic development and change as well as the affect of the continuing activities of many agencies such as highway maintenance, each with its own tasks and priorities.

A challenge for the design and management of the public realm in the World Heritage Site is to value, sustain and enhance the qualities which make the area special whilst meeting contemporary needs.

## How to use the guide

The guide is organised into four sections :

**Part One** defines the quality of the World Heritage Site and identifies the key principles which create that quality and are important to the public realm. It also emphasises the importance of integrated design and management of the public realm.

**Part Two** contains information about the features which make up the public realm and instructions to ensure that their design is brought together and is appropriate to the character of each street.

This part also provides information about procurement sourcing and workmanship.

**Part Three** contains information about how to coordinate the agencies responsible for the public realm.

**Part Four** contains construction details and ways to reduce sign clutter

The document contains two types of coloured box :



Text within green boxes contains key principles and features



Text within red boxes contains key instructions

## Background

The Ironbridge Gorge area is “...under pressure from traffic, visitors and worse still from the uncontrollable desire to enhance the place”.

Sir Neil Cossons in ‘Landscape of Industry’

*‘The Ironbridge Gorge World Heritage Site is full of historic and visual incident provided by buildings, structures and landscape and the human activity of the area. The public realm should be a complement to this visual and human interest. It should not be in competition with it, either in terms of incremental accumulation of street furniture, signs and markings or in terms of unnecessarily complex and rich design.*

*Historic surface treatments, street furniture and boundaries should be retained and conserved. For new interventions there will be a hierarchy of design treatments appropriate to different situations and types of thoroughfare and space. These will be informed by our knowledge of what was used throughout the area’s history but the overall policy should be that they should be simple and uncluttered and of the best materials appropriate for the type of space or thoroughfare that are affordable in execution and maintenance.*

*The public realm should be the stage not the show: the gallery wall not the painting’*

Ref. English Heritage

Much of the public realm is the result of a series of uncoordinated activities by different public sector agencies and their contractors, as they carry out their normal day to day functions. As a result, street furniture such as signs, bins and equipment are put in place as they normally would be anywhere in the country without sufficient consideration of the specific context of an area. Gradually and incrementally over time the effect of this becomes very pronounced.

The situation is compounded by the large number of organisations, agencies or individuals within them who authorise, or carry out independent works in the public realm. Eg. one can identify at least fourteen departments within Telford & Wrekin who are responsible for different aspects of the public realm. Add to these the statutory service companies and their contractors and the total could be in excess of forty different responsible bodies.

Every intervention to a street surface or additional item of street furniture is undertaken for a reason eg. it follows public policy, it is an essential repair or for health and safety reasons etc. The purpose of this work is to help provide a level of guidance so that better and more informed decisions and choices can be made and that work by different agents within the public realm is co-ordinated.

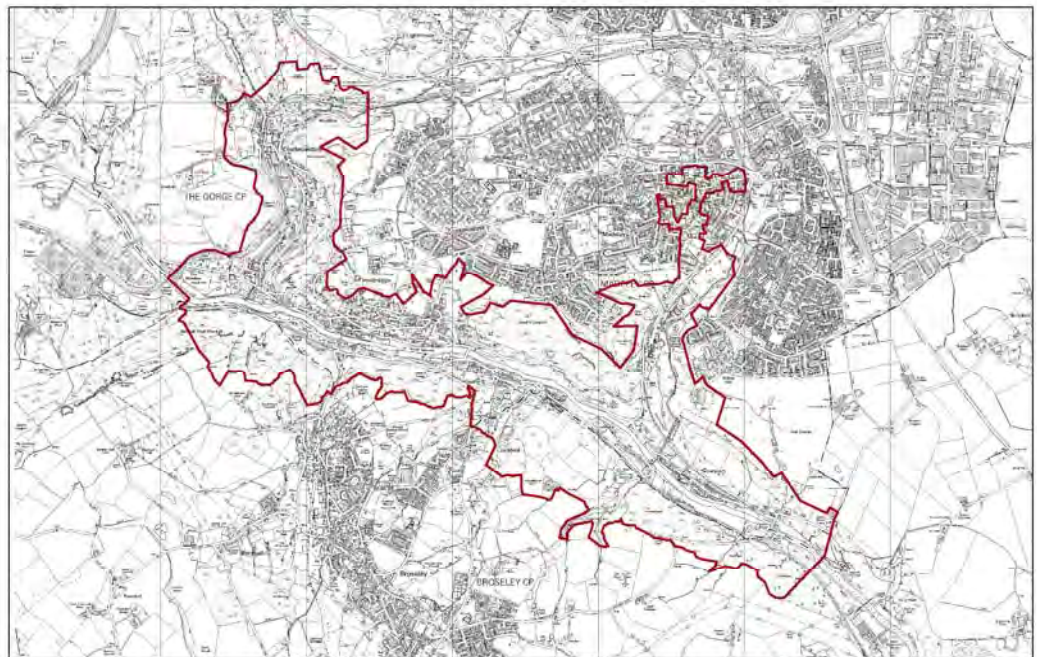
## The Ironbridge Gorge World Heritage Site

The World Heritage Site was designated in 1986 and covers an area of 5.5 km<sup>2</sup> (550ha). Most of it is located in Telford, Shropshire.

The site incorporates a 5km length of the steep-sided Severn Valley together with two smaller river valleys extending northwards to Coalbrookdale and Madeley. The area contains a number of settlements including Coalbrookdale, Ironbridge, Jackfield, Coalport and Madeley

The area offers a powerful insight into the origins of the Industrial Revolution and also contains extensive evidence and remains of that period when the area was the focus of international attention from artists, engineers, and writers. The site contains substantial remains of mines, foundries, factories, workshops, warehouses, ironmasters' and workers' housing, public buildings, infrastructure, and transport systems, together with traditional landscape and forests of the Severn Gorge.

Today the site is a living, working community with a population of approximately 4000 people. It is also a historic landscape that is interpreted and made accessible through the work of a number of organisations, in particular, the Ironbridge Gorge Museum Trust (established in 1967 to preserve and interpret the remains of the Industrial Revolution within the Ironbridge Gorge) and the Severn Gorge Countryside Trust (established in 1991 to manage the woodland and grassland in the Gorge).



The extent of the World Heritage Site



# Part One: Defining the quality of the Ironbridge Gorge World Heritage Site

## General Character

The use of **Iron** has a strong historic association with the area and has been adapted for many uses including building details: lintels and window frames, as well as external details such as posts and gates.

Cast iron kerbs are an appropriate feature of the area but are in fact a late 20<sup>th</sup> century introduction.

Local **stone** is used in significant and larger buildings. ( both for the building and for boundaries. ) In some cases boundaries have lower courses in stone with brick above.

Although there is existing use of stone slab pavements, this is not a historic surface material. Roads would have historically been formed of dark crushed stone, which in the later nineteenth century would have been bound or replaced with a tar based material.

**Brick** is commonly used in buildings, boundaries and ground surfaces such as drainage gullies.

The Ironbridge area was designated as a World Heritage Site because of its unique historic significance as the birth place of the Industrial Revolution and because of its related unique physical quality.

Key features of the unique physical character include the:

- dramatic natural setting
- use of local materials, particularly iron and brick
- use of local skills
- robust, industrial vernacular integrity of design
- innovation
- the informal 'vernacular' townscape ( see page 13)

## How the area has changed

The Ironbridge Gorge area has changed considerably over the past 200 years. Dramatic changes began to take place with the expansion of iron working in the early 1700's. By the mid 1800's the area was an intensive and aggressive area of industrial activity but by the beginning of the 20<sup>th</sup> century it had become a place of decline and dereliction.

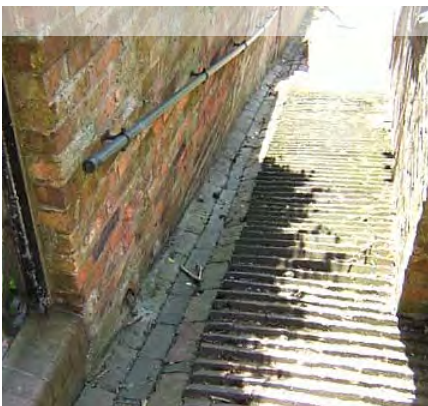
Today it is a thriving attractive place. Most of its buildings and structures have been repaired, its monuments to the industrial past restored and valued and the natural garden and woodland features have matured and clothe the area in a generous context of trees and vegetation.

The WHS is a place which has to balance a number of needs and qualities including:

- A place which supports a living 21<sup>st</sup> century community
- The conservation of an historically authentic place
- A place which provides an attractive experience of the historic past
- The management of a very green natural landscape



Cast iron was used for windows, lintels and garden gates; brick for most buildings and for draining channels



After intensive industrial activity in the 1800's, by the beginning of the 20<sup>th</sup> century the area had become a place of decline



The area is now a thriving place with the fabric of the industrial past restored and valued within a generous context of trees and vegetation

## Subdivisions within the World Heritage Site

The World Heritage Site is an assembly of several different areas. Each area has its own slightly different quality created by subtle differences of location, position, orientation, settlement, form and use and indeed local residents will often identify themselves with these areas first - rather than with the larger Ironbridge Gorge or World Heritage Site.

The area contains 5 named settlements. These are:

- Ironbridge
- Coalbrookdale
- Coalport
- Jackfield
- Madeley

**Ironbridge** is located on the south facing steep slopes of the north side of the River Severn. It is the prime destination for most tourists because it is central to the area and it contains the iconic Iron Bridge. It provides the immediate setting for the bridge and is the retail centre of the area.

**Coalbrookdale** still retains industrial activity and is located in its own north-south subsidiary valley. Large industrial buildings occupy the limited areas of flat land in the valley bottom with the rest of the settlement scattered across the valley slopes.

**Coalport** is a separate hamlet, at the east end of the gorge. It includes a mix of development including the Coalport China Museum and an eclectic range of housing from different historic periods inc. the 20<sup>th</sup> century.

**Jackfield** is a diverse development mix on the south side of the river including housing, small scale commercial and museum uses.

**Madeley** is located above the steep valley and is now surrounded by the more recent development of Telford. Whilst its position means that it is slightly different to those areas located down in the gorge itself, it is an essential part of the history of the World Heritage Site and it still retains much historic built fabric which relates to that shared history.

It retains a high street rising up a steep slope flanked by houses, shops, pubs, chapels and church, leading as well as a variety of historic streets and a distinguished parish church.

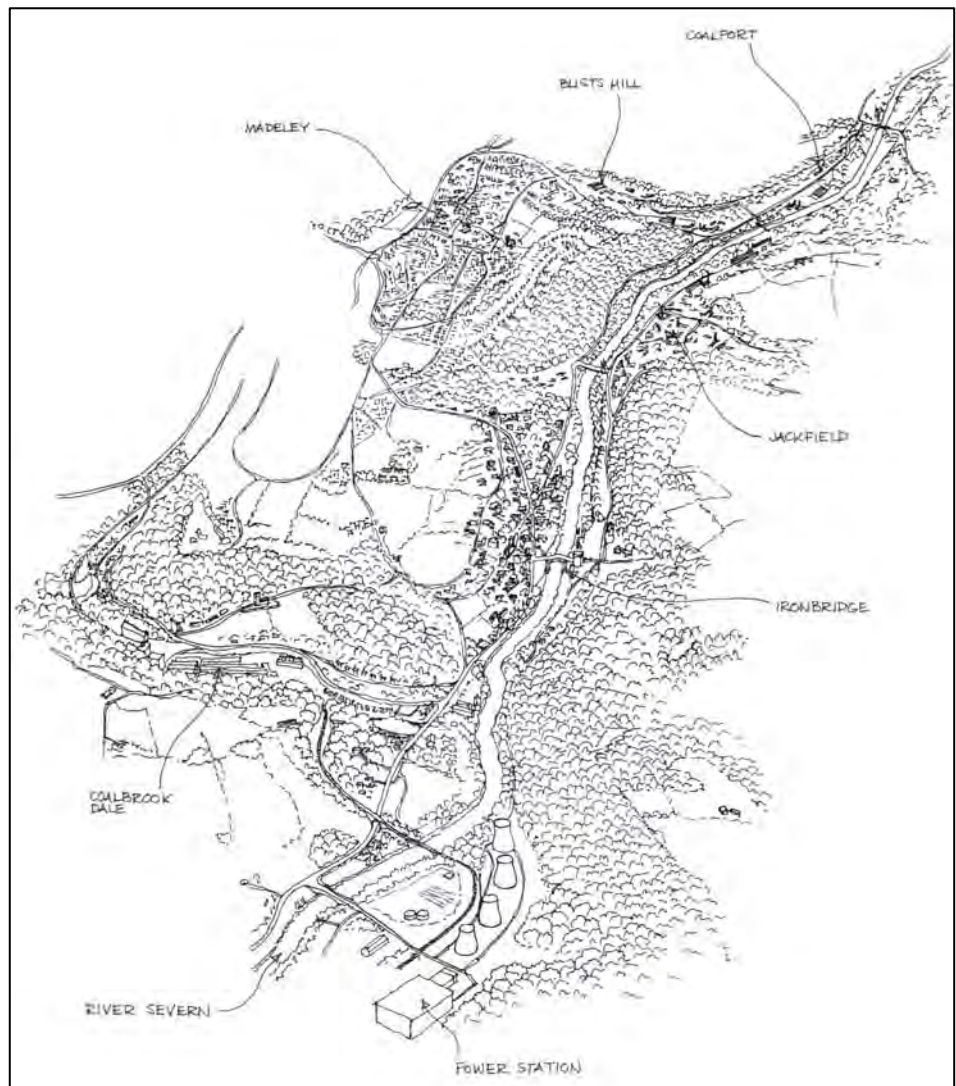
Whilst each area displays a different character, and local residents identify with their own settlements, those differences appear to be derived from features other than the public realm ie. there are few if any public realm features that particularly distinguish one area from another. There are no traditional ground surfaces that are distinct in one settlement but not in another and there are no particular themes of historic street furniture in one settlement that marks it out as being different from the others.

It would therefore appear that to a large degree, it may be possible to provide a set of general 'rules' for the design and management of the public realm in the WHS responding to the overall character of the place and further, that this should not undermine the local distinctiveness of the individual 'sub' areas.

What is evident however is the detrimental effect of the use of 'fake' and 'anywhere' materials and street furniture as this will undermine the distinctive character and quality of both the overall WHS and that of the individual areas.

#### Key principles:

- Local distinctiveness is undermined by the cluttered and wide use of 'anywhere' street furniture.
- To accentuate the local characteristic of each locality, it is important to remove and reduce all the extraneous clutter and street paraphernalia
- Adhere to rules on design and management deemed acceptable and appropriate for the World Heritage Site.



## Street character types

Whilst it would not appear that the public realm has a significant effect upon the distinctiveness of individual areas within the WHS, the same cannot be said of its individual streets and spaces.

The public realm of the World Heritage Site is formed by its streets and urban spaces. These streets and spaces can be grouped into different categories which share similar visual and functional characteristics.

The WHS Public Realm Guide identifies the following street character types:

1. Urban main road
2. Urban minor road
3. Urban wider footpath
4. Village main road
5. Urban narrow footpath
6. Suburban minor road
7. Rural main road
8. Rural minor road
9. Rural footpath
10. Sui Generis ( unique streets and spaces) eg.
  - Wharfage
  - Madeley High Street
  - Market Square, Ironbridge.

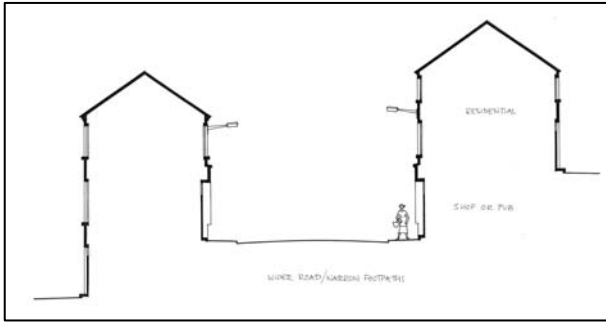
The key features of each street character type are analysed on the following pages.

- Road: purpose, surface material and width
- Drainage channel: style, material
- Kerb: style, material
- Pavement: surface material, width
- Verge: width
- Boundary (back edge of pavement): building height and purpose, wall height, railings, fences or hedges
- Beyond the boundary: buildings, height and purpose, gardens, park, open space, countryside

## Informal Vernacular Townscape

The settlements of the World Heritage Site have developed over time and are not laid out according to a formal grand plan. A quality and the beauty of the townscape in the World Heritage Site is partially derived from the 'organic' layout. This not only creates ambiguities in what is *public* realm and what is not, but also produces a sequence of streets and spaces which are interesting and stimulating to experience and explore.

It also means that there are many unadopted spaces.



### 1. Urban main road

Two lane road, blacktop, 7 – 8 metres wide

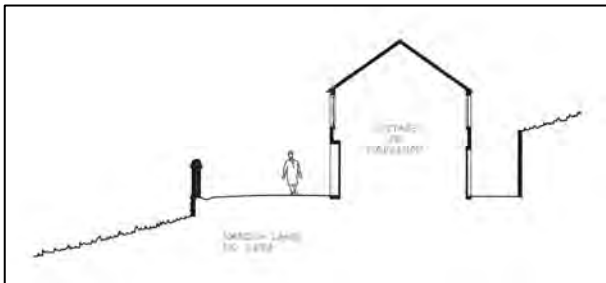
No distinct drainage channel

Concrete kerbs

Narrow pavements on both sides, 1-1.5 metres wide

Boundary walls and buildings at back edge of pavement

Beyond boundary: no front gardens, two and three storey shops, businesses and houses



### 2. Urban minor road

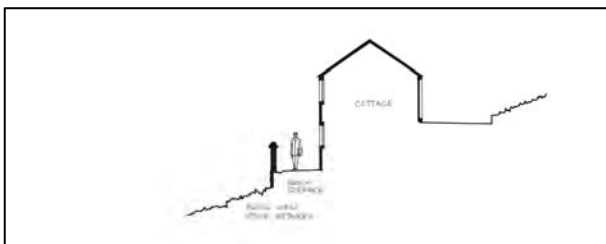
Two way road, blacktop, 6 metres wide

Brick drainage channel

No kerbs or pavements

Boundary walls and buildings

Beyond boundary: no front gardens, two storey houses



### 3. Urban wider footpath

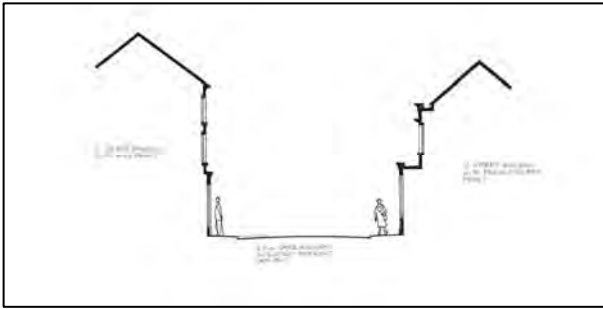
Path for pedestrians only, blacktop, 2-3metres wide

Brick drainage channel

No kerbs or pavements

Boundary walls and buildings

Beyond boundary: no front gardens, two storey houses, open land



#### 4. Village main road

Two way road, blacktop, 6 metres wide

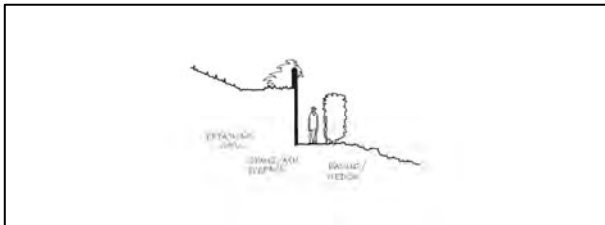
No distinct drainage channel

Concrete kerbs

Narrow pavements, blacktop, on both sides, 1 metre wide

Boundary walls and buildings

Beyond boundary: no front gardens, two and three storey buildings



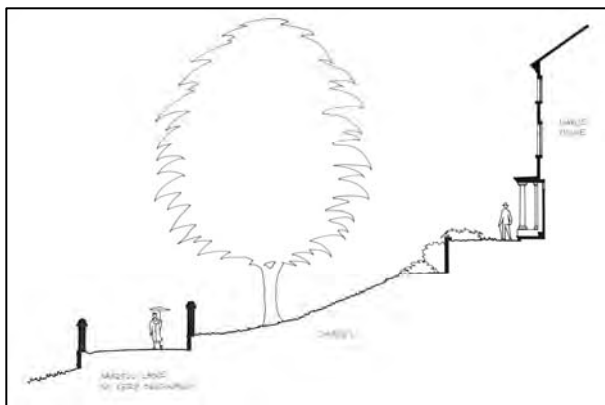
#### 5. Urban narrow footpath

Footpath for pedestrians only, clinker or engineering brick surface, 2 metres wide

No distinct drainage channel

No kerbs or verges

Boundary walls and hedges



#### 6. Suburban minor road

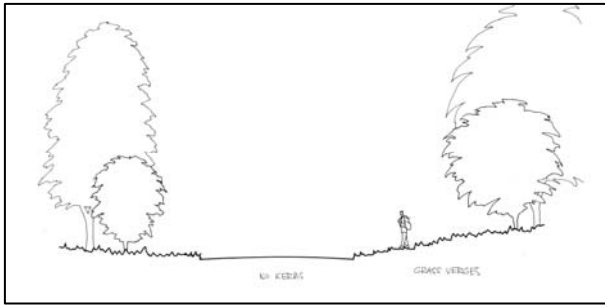
Two lane road, blacktop surface, 5 metres wide

Brick drainage channel

No pavement or verges.

Boundary walls

Beyond boundary: gardens and two storey houses



### 7. Rural main road

Two way road, blacktop surface, 7 metres wide

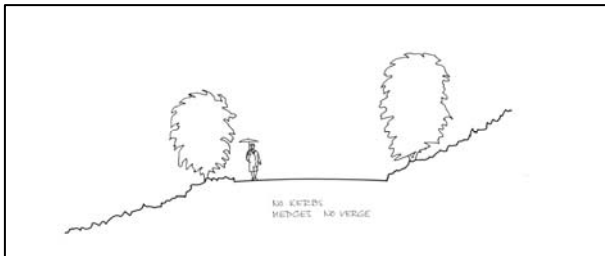
No distinct drainage channel

No pavements

Grass verges

Boundary rural fences and hedges

Beyond boundary: open countryside



### 8. Rural minor road

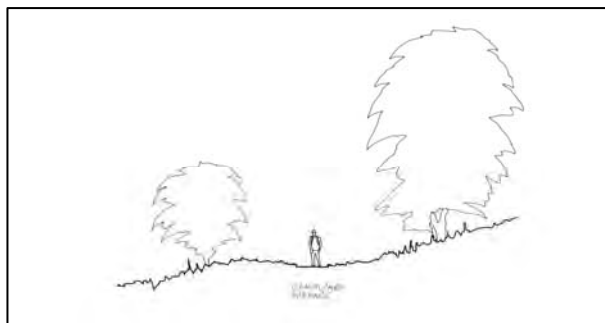
Two way road, blacktop surface, 6 metres wide

No distinct drainage channel

No pavements or grass verges

Boundary walls and fences

Beyond boundary: gardens and countryside



### 9. Rural footpath

No vehicles, blacktop surface, 2-3 metres wide

No distinct drainage channel

No pavements

Grass verges

Boundary indistinct

Beyond boundary: countryside



### Key Principles

- the appropriateness of the design and management of the public realm is significantly determined by the type of street and space in which they occur.

## General Conclusions

### Context

The quantity, quality and distribution of the public realm in the Ironbridge Gorge area **effects** the character and quality of the World heritage Site ( how it looks, how it is experienced and how it functions) and in its turn – the public realm is **affected** by the overall historic and physical quality and character of the WHS ie. it both helps determine and is determined by the overall character and quality of the WHS.

### 'Contemporary' design or 'traditional' design

There is a common misconception that in deciding upon items such as street furniture, the fundamental choice is between the use of 'contemporary design' or 'traditional' design. This is both an impractical and an unhelpful distinction, not least because the words 'contemporary' and 'traditional' can mean different things and be defined in many different ways by different people.

Whichever approach is taken they must always be informed by the following:

- At the height of its industrial past the area was at the forefront of innovation and indeed, the challenging uniqueness of the area will often call for creative 'innovative' solutions. ie. innovation was and continues to be a legitimate design approach in the World heritage Site.
- Features which we expect today such as street lighting and litter bins were largely not part of the local landscape in the historic period which has made the area famous. The way to approach this issue should always be :
  - is it needed ?
  - can its visual intrusion be minimised.

This will often result in the choice of design which is 'minimal' and 'contemporary' in appearance.

- there is a wealth of distinctive design in the area which provides a rich reference source from the key historic periods for both new contemporary and traditional design.

### Change and the 21<sup>st</sup> Century

The quality of the public realm has evolved and changed over time and will continue to change in response to changes in the way we value and use the area . To be successful the design, maintenance and management of the public realm in the World

Heritage Site will have to continue to respond to change **and** in ways which preserves the integrity of the existing character.

### **Sustainability**

By the designation of the area as a World Heritage Site we are sustaining an area of special historic and physical quality for future generations. All design and management decisions for the public realm must also adhere to sustainable principles : be environmentally responsible, socially equitable and economically viable

#### Key principles:

- The public realm is the stage, not the show. It should be simple and uncluttered
- Details and materials should reflect the local industrial vernacular
- Design, management and maintenance should be informed by the type of street or space
- Innovation and contemporary design is welcomed but must be informed and directed by the existing quality
- Design and management decisions must adhere to sustainable principles : be environmentally responsible, socially equitable and economically viable