

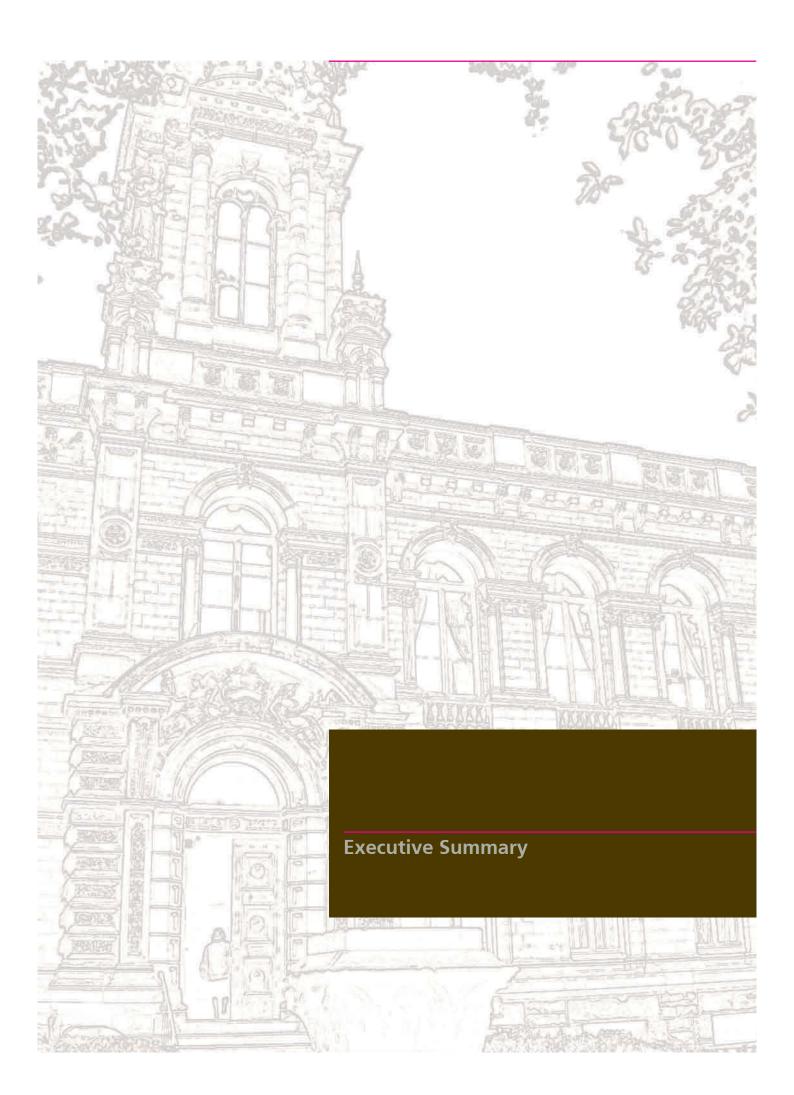
Saltaire World Heritage Site Environmental Capacity Study

Final Report

JOB NUMBER: 5036874		DOCUMENT REF: Saltaire ECS-Final Draft Report(02-06 issue).doc				
Final	Final Report	AC	AC	AC	AC	30/03/06
Final Draft	Client Issue for final comments	AC	AC	AC	AC	06/02/06
Draft	Client Issue	AC	AC	AC	AC	29/12/05
0		Originated	Checked	Reviewed	Authorised	Date
Revision	Purpose Description	ATKINS				

CONTENTS

EXECUTIV	E SUMMARY	1
1. INT	RODUCTION	11
2. ME	THODOLOGY	15
3. THE	SALTAIRE WORLD HERITAGE SITE	31
4. EN\	IRONMENTAL CAPACITY OF THE SITE	37
5. OTH	IER MONITORING MEASURES	125
6. M O	NITORING REGIME	137
APPENDIC Appendix Appendix Appendix Appendix Appendix Appendix Appendix Appendix	A Review of the Concept of Setting B The Setting of Saltaire C Planning and Landuse Baseline D Traffic, Transport and Parking Baseline E Resident's Survey F Visitor Survey G Other Users Survey	
Figure 1: Figure 2: Figure 3:	General Methodology Boundary of the Saltaire WHS Saltaire WHS Buffer Zone Areas of historic demolition	
Figure 4:	Aleas of Historic defination	



EXECUTIVE SUMMARY

Background

Saltaire was inscribed on the World Heritage List in 2001. This inscription recognises Saltaire's Outstanding Universal Value and places a duty of care on the UK Government to ensure that it is protected, conserved and presented for the benefit of current and future generations. The government achieves this in partnership with local authorities, English Heritage and other stakeholders through the implementation of local and national planning policy and World Heritage Site (WHS) Management Plans. Saltaire's first Management Plan was completed in 2001 and this and the adopted development plan have supported the management of the Site over the last 5 years.

City of Bradford Metropolitan District Council (CBMDC) identified the need for the Environmental Capacity Study (ECS) in the Management Plan and commissioned Atkins Heritage in 2005 to prepare the study. The ECS was conceived as a tool to help guide the management of the Site and address a range of pressures and demands facing the Site due its location in a strategic corridor. These pressures include traffic and transport issues, the need for economic and social regeneration and the maintenance of a high quality of life for residents.

The ECS will play a significant role in the development of a revised WHS Management Plan for the Site. It will also inform a number of other emerging strategies including a tourism strategy and planning documentation within the Local Development Framework (LDF). The indicators identified by the ECS may be used as part of the annual monitoring report on the LDF and the accompanying Sustainability Appraisal.

This study is the first of its kind for a World Heritage Site and as such it provides an innovative approach to assisting the long-term management of complex cultural heritage assets such as World Heritage Sites and it is hoped that it will provide a model for use at other historic areas.

1

Aim and Scope of Study

The overall purpose of the ECS was to gain an appreciation of the level and type of change that can be accommodated within the World Heritage Site and its setting and to provide a mechanism to allow for positive change to take place, whilst putting management arrangements in place to monitor the impact of change and prevent change that exceeds the environmental capacity of the Site. This included gathering data to allow long-term monitoring of issues and to inform decisions regarding the management and development of the Site.

Based on an analysis of other studies and current approaches to conservation planning the following definition of Environmental Capacity has been used by the ECS:

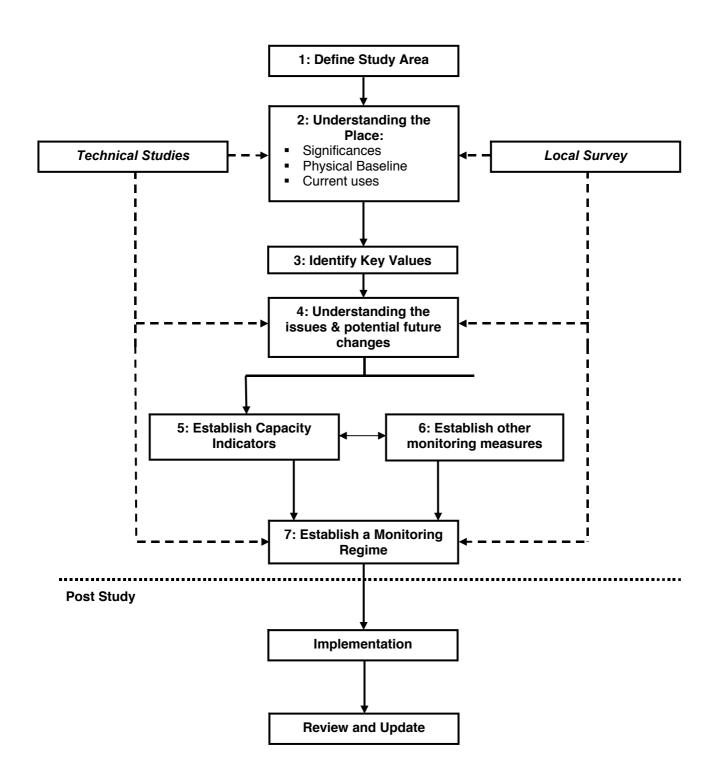
Environmental Capacity: The ability of the environment of a place to accommodate specific types of change or development without degrading its special interest, character, fabric or setting.

This should reflect the physical nature of the place, the significances of the place, the inherent sensitivity of the place (based on an understanding of its nature and associated values) and its sensitivity to the particular types of change or development.

The study area for the ECS encompassed the extent of the Saltaire WHS and its setting (see Figures 2 and 3 in main report). The Site's setting had previously been assessed at the time of its World Heritage Site nomination and a Buffer Zone has been established to reflect this. The ECS took the opportunity to re-evaluate the Site's setting, in terms of its extent and character, and review the existing Buffer Zone. This broadly confirmed the accuracy of the earlier analysis and supported the defined extent of the Buffer Zone.

Methodology

Development of the study involved a staged process of survey, analysis and assessment (see below) which included public consultation. Approaches taken by earlier studies formed the starting point for the methodology which then evolved over the course of the project as a result of discussions with all members of the project team, including members and officers of the Council and English Heritage.



Capacity Issues and Key Values

The Study focussed on identifying the capacity issues facing the Site and assessing the threat posed by these issues (now or in the future) to the Site's Key Values.

The Key Values were identified through an analysis of the Outstanding Universal Value (OUV) of the Site and then graded as to whether they were critical, important or contributory in terms of their importance to the Site.

Key Values:

The fabric of the Site – The fabric i.e. the buildings, streets, open spaces and designed landscapes, embodies the Site's Outstanding Universal Value and is a direct reflection of the historical, social and economic environment in which it was developed. This value is considered to be *critical* as without the survival of its fabric the Site could not be a WHS.

The character of the Site – The Site's character as established by its layout, location and architectural form is key to understanding the Site and the motivations behind its creation. The authenticity of the Site's character and form was also a key reason for its inscription. The character of the Site is therefore is considered to be a *critical* value.

The setting of the Site – The setting contributes to the Site's character and sense of place and also enables us to understand some of the motivations for why the mill and village were here. As such it is considered to be an *important* value.

The quality of life of the residents - The residential use of the Site is both an authentic expression of its original function and a key mechanism through which its fabric and character are conserved. The fact that the Site is a desirable location to live is an important aspect of its significance. This is therefore considered to be an *important* value.

The use of the Site - The mix of business, educational and other uses on the Site are a key mechanism through which its fabric and character are conserved. These elements are also an important aspect of the Site's wider economic and social significance. Overall, this is considered to be an *important* value.

The natural environment – The natural environment of the Site was not part of the reason for its nomination. It does make some contribution to the character of the Site and the quality of life of the residents. In addition, elements of the natural environment have significance in their own right. It is considered that this is a **contributory** value.

The study identified 8 key capacity issues which could affect the Site's Key Values now or in the future, these are outlined below.

What is the capacity of the Site to accommodate visitors?

Visitors have formed part of Saltaire's character for much of its history and currently make a key contribution to its economy. Due to its robust physical form, the Site is able to accommodate more visitor numbers than at present without threatening its Outstanding Universal Value. The key limiting factors are the impact of the visitors

on the local population of the village and the ability of the Site (its fabric and character) to assimilate any additional facilities this change may bring.

What is the capacity of the Site to accommodate traffic?

The Site has a very limited capacity to accommodate traffic. This is due to its historic form and character, the fact that it is a residential area and the fact that the principal roads through the Site (Saltaire Road and Bingley Road) are already nearing their physical capacity to accommodate peak-time traffic. The majority of traffic related issues e.g. congestion, rat-running and speeding are a result of the Site's location on a strategic road corridor. Consequently, the capacity issues are primarily due to external and largely uncontrollable factors.

What is the capacity of the Site to accommodate car parking?

Car parking is a sensitive issue. The provision of parking spaces in the immediate proximity of the home, workplace, shop or visitor destination is a key factor in making those facilities attractive to residents, business and visitors. Car parking therefore plays a significant role in the continued viability of the Site. The Site has the physical space to accommodate more on-street parking but not in the central streets of terraced housing. There is no capacity within the Site to develop more off-street parking. Some capacity may exist outside of the Site for this but any such development would need to be careful sited to avoid adverse effects. Car parking is also having an impact on the fabric and character of the Site through damage to pavements and the cluttering the street scene.

What is the capacity of the Site to accommodate different uses?

The majority of the Site is currently used for residential purposes. There are also a number of other uses on the Site including commercial, retail, tourism and educational establishments. This mix provides for a high quality of life for residents, ensures that the principal buildings are conserved and helps maintain the Site's strong historic character. The mix of uses does however generate other issues such as traffic pressures, conservation issues, parking problems and the need to cater for visitors. The Site has the physical capacity to accommodate this range of different uses. Its larger buildings could be, and have been, converted to accommodate new uses but there is very limited capacity for changes of use for smaller residential and non-residential properties. Any future changes would only be acceptable where they would not cause other capacity issues or harm the Key Values of the Site.

5

What is the capacity of the Site to accommodate changes to its fabric?

The fabric of the Site is highly sensitive to change and has a very limited capacity to accommodate physical changes. It is a unique and authentic record of the Site's development and loss has the potential to degrade the Outstanding Universal Value of the Site. There are two key types of changes that could affect the fabric: alteration and degradation through lack of maintenance. Alterations to buildings have historically occurred across the Site but the current planning and listed building regime has largely bought these under control and it is unlikely that this will be a critical future issue. Maintenance regimes are a key issue, particularly given the fact that the Site is in multiple private ownership. The responsibility for conserving much of the Site's fabric therefore lies in the hands of the owners and occupiers of the buildings.

What is the capacity of the Site to accommodate changes to its character?

The Site has a distinctive and authentic character that reflects its historic origins. This character is derived from three underlying factors: Its strongly geometric form and layout; the architectural style employed on all its buildings and the areas of public realm and open spaces. Current planning regimes mean that the geometric form and layout of the Site is unlikely to ever change therefore the focus must be on the architectural form of the buildings and the areas of public realm and open spaces. Key issues here relate to alteration and maintenance of private and public spaces and buildings. Given the importance of the Site's character there is little capacity for inappropriate change. There is however capacity for positive change to reverse past inappropriate alterations, improve the condition of spaces and buildings and to encourage best-practice in the future and this should form a focus for action over the coming decades.

What is the capacity of the Site to accommodate new development?

There is little available land that could accommodate new built development on the Site. There are a limited number of areas where historic buildings have been removed and there may be some scope for new built development in these locations. These include the site of the former washhouses on Caroline Street, the car park on Caroline Street, the site of the former station buildings, the creation of a new bridge over the River Aire at the bottom of Victoria Road and any future redevelopment of the existing chapel off Harold Place. There may also be very limited opportunities to accommodate other small-scale new development within the Site e.g. extensions to retail and commercial properties. The acceptability of any such proposals would be judged on a case-by-case basis and any new developments would need to meet rigorous design standards.

6

....

What is the capacity of the Site to accommodate changes to its setting?

The issues facing the setting of the Site relate to two key factors, potential development which could impact on key elements of the Site's setting and gradual change in the quality of the Site's immediate setting and the rural backdrops. Given the size of the Buffer Zone and the nature of the Site's setting there is capacity for new development within the Buffer Zone where its location, scale, mass and height is appropriate in terms of the Site's setting. However, the issue of new tall buildings / structures presents particular challenges. This type of development could occur in urban and rural areas e.g. wind turbines and either could have a visual impact on the Site's setting. Current evidence indicates that there is very limited capacity to accommodate new tall buildings / structures in the setting of the Site.

Other changes, such as alterations to land management regimes in the rural areas around the Site and physical alterations to the townscape of its immediate setting, could also impact on the Site's setting. There is capacity to enhance the immediate townscape setting of the Site, but there is very limited capacity to significantly alter the land-use regimes in the key rural backdrops around the Site.

Indicators and Thresholds

One of the key conclusions of the study has been that it is not possible to establish fixed numerical capacity levels. For example, it is not possible to say that "Saltaire can accommodate 100,000 visitors a year" as the issues associated with visitors relate not to numbers but to where they go, how they get there and what they do. Consequently, the study has employed a "monitor and manage" approach founded on a series of Capacity Indicators. These were developed to address those issues that were considered to pose a significant threat to the Key Values of the Site. The indicators measure changes in data through time and trigger action when thresholds are exceeded. The thresholds have been established at levels which, based on current information, will potentially represent situations where action may be required to prevent the environmental capacity of the Site being exceeded. These thresholds will however evolve through time as the study is implemented.

Capacity of the Site to accommodate :	Indicators
Visitors	Indicator 1: Impact of visitors on residents and other users
Traffic	Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2B: Residents' view on traffic congestion Indicator 2C: Other users' view on traffic congestion Indicator 3A: Through traffic on site away from Saltaire and Bingley Rd Indicator 3B: Traffic speeds

7

Saltaire ECS-Final Report.doc

Capacity of the Site to accommodate :	Indicators
Car parking	Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability
Different uses	Indicator 5A: Provision of local retail and service facilities Indicator 5B: Active frontages on Victoria Road Indicator 5C: Active frontages on Bingley Road Indicator 6: Vacant Premises
Changes in its fabric	Indicator 7A: Overall condition of properties Indicator 7B: Condition of Outbuildings Indicator 8: Condition of major industrial and civic buildings Indicator 9: Alterations to residential and other properties Indicator 10: Appropriateness of Shop frontages
Changes to its character	Indicator 11: Condition of Character Areas
New development	No indicator developed – guidance contained in report
Changes to its setting	Indicator 12: Changes to key views into, across and out of the Site Indicator 13: The quality of the Immediate Setting and Approaches & Gateways Indicator 14: The impact of development on the Setting of the Site

For each indicator information is provided on the baseline data, trends in that data and the level of the threshold. A series of actions are then identified should a threshold be exceeded. These range from the need for further analysis and monitoring through to possible physical actions such as the provision of more car parking spaces.

The monitoring of trends within this data will also enable the Council and its partners to identify areas where issues may be emerging before thresholds are exceeded. This will allow them to develop preventative measures before issues become a significant threat.

Monitoring Measures

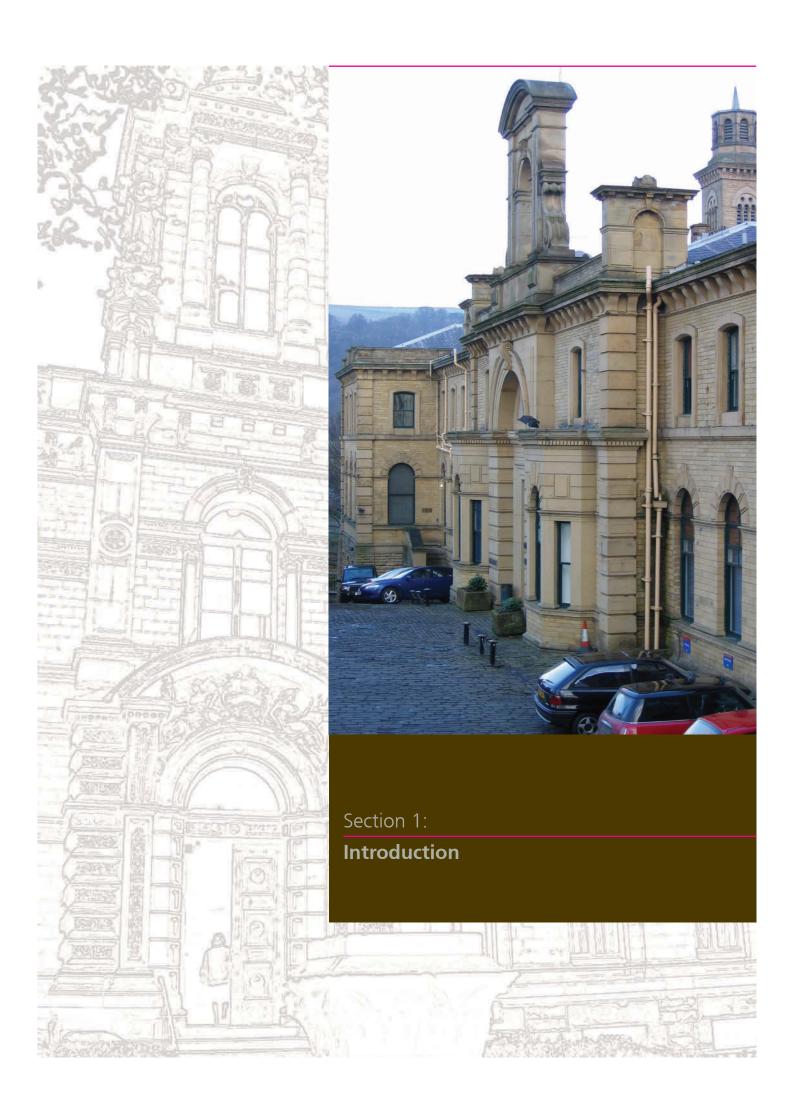
In addition to the indicators, the study has outlined a series of other areas where monitoring is required to support the analysis of the indicators should thresholds be exceeded. These monitoring measures cover a range of aspects including resident satisfaction, visitor numbers and the quality of public transport. The long-term analysis of trends in these measures will also supply important information to support the management of the Site.

Implementation and Review

The ECS also includes a timetable for the ongoing monitoring of the Site. This has been established over a rolling 6-yearly programme to tie-in with the UNESCO periodic review process. Key to this process is a regular programme of surveys to inform the indicators and monitoring measures:

Survey	Frequency
Fabric Survey	6-yearly
Character Survey	6-yearly
Use Class Survey	Yearly
Resident Questionnaire	3-yearly
Other Users Questionnaire	3-yearly
Visitor Questionnaire	3-yearly
Visitor Count	Yearly
Peak hour stress flow measure	3-yearly
Car parking utilisation	3-yearly
Setting survey	6-yearly

The ECS is not however a static document. It will continue to be reviewed and developed over the coming years as new challenges and issues emerge at the Site. This review and development is a critical part of the rolling timetable.



1. INTRODUCTION

Background

- 1.1 The City of Bradford Metropolitan District Council (CBMDC) commissioned Atkins Heritage in May 2005 to prepare an Environmental Capacity Study (ECS) for the Saltaire World Heritage Site (the 'Site').
- 1.2 This study is the first of its kind for a World Heritage Site in the United Kingdom and, in so far has been identified, the world. As such it provides an innovative approach to assisting the long-term management of complex cultural heritage assets such as World Heritage Sites.

Aims of the Study

1.3 The study has been undertaken to provide CBMDC and other stakeholders with a tool to monitor long-term changes that could affect the integrity, authenticity and Outstanding Universal Value of the Saltaire World Heritage Site and to establish the capacity of the Site to accommodate these changes to its environment.

1.4 As stated in the Project Brief:

"The overall purpose of the study is to gain an appreciation of the level and type of change that can be accommodated within the World Heritage Site and its setting and provide a mechanism to allow for positive change to take place, whilst putting management arrangements in place to monitor the impact of change and prevent change that exceeds the capacity of the Site."

The consultant is required to consider the potential impacts of change on the site and its setting and to identify thresholds of acceptable change ... Indicators to monitor change should be identified and guidelines produced on opportunities and constraints for change and on appropriate management techniques should capacity levels be approached."

"Particularly important to consider is the potential changes caused by increasing numbers of visitors, changes to transportation links, alterations to the use of key buildings, such as the college buildings, the mills and Victoria Hall, and development pressures within the setting of the site. Capacity thresholds based on the potential impact of change on the site will be identified".

- 1.5 The ECS will play a significant role in the development of a revised WHS Management Plan for the Site. It will also inform a number of other emerging strategies including a tourism strategy and planning documentation within the Local Development Framework (LDF). The indicators identified by the ECS may be used as part of the annual monitoring report on the LDF and the accompanying Sustainability Appraisal.
- 1.6 This study is the first of its kind for a World Heritage Site and as such it provides an innovative approach to assisting the long-term management of complex cultural heritage assets such as World Heritage Sites and it is hoped that it will provide a model for use at other historic areas. With this in mind, the general methodology for the ECS is described in Section 2.

The Steering Group

- 1.7 The ECS has been developed in consultation with a steering group composed of the following members:
 - Stephen Bateman Design and Conservation Manager CBMDC
 - Caroline Wilkinson World Heritage Site Officer CBMDC
 - Gina Glot Urban Centres Manager CBMDC
 - Joe Grint Transport Planner CBMDC
 - Cllr. Chris Greaves Chair, Saltaire Project Team
 - Andy Taylor Regeneration Manager, Airedale Partnership, CBMDC
 - Adrian Walker Geographical Information Data Manager CBMDC
 - Ian Smith Land Use Planner, English Heritage
- 1.8 The Steering Group played a key role in developing the ECS and their advice and recommendations have strongly influenced both the content and structure of the ECS.

Structure of the Report

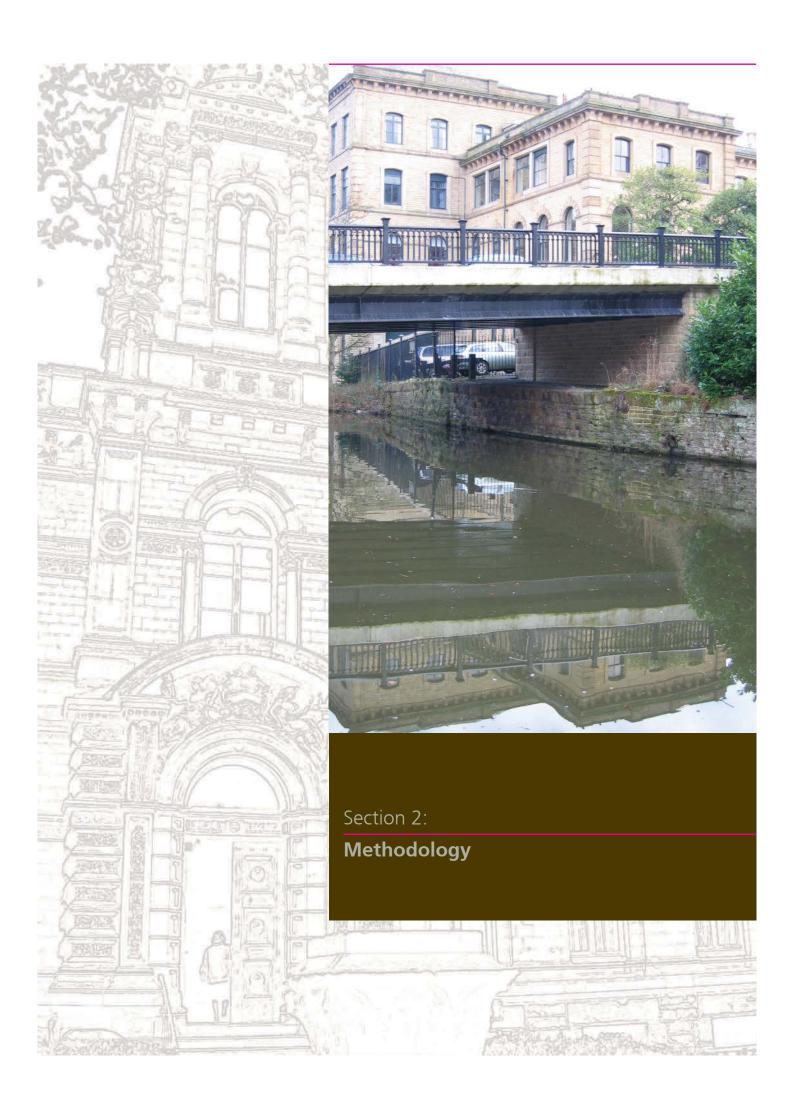
- 1.9 The following briefly outlines the structure and content of the report and its appendices.
 - **Section 2: Methodology** Describes the general methodological approach of the study.
 - Section 3: The Saltaire World Heritage Site Reviews the Significances and Outstanding Universal Value of the Site and then identifies the Key Values that require monitoring and analysis.
 - Section 4: Environmental Capacity of the Site Presents the capacity issues and indicators.
 - Section 5: Other Monitoring Measures Provides information on other factors that require monitoring to support the analysis of the capacity indicators and supply data to inform the long-term management of the Site.
 - **Section 6: Monitoring Regime** Identifies the regime required to update and monitor the Indicators and Monitoring Measures.
 - Appendix A: Review of the Concept of Setting Describes the legal and planning background behind the concept of setting as it relates to the Saltaire WHS.
 - Appendix B: The Setting of Saltaire Describes the setting of the World Heritage Site based on a survey undertaken as part of the ECS.
 - Appendix C: Planning and Landuse Baseline Describes the current planning and land-use regime in the WHS
 - Appendix D: Traffic, Transport and Parking baseline Presents the results of analyses undertaken to support the ECS
 - Appendix E: Residents' Survey Presents the results of the Residents' Survey undertaken for the ECS
 - Appendix F: Visitor Survey Presents the results of the Visitor Survey undertaken for the ECS
 - Appendix G: Other Users' Survey Presents the results of the Other Users' Survey (mainly students and people working on the Site) undertaken for the ECS
 - Appendix H: Monitoring Surveys Provides further detail on the nature of surveys required to support the monitoring of the indicators.

Project Team

1.10 The Project Team encompassed a broad range of disciplines from across Atkins. Members included Janet Miller (Project Director), Andrew Croft (Project Manager), Nicki Schiessel (Visitors and Tourism), Julia Bennett (Heritage Conservation), Alexander Cornwell (Traffic and Transport), Tim Hunter-Rowe (GIS), Christopher Garrett (GIS), Julian Hall (Planning), Lesley Barlow (Urban Design), Tim Gorton (Landscape).

Glossary

- 1.11 The following terms are used in this report:
 - Saltaire WHS or the 'Site': The area inscribed as a World Heritage Site in 2001 as shown on Figure 2.
 - **Buffer Zone**: The Buffer Zone for the Site developed by CBMDC and contained in the Development Plan
 - ECS: Environmental Capacity Study
 - Key Values: Those values, both physical and associated, that have been assessed by the ECS (see section 3) as being of importance to the Site in terms of its Outstanding Universal Value
 - Outstanding Universal Value: The values associated with Site for which it was Inscribed on the World Heritage List
 - **Indicator**: A measurement tool designed to trigger action or review when a threshold is breached. These form the core of the ECS.
 - Monitoring Measure: A supporting measure designed to provide further information for the analysis of the indicators and to support the management of the Site.



2. METHODOLOGY

Introduction

- 2.1 This section outlines the overall methodology behind the study. It seeks to explain the various stages of the project and to provide sufficient information to allow other parties to adapt and develop the methodology to reflect the circumstances that they may face at other sites.
- 2.2 The section begins with a definition of "Capacity" this is followed by a review of other similar studies undertaken in the UK. This establishes a theoretical basis from which the wider methodology has been developed and situates the ECS in a broader context of emerging and past approaches.
- 2.3 The section then goes on to describe the stages behind the development of the Saltaire ECS study with the aim of allowing this to be adapted and applied to other sites. This includes a description of the approach undertaken for this particular study to allow interested parties the opportunity to see how particular issues were addressed and how similar issues could be addressed at their site.

Defining Environmental Capacity

- 2.4 Key to the study is the definition of capacity. A recent topic paper by the Countryside Agency and Scottish Natural Heritage (2004) *Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity* sought to define capacity and sensitivity in terms of landscape character, this provided the following definition:
 - iii) **Landscape capacity**: This term should be used to describe the ability of a landscape to accommodate different amounts of change or development of a specific type. This should reflect:
 - the inherent sensitivity of the landscape itself, but more specifically its sensitivity to the particular type of development in question...... This

means that capacity will reflect both the sensitivity of the landscape resource and its visual sensitivity;

- the value attached to the landscape or to specific elements in it.
- 2.5 Although this definition relates to landscape character and visual sensitivity the basic concepts are considered to be applicable to the ECS.
- 2.6 This definition has been adapted, in light of a review of other approaches to assessing capacity (see Similar Studies below) and to reflect current approaches to conservation planning for cultural heritage sites to provide the following definition of environmental capacity for this study:

Environmental Capacity: The ability of the environment of a place to accommodate specific types of change or development without degrading its special interest, character, fabric or setting.

This should reflect the physical nature of the place, the significances of the place, the inherent sensitivity of the place (based on an understanding of its nature and associated values) and its sensitivity to the particular types of change or development.

Similar Studies

- 2.7 The development of the methodology for the ECS was preceded by a review of a number of other approaches to similar issues that have been tested and / or adopted by agencies in the UK and Europe. These included:
 - The State of the Environment Report (Environment Agency);
 - Sustainable Development Indicators Quality of Life Counts and Local Quality of Life Counts (Defra);
 - Countryside Quality Counts (Countryside Agency); and
 - Hadrian's Wall Limits of Acceptable Change (English Heritage ongoing)
 - Market Town healthchecks (Countryside Agency);
 - Stroud: Local Environmental Capacity Study (Brown 1998)
 - Environmental Capacity: A Methodology for Historic Cities (Arup, BDP and Prof. Breheny 1995).

- 2.8 In addition, the project team examined a number of other capacity studies that have been undertaken in the UK and Europe which have primarily focussed on issues such as housing allocations, visitor carrying capacity or development potential. These single issue studies tended to draw on a wide range of baseline data sources but were predominately focussed on identifying opportunities for development or limits to particular types of activity. These types of study did not tend to produce long-term monitoring regimes and consequently were of limited relevance to this study.
- 2.9 Of the studies identified above, a number have been developed to provide information at a national / regional level to help assess the performance of strategic policy. These were often focussed on environmental (e.g. The State of the Environment report), social (e.g. Quality of Life Counts) or economic issues. They tended to be general and strategic in nature and their indicators sometimes seemed to reflect the availability of data rather than being focussed on key issues. However, some of the indicators developed for these studies were considered to be of relevance to Saltaire; in particular some of the social / economic indicators developed for the Local Quality of Life Counts project. Where appropriate, versions of some of these indicators have been used within the surveys (see below and Appendices E, F and G), Capacity Indicators (see Section 4) and other Monitoring Measures (see Section 5); this approach has the added benefit of allowing rapid tie-in with regional and subregional policy approaches.
- 2.10 In terms of studies that have a more detailed and local focus four relevant examples were identified. Firstly, the Market Town Healthcheck method developed by the Countryside Agency to assist with the sustainable development of market towns across England. The baseline data collected for these types of study reflects, to an extent, the level of detail required for this ECS, but was still relatively general in its scope and content. In addition, the healthchecks were aimed at guiding future change and more importantly developing support from the local community for the future direction of change. They did not provide a detailed monitoring and management regime for environmental and fabric-related issues. Some of the approaches to the collection of baseline data used by this method were considered but ultimately the healthcheck model was not considered to be particularly useful as a template for the ECS.
- 2.11 The Stroud capacity study was similar in scale to Saltaire but, as with many other studies, was focussed on assessing housing capacity. It did however base its method on the Historic Cities methodology (see below) and more

importantly involved the local community in identifying the key issues facing the town. This latter point has particular relevance to Saltaire and this approach has been taken forward, with modifications, as part of the methodology for this study. However, the Stroud study's focus on identifying capacity for a particular type of change that is very unlikely to happen in Saltaire meant that it had limited relevance to the development of this study.

- 2.12 The Hadrian's Wall Limits of Acceptable Change (LAC) approach is still being developed for the World Heritage Site. This is, in effect, a monitoring regime that is designed to respond to local issues and concerns along the wall. The basic process involves identifying indicators and thresholds for triggering action. These range from damage to archaeological monuments through to complaints from farmers about visitor activity. The approach is designed to trigger action when particular events occur. It does not, yet, include long-term monitoring regimes (although a regime for monitoring erosion archaeological remains has been developed) and is very much focussed on rapid responses to local problems. The methodology has a number of issues associated with it, for instance the use of complaints from interested parties to trigger action has the potential to leave the system open to abuse. In addition, although the monitoring indicators are local in extent, they tend to be relatively general in nature and not designed for regular updating in a way that could help identify trends. The LAC methodology has informed the ECS, but its focus on responses to issues as they arise and the fact that it is relatively general in its approach means that, as a methodology, it was not suitable for direct application at Saltaire.
- 2.13 The Historic Cities Methodology originally developed for Chester in the mid-1990s was undoubtedly the one that offered the most guidance, in terms of overall approach, to this study. However, due to its geographical study area the Chester study was relatively general in nature and primarily concerned with planning the development of a town at a strategic scale.
- 2.14 The basic structure of the Chester methodology with clear stages of baseline collection, issues identification and the development of indicators / thresholds was considered to be broadly useful for the Saltaire study. This has been adapted and expanded to accommodate a number of key differences that in part relate to the differing geographical scales of the studies and the need to incorporate the views of a smaller population of residents, users and visitors to the Site within the methodology. The major differences relate to the fact that the Historic Cities methodology focuses on identifying current issues and tensions facing a place and then identifying indicators, whereas the method

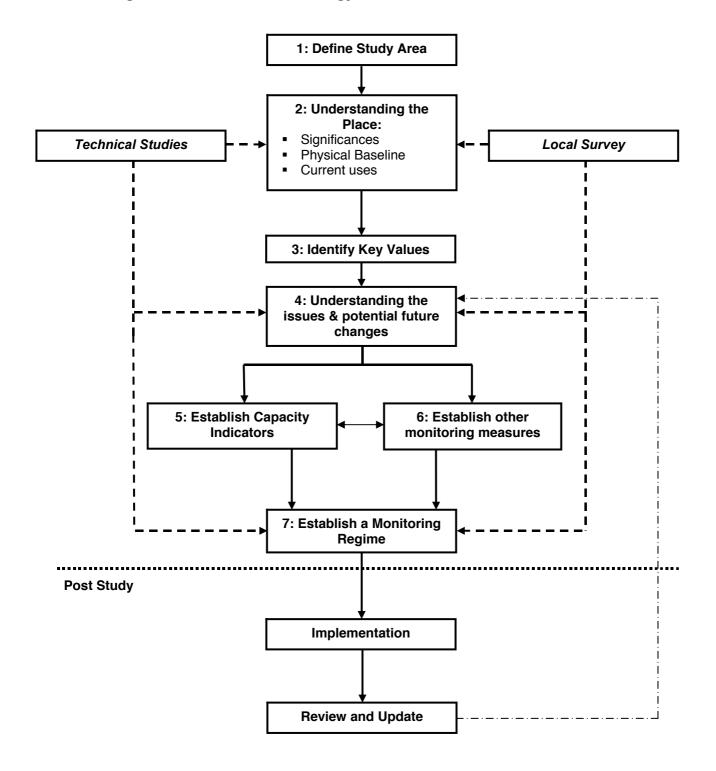
developed for Saltaire identifies Key Values that are related to the Outstanding Universal Value of the Site (see Section 3) against which issues can be assessed and weighted, from which capacity indicators are established. This difference is small but fundamental.

2.15 The general methodology outlined below therefore reflects a number of previous studies. It has sought to further develop the approach that was pioneered at Chester whilst incorporating additional elements such as the concept of Significance, which has over the past decade become a central tenet of conservation planning.

Methodology

- 2.16 Figure 1 (overleaf) provides an outline of the general methodology. In effect this encompasses the following stages:
 - Stage 1: Definition of the Study Area
 - Stage 2: Understanding the place and its significances
 - Stage 3: Identifying Key Values
 - Stage 4: Understanding Issues and Potential Future Changes
 - Stage 5: Establish Capacity Indicators
 - Stage 6: Establish other monitoring measures
 - Stage 7: Establish a monitoring regime
- 2.17 These stages are supported and informed by a range of technical studies and local surveys.
- 2.18 The following outlines the aspects of each of the above stages.

Figure 1 – General Methodology



Stage 1: Definition of the Study Area

- 2.19 This is a critical stage as it sets the geographical scope for the study. This has a direct bearing on the level of detail needed for the indicators and baseline data collection. For smaller sites it is more realistic to define detailed indicators based on relatively detailed and comprehensive baseline information. For larger areas more general strategic level indicators may be appropriate. The methodology identified here is applicable to both, but the choice of study area will significantly affect the scope of work and the nature of the final study. It is also important to ensure that the setting of the site is reflected in the study area.
- 2.20 The study area for the Saltaire ECS encompassed the extent of the Saltaire WHS and its setting (see Figures 2 & 3 and Appendix B). The extent of the Site's setting had previously been assessed at the time of its nomination and a Buffer Zone has been established to reflect this. This study took the opportunity to re-evaluate the Site's setting, in terms of its extent and character, and review the existing Buffer Zone. The results of this analysis can be found in Appendix B.

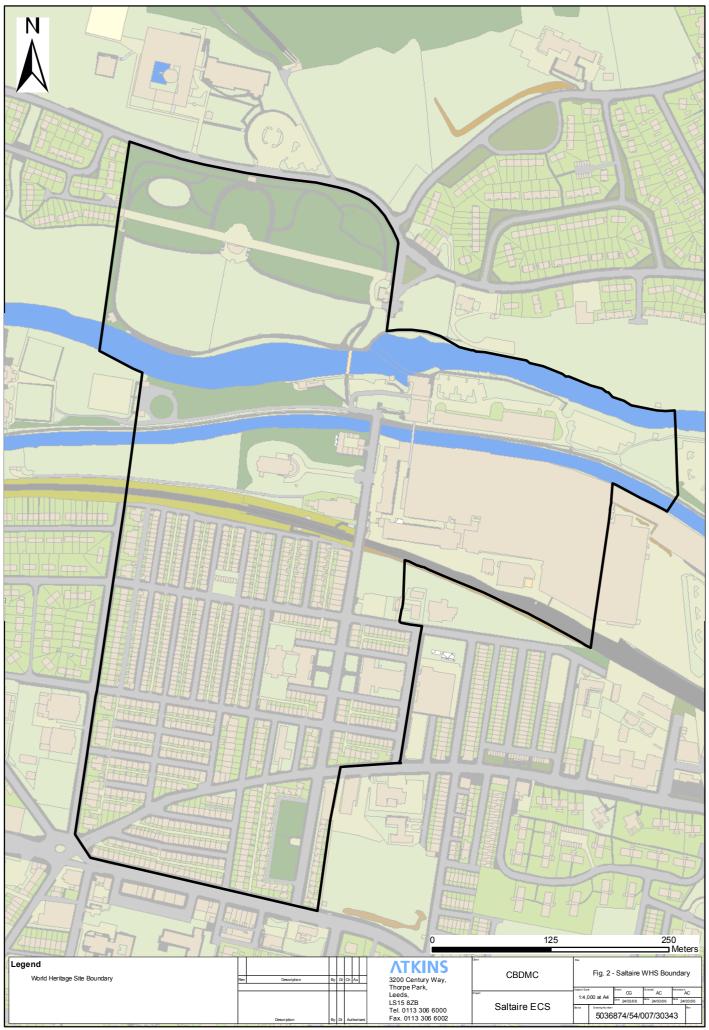
Stage 2: Understanding the place and its significances

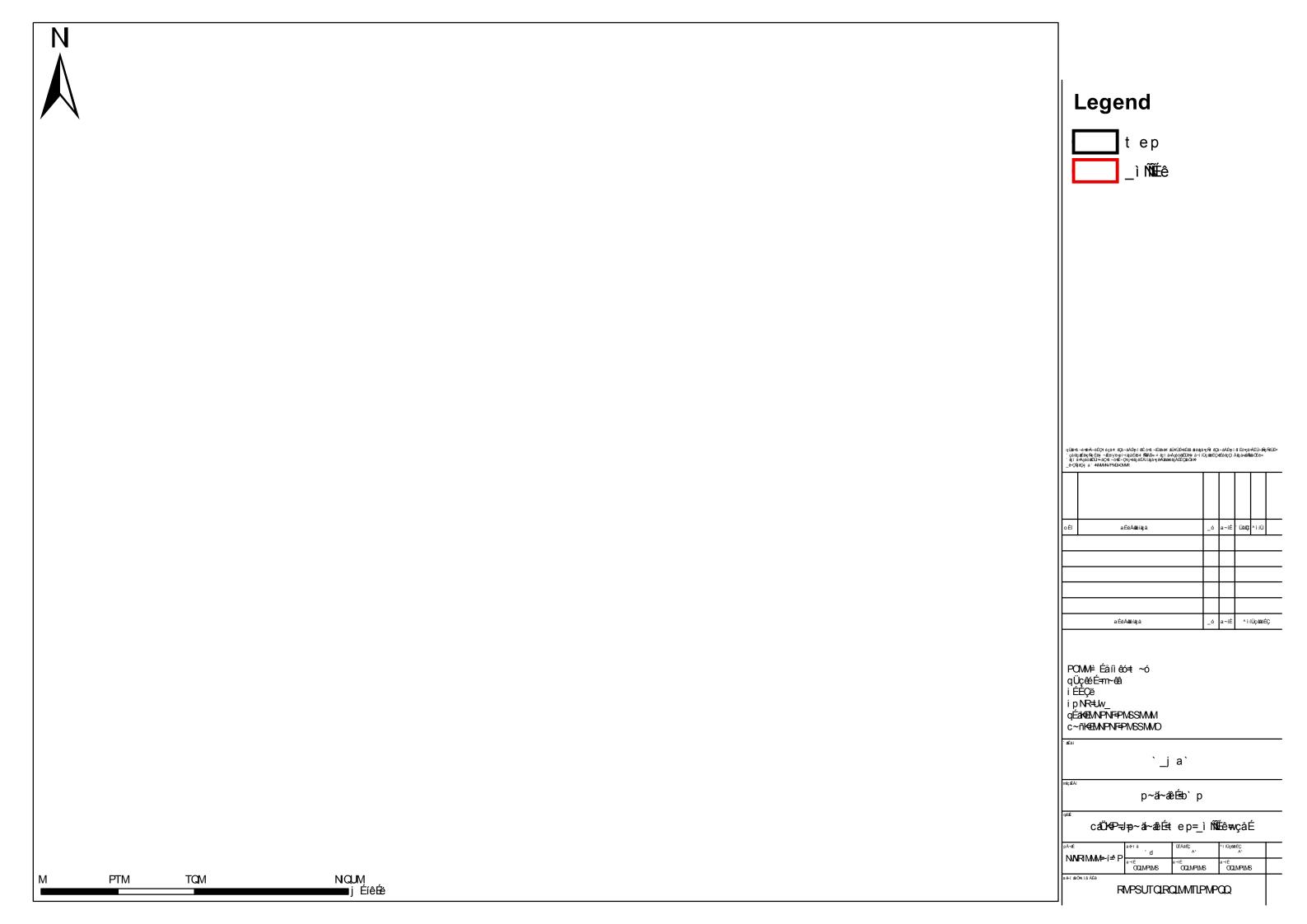
- 2.21 Key to the successful development of an Environmental Capacity Study is a sound understanding of a place in terms of its physical nature, historical development, current uses and its significances.
- 2.22 For many places this may already be wholly or partially available e.g. in the form of a Conservation Plan or Management Plan. However, there will be circumstances where knowledge will need to be developed to either fill gaps in understanding or provide a basic level of understanding. The nature of studies required to do this would vary considerably from site-to-site and would need to reflect the particular nature of each site.
- 2.23 In the case of Saltaire considerable work had already been undertaken in this regard including:
 - WHS Nomination Document (CBMDC 2000);
 - WHS Management Plan (CBMDC 2001);
 - Saltaire Conservation Area Assessment (CBMDC 2003); and

- Saltaire World Heritage Site Designed & Open Spaces Conservation Management Plan (Hillary Taylor Landscape Associates 2004).
- 2.24 These documents clearly defined what was significant about the Site as well as supplying detailed information on its historic development, use and management regimes.
- 2.25 However there was a need to gather further data to support our understanding of the Site and its significances, this included:
 - An analysis of the setting of the Site (Appendices A and B)
 - A review of the current planning and land use regime on the Site (Appendix C)
 - A review of the traffic, transport and parking situation on and around the Site (Appendix D)
 - Questionnaire surveys aimed at residents, visitors and other people who regularly used the Site (See Appendices E, F and G)
- 2.26 In addition, other data including listed building records, data on planning applications over the last 15 years, traffic surveys, crime statistics, census information, results of previous visitor surveys and the results of a recent crime survey was taken into account.
- 2.27 All of these studies and data sources also informed the analysis of issues and the development of the indicators (see Stage 4 below).
- 2.28 The key output from this stage was a review of the significances of the Saltaire WHS (see Section 3). This was based on the Statement of Significance and Justification for Inscription presented in the Nomination Document for the Saltaire WHS and the Evaluation Body's report on the Site submitted to UNESCO in support of its Inscription. At other sites it may be that this stage would see the development, for the first time, of a Statement of Significance.

Stage 3: Identifying Key Values

2.29 The Burra Charter (Australia ICOMOS 1999) is now widely regarded as an internationally relevant document that provides a starting point for the process of managing places of cultural heritage significance. The Burra Charter defines cultural significance as:





"Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects."

- 2.30 This concept of significance underpins the approach undertaken by this study to the monitoring and assessment of Saltaire's Capacity to accommodate change. Through an analysis of the many values associated with the Site and embodied in its fabric and setting it has been possible to define 6 broad Key Values (see Section 3), the conservation of which is considered important to maintaining the Site's overall significance and its Outstanding Universal Value as a World Heritage Site.
- 2.31 However, the study also recognises that not all of these "values" are of equal importance to the Outstanding Universal Value of the Site. Therefore a grading regime has been developed to weight the values in relation to each other and the Site's Outstanding Universal Value (OUV). This uses three broad bands under which the 6 Key Values were graded:
 - **Critical**: A value that is **fundamental** to the OUV of the WHS where change has the potential to directly degrade the OUV of the Site and affect its inscription
 - **Important**: A value that **contributes**, either directly or indirectly, to the OUV of the Site or is **important** to the wider significance of the Site and where change could directly or indirectly degrade the OUV of the Site.
 - **Contributory**: An aspect that may not directly relate to the OUV of the Site but is still of **some significance** to the place.
- 2.32 These grades were structured to reflect the fact Saltaire is a World Heritage Site, but the principle of grading would remain valid at other sites, although different criteria may be required.
- 2.33 This grading of Key Values is important as it allows the study to identify where issues or changes have the most potential to impact on the significance of a site. For example, a possible impact on a Critical value would be a greater cause for concern than a possible impact on an Important or Contributory value. This therefore allows the study to focus on those issues and changes that pose the greatest threat to the significances of a site.

Stage 4: Understanding the issues

- 2.34 All sites will have a range of issues facing them. These could include issues such as the need to accommodate visitors, proposed new developments or levels of traffic. Some of these issues arise from the physical nature of the Site. In the case of Saltaire this includes amongst others the ongoing maintenance and alteration of properties arising from the Site's predominately residential use and the conservation of the public realm. Other issues relate to how the Site is currently used, at Saltaire many of these issues relate to visitors, business use and its residential function. There are also often issues associated with potential future changes such as economic decline, new development etc.
- 2.35 These issues need to be identified and assessed as part of the study. The baseline studies undertaken at Stage 2 (see above) include an analysis of the issues, but further studies / analyses may need to be undertaken to support this stage. At Saltaire this involved undertaking a range of studies, in addition to those identified above, including:
 - Analysis of the state of the conservation of the Site's fabric (including a review of existing surveys);
 - Analysis of streetscape / public realm;
 - · Tourism and visitor assessment; and
 - Traffic and transport assessments.
- 2.36 This stage also involved gathering the views of a number of groups that either lived on or used the Site through three separate questionnaire based surveys:
 - Residents survey (see Appendix E)
 - Visitors survey (see Appendix F)
 - Survey of other regular users (e.g. Students and workers) (see Appendix G)
- 2.37 These surveys proved invaluable in identifying the concerns and issues facing these groups and also helped highlight potential tensions between the different uses and users on the Site.
- 2.38 The identified issues were also assessed to identify the level of threat they posed to the Key Values (see Stage 3 above). The methodology for achieving

this was developed from current approaches to Environmental Impact Assessment (EIA).

2.39 In Environmental Impact Assessment the *significance of the environmental* effect is derived from an analysis of the *magnitude of the change* against the *importance / sensitivity of the affected resource*. This is usually expressed as a table e.g.:

Magnitude of Change	Importance of affected resource			
	NATIONAL REGIONAL LOCAL No Grade			
SUBSTANTIAL	Large	Large/Moderate	Moderate/Slight	Neutral
MEDIUM	Large/Moderate	Moderate	Slight	Neutral
SMALL-SCALE	Moderate/Slight	Moderate/Slight	Slight	Neutral

- 2.40 In this way a small impact on a nationally important resource may have an overall effect akin to a substantial impact on a locally important resource.
- 2.41 This combination of scale of impact and importance of the thing being affected provided a useful starting point for weighting the issues.
- 2.42 As noted above, the study had already graded the Key Values in relation to their contribution to the Outstanding Universal Value (OUV) of the Site using the following terms Critical, Important and Contributory. This grading establishes the importance criteria necessary for this approach to assessing issues.
- 2.43 In terms of the issues it is also possible to identify the relative threat that they pose to a particular value using a graded approach. For this study the following 4 level categorisation was developed:
 - Major Threat An issue that could result in a major degradation of the particular value and consequently have a serious impact on the Site and its OUV
 - Moderate Threat An issues that could have a notable impact on a particular value resulting, perhaps in the longer term, to a significant degradation of that value and consequently the Site and its OUV
 - **Minor Threat** An issue that could potentially impact on the value, but that by virtue of its scale or temporal nature is not considered to be of particular concern.

- **No Threat** An issue that would have very minor or no real consequences in relation to that value.
- 2.44 Through a combination of the threat that an issue poses to a Key Value and the importance of that value it is therefore possible to identify those issues which are of particular concern. The following table outlines the relationship between threat and the grade of the value:

	Critical Value	Important Value	Contributory Value
Major Threat	Primary Concern	Primary or Significant Concern	Significant or Minor Concern
Moderate Threat	Primary or Significant Concern	Significant Concern	Minor Concern
Minor Threat	Minor Concern	Minor Concern	No Concern
No Threat	No Concern	No Concern	No Concern

- 2.45 The highlighted fields identify those relationships for which thresholds or monitoring measures may need to be established to ensure the conservation of the Site's OUV, essentially the Primary Concerns and Significant Concerns; with an emphasis on the Primary Concerns. There are instances however, where threats may be borderline and consequently some degree of flexibility in judgement has been allowed.
- 2.46 The three levels of concern are described as follows:
 - Primary Concern: A priority matter that requires monitoring to ensure that Critical or Important Values relating to the Site's OUV are not degraded by potentially serious issues to a level that could impact on the OUV of the Site.
 - **Significant Concern**: A notable matter that should be monitored, to ensure that the Site's OUV is sustained.
 - **Minor Concern**: A small scale concern that does not warrant direct monitoring due to the fact that it is unlikely to degrade the OUV of the Site.
 - **No Concern**: No issue (or a very minor matter) which does not require monitoring as it would have no appreciable affect on the OUV of the Site.
- 2.47 The weighting developed above was then used to identify areas of concern that require the establishment of thresholds.
- 2.48 The majority of the issues identified relate to the ability of Saltaire to accommodate specific types of change or development e.g. to accommodate

visitors or new development proposals. These Capacity Issues formed the focus for the study and indicators were established for them (see below). In addition, Monitoring Measures have also been established to support the analysis of Capacity Issues when thresholds are exceeded. The relationships between Capacity Issues, Indicators and Monitoring Measures can be found on Table 1 at the start of Section 4.

Stage 5: Establish Capacity Indicators

- 2.49 Based on the analysis of the issues and potential future changes facing the Site a number of Capacity Indicators were then established. These capacity issues relate to the current and future use of the Site (e.g. visitors and traffic); potential future changes (e.g. new development and change in the Setting); and the inherently sensitive nature of its physical form and significances (e.g. fabric and character). This reflects the definition of Environmental Capacity provided above.
- 2.50 In the case of Saltaire these capacity issues and indicators were addressed as a series of questions (see Section 4) covering the following areas:
 - What is the capacity of the Site to accommodate visitors?
 - What is the capacity of the Site to accommodate new development?
 - What is the capacity of the Site to accommodate traffic?
 - What is the capacity of the Site to accommodate to car parking?
 - What is the capacity of the Site to accommodate changes to its fabric?
 - What is the capacity of the Site to accommodate changes to its character?
 - What is the capacity of the Site to accommodate different uses?
 - What is the capacity of the Site to accommodate changes to its setting?
- 2.51 For each of the Capacity Issues the nature of the issue is explored in more detail with supporting baseline data gathered as part of the Study. This includes an analysis of the level of concern associated with the issue.
- 2.52 From this analysis an indicator (or indicators) was then established to monitor these issues through time and identify when the capacity of the Site may be exceeded in relation to any given issue. These indicators use changes in data collected as part of the baseline to monitor when capacity thresholds are

reached. These thresholds are then used to trigger further analysis to identify the potential causes of the threshold being exceeded and from this analysis targeted action can be developed to address the issue.

- 2.53 The thresholds vary from indicator to indicator. They have been based on available data and designed to trigger action when it is considered that a particular issue would reach a level that could result in the degradation of the Site's OUV or key values. Some of the thresholds are awaiting survey data that will be collected in the future. For these thresholds, guidance has been provided on possible approaches to their establishment. For other thresholds, the levels have been established with reference to factors such as the state of the Site at the time of its Inscription in 2001, available empirical data or the results of recent surveys. In each case the reason for the threshold is clearly laid out in the supporting text.
- 2.54 Section 4 presents these indicators. The issue and baseline data is described and analysed and the reason for each indicator and threshold is also outlined to allow transparency in the approach. The exact nature of each indicator varies considerably depending on the nature of the issue(s), the available data and the need for further action. The Capacity Indicators are also cross-referenced where necessary and any associated Monitoring Measures (see Stage 6 below) are identified.
- 2.55 Some of the indicators identified for the Saltaire ECS do not have available baseline data at this stage. Consequently, a programme of further surveys and analysis has been proposed to develop the required data for future monitoring (see Stage 7). This has been undertaken as it was considered important to ensure that the indicators addressed issues rather than just reflecting available data.

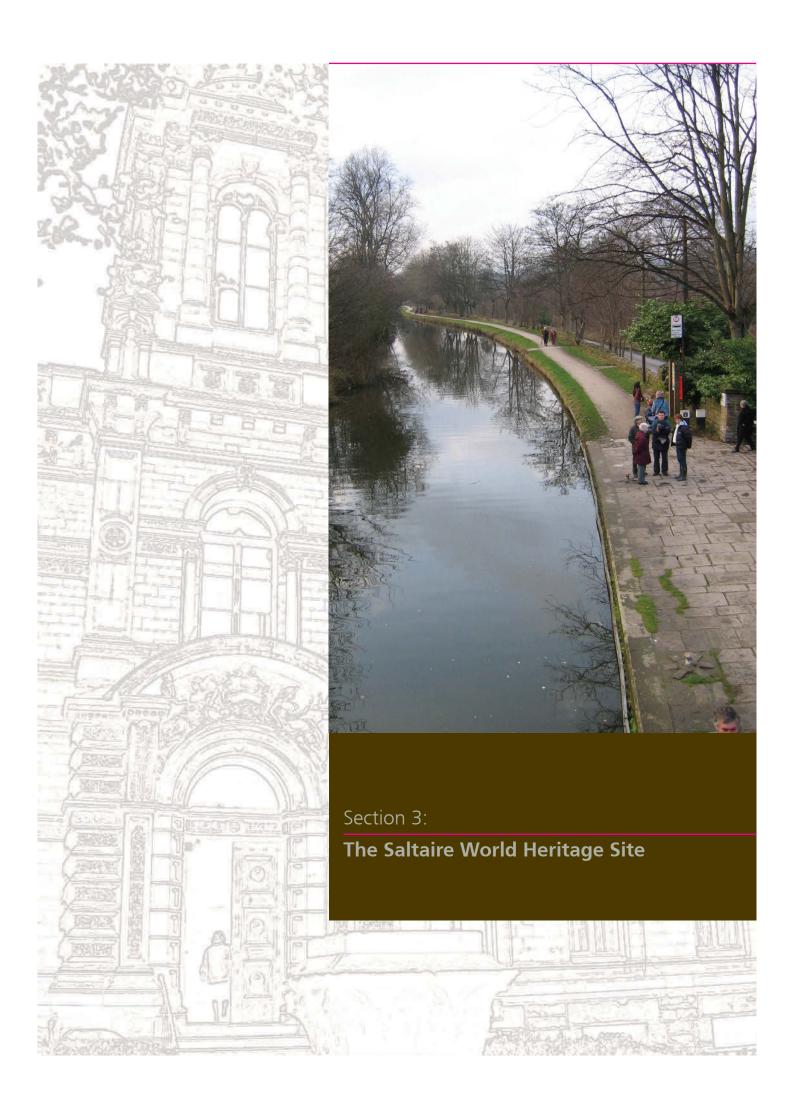
Stage 6: Establish other monitoring measures

- 2.56 Alongside the Capacity Issues a number of other areas were identified for monitoring. These were areas where monitoring would be useful in assessing the likely causes for a capacity threshold being exceeded. These measures cover a wide range of issues including amongst others:
 - Overall Resident Satisfaction
 - Visitor Numbers and Satisfaction
 - Transport modal share and other transport issues

- Car Parking Utilisation
- Presence of charity Shops
- 2.57 These Monitoring Measures primarily supply data to inform the analysis of the Indicators; however they also provide data that could be of benefit for the long-term management of the Site. The ongoing monitoring of these areas may identify future trends that require the establishment of new indicators.

Stage 7: Establishing a monitoring regime

- 2.58 A key aspect of this ECS has been the establishment of a 6-yearly monitoring cycle to allow the regular updating and review of the indicators and other monitoring measures. This particular cycle was chosen as it ties in with the WHS Management Plan process and the UNESCO Periodic Reporting cycle. Other cycles may be more appropriate for different sites.
- 2.59 The monitoring regime focuses on a series of yearly, 3-yearly and 6-yearly surveys designed to provide data to update different indicators and monitoring measures at different times. Many of the baseline data sets have also been designed to be updated on an ad-hoc basis, to allow for yearly reporting of the indicators. It is currently anticipated that all indicators and surveys would be refreshed every six-years to provide a consistent long-term management tool.
- 2.60 The indicators and issues themselves are likely to change over time and it is also anticipated that as events and wider economic and social circumstances change then the ECS will be adapted to meet these.



3. THE SALTAIRE WORLD HERITAGE SITE

Introduction

- 3.1 This section briefly describes the Saltaire World Heritage Site and presents a review of the significances and Outstanding Universal Value of Site. The review has been undertaken to enable the identification of the Key Values that would need to be monitored over the long term to ensure that the Outstanding Universal Value of the Site is conserved for future generations.
- 3.2 The section begins with a very brief overview of the Site followed by a review of the significances and Outstanding Universal Value of the Site. Finally the Key Values for future monitoring are identified and described.

The Saltaire World Heritage Site (WHS)

- 3.3 The Saltaire WHS was inscribed on the World Heritage List in 2001 as a cultural site. This Inscription recognised its Outstanding Universal Value under the terms of the 1972 UNESCO Convention on World Heritage.
- 3.4 The Site's character, form and historic development have been described in a number of documents including the WHS Nomination Document (CBMDC 2000), the WHS Management Plan (CBMDC 2001), Saltaire Conservation Area Assessment (CBMDC 2003) and the Saltaire World Heritage Site Designed & Open Spaces Conservation Management Plan (Hillary Taylor Landscape Associates 2004). For the sake of brevity the descriptions and analyses presented in those documents are not repeated here. However, the following provides a very brief overview of the Site.
- 3.5 The Saltaire WHS is a remarkable surviving example of a mid to late 19th century planned industrial town. The development of the Site by Titus Salt began in 1851 and was finished in 1876. Upon completion it provided a fully integrated textile mill complex accompanied by a model village laid out, in the eyes of Titus Salt, to provide a high quality living environment for those working at the mill in an attractive rural area on the edge of Bradford.

- 3.6 The Site's formalised grid pattern of streets, open spaces and buildings represent a key stage in town planning and this coupled with the use of a unified Italianate style of architecture created a highly distinctive urban environment, the vast majority of which has survived today. This fact was noted in the UNESCO Evaluation Report which stated that "By comparison with other complexes of this type from the second half of the 19th century Saltaire is outstanding because of its completeness and its integrity" and "The integrity of Saltaire as a model industrial village is total: there have been no changes to its layout or appearance since work began in the 1850s."
- 3.7 Although the mill complexes ceased production in the late 20th century the Site continues in use as a residential and commercial area. It provides a home for approximately 1400 people¹ the majority of whom live in the original terraced properties. In addition, the Site provides a base for a number of major employers including PACE Micro Technology, the National Health Service (NHS) and Salt's Mill. The latter is a regionally important retail and tourism destination and a key reason why many people visit the Site (see Visitor Survey results in Appendix F). The Site also contains numerous smaller retail outlets, mainly along Victoria Road and Bingley Road, which provide a service to local people and visitors. A number of institutional buildings on the Site have been taken on by Shipley College and the Site is now used by a significant number of students.
- 3.8 Overall, the Saltaire WHS is a vibrant urban area that is home to a number of modern uses all housed within a remarkable historic urban environment that has survived virtually unscathed since its development in the mid 19th century. The future management of the Site, as outlined in the WHS Management Plan, therefore seeks to balance the needs of contemporary society with the obligation (as laid out in the 1972 UNESCO Convention) to identify, protect, conserve, present and transmit to future generations the Outstanding Universal Value of the Site.

Review of the Outstanding Universal Value and Significances of the World Heritage Site

3.9 This review is based on the Statement of Significance and Justification for Inscription presented in the Nomination Document for the Saltaire WHS and the Evaluation Body's report on the Site submitted to UNESCO in support of its inscription.

_

¹ figure derived from 2001 Census – may include properties within Saltaire but outside the WHS

The Outstanding Universal Value of the Site

- 3.10 The Site was inscribed as a Cultural Site on the World Heritage List as a *group of buildings* under the following cultural criteria:
 - Criterion ii: Saltaire is an outstanding and well preserved example of a mid 19th century industrial town, the layout of which was to exert a major influence on the development of the "garden city" movement.
 - Criterion iv: The layout and architecture of Saltaire admirably reflect mid 19th century philanthropic paternalism, as well as the important role played by the textile industry in economic and social development.
- 3.11 These two criteria highlight the Outstanding Universal Value of the Site and as stated in the Nomination Document its Outstanding Universal Value exists for three key reasons:
 - It encapsulates the maturing of industrial society and the industrial system
 - It represents an important stage in the development of a formal land-use planning system.
 - Its unified architectural style, its construction quality and its building hierarchy exhibits mid-Victorian society's pre-eminence in European imperialist and technological domination and the paternalistic, moral and practical philanthropy of that time
- 3.12 The physical fabric and character of the Site embody the Outstanding Universal Value of the Site. Without the survival of the fabric our recognition and understanding of these values and the historic / cultural phenomena that led to the development of the Site would be severely diminished. This fact is recognised in the WHS inscription which requires that a Site be both authentic and integral in its form. The inscription therefore recognises that the Site has survived as a remarkably complete and coherent physical entity (see para. 3.6 above); a fact that significantly contributes to its overall value and significance. The coherence and character of the Site and the survival of the physical fabric is therefore of critical importance to the Site and its Outstanding Universal Value.

Other Significances

3.13 The fact that the Site continues to operate as a living and working social / economic community that, although now engaged in new industries and living different lifestyles, still values and supports the Site is of particular significance and, as outlined below, is considered to be an Important Value. This living

community of residents, workers, students and visitors supplies the Site with a necessary vibrancy that helps ensure its continued conservation and the transmission of its values and meanings to future generations. It also maintains authentic uses for many buildings and areas of the Site.

- 3.14 The Site also other wider significances including its:
 - role as a retail and leisure destination in the local area and wider region;
 - iconic status and source of civic pride for the wider City of Bradford;
 - strong presence in the wider landscape as a recognisable landmark;
 - value as a place to live for residents;
 - economic role in Bradford especially in terms of employment and tourism;
 - ecological values, especially along the canal and river corridors; and
 - use as a major centre for education.
- 3.15 Another aspect that needs to be considered is its setting (also see Appendix B). The Site was located at Saltaire for a number of reasons, including the proximity of the canal, railway and road network. These elements all form part of the setting of the Site and directly relate to the Outstanding Universal Value and significances of the Site. In addition, the Site was deliberately established in a rural location by Titus Salt in response to the growing degradation of living conditions within the cities. The rural aspect of the Site's setting is therefore a key aspect of the reasoning behind its foundation and a reflection of the paternalistic attitude and social morals of its founder. The setting of the Site is also structured by its fabric and form and the Site plays an important role in establishing the character of the local area. In summary, the setting of the Site reflects many of the reasons for its foundation, is directly linked to the reasons for its inscription and provides a distinctive character for the Site; as such it is an important value in terms of the Site's overall significance.

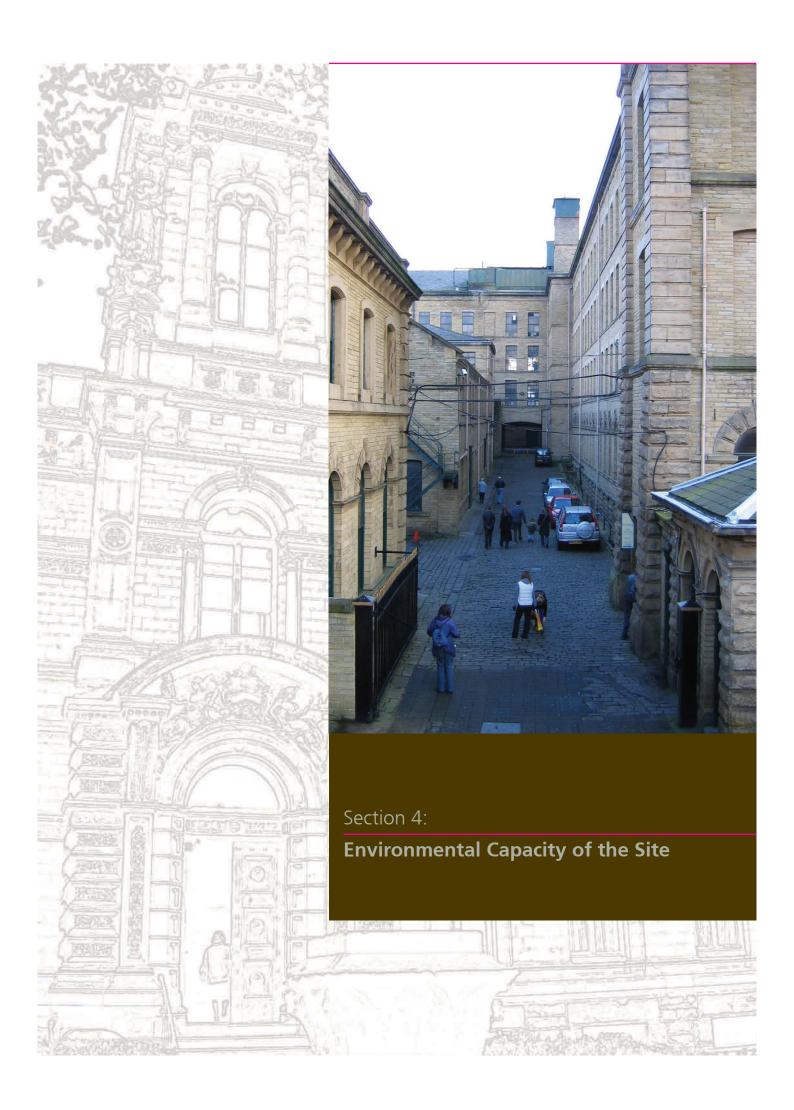
Key Values

3.16 Having reviewed the reasons for the Site's inscription, its Outstanding Universal Value and the many significances of the Site, six Key Values have been identified for future monitoring to ensure that the key values associated with Site are adequately conserved and protected. These are:

- The fabric of the Site (Critical);
- The character of the Site (Critical);
- The setting of the Site (Important);
- The quality of life of the residents (Important);
- The use of the Site (Important); and
- The natural environment (Contributory).
- 3.17 These values have been graded as part of the study to provide a level of differentiation between them in terms of their relative value to the Outstanding Universal Value (OUV) of the Site. Three broad grades have been established:
 - **Critical**: A value that is **fundamental** to the OUV of the WHS where change has the potential to directly degrade the OUV of the Site and affect its inscription
 - **Important**: A value that **contributes**, either directly or indirectly, to the OUV of the Site or is **important** to the wider significance of the Site and where change could directly or indirectly degrade the OUV of the Site.
 - **Contributory**: An aspect that may not directly relate to the OUV of the Site but is still of **some significance** to the place.
- 3.18 The following outlines why each of the values has been selected and the reasoning behind their relative grading.
 - The fabric of the Site As previously discussed the surviving fabric of the Site, primarily its buildings, streets, open spaces and designed landscapes, embodies the OUV of the Site and is a direct reflection of the historical, social and economic environment in which the Site was developed. This value is considered to be *critical* as without the continuing survival of its physical fabric the Site could not be a WHS and would not be of Outstanding Universal Value.
 - The character of the Site The character of the Site as established by its layout, location and architectural form is key to understanding the Site and the motivations behind its creation. The authenticity of the Site's character and form was also a key reason for its inscription. The character of the Site is therefore is considered to be a *critical* value.
 - The setting of the Site The setting contributes to the Site's character and sense of place and also enables us to understand some of the

motivations for why the mill and village were located here. As such it is considered to be an *important* value.

- The quality of life of the residents The residential use of the Site is both an authentic expression of its original function and a key mechanism through which its fabric and character are conserved and maintained. The fact that the Site is an attractive and desirable location to live is an important aspect of its wider significance. This is therefore considered to be an *important* value.
- The use of the Site The mix of business, educational and other commercial uses on the Site are a key mechanism through which its fabric and character are conserved and maintained. These elements are also an important aspect of the Site's wider economic and social significance. Overall, this is considered to be an *important* value.
- The natural environment The natural environment of the Site was not part of the reason for its nomination. The natural environment does however make some contribution to the character of the Site and the quality of life of the residents. In addition, elements of the natural environment (e.g. habitats) have significance in their own right. It is considered that this is a *contributory* value.
- 3.19 It is clear from the above that the physical form and character of the Site are critical concerns for the ECS. However, the residential and other uses on the Site are important and therefore need to be addressed as part of the ECS. The setting of the Site is also a notable element and consequently needs to be considered by the ECS. The Natural Environment is considered by the ECS, but is a lesser concern in relation to the study and the Site and will only be addressed where significant issues are identified in relation to this value.



4. ENVIRONMENTAL CAPACITY OF THE SITE

Introduction

- 4.1 This section discusses those uses, potential future changes and issues that could affect the Site. The identified areas of concern relate to the use of the Site, its physical nature and its value.
- 4.2 In broad terms, the Capacity Issues relating to the **use** of the site include:
 - What is the capacity of the Site to accommodate visitors?
 - What is the capacity of the Site to accommodate traffic?
 - What is the capacity of the Site to accommodate to car parking?
 - What is the capacity of the Site to accommodate different uses?
- 4.3 With regard to the conservation of the **physical nature** of the Site and its significances the issues relate to:
 - What is the capacity of the Site to accommodate changes to its fabric?
 - What is the capacity of the Site to accommodate changes to its character?
- 4.4 In terms of potential **new physical changes**, the issues are:
 - What is the capacity of the Site to accommodate new development?
 - What is the capacity of the Site to accommodate changes to its setting?
- 4.5 These issues have been identified through an analysis of existing material, surveys and technical studies. Further information on these can be found in Section 2.
- 4.6 The issues relating to each of the above questions are discussed in detail below. The analysis for each question includes an outline of the current and past situation, the issues arising from current and potential future

circumstances in relation to the Site's Key Values and a review of the level of concern associated with each issue (see Stage 4 in Section 2 for methodology). Finally an indicator, or indicators, designed to monitor the capacity of the Site to accommodate these changes or uses is presented.

- 4.7 The issues are obviously interrelated (e.g. *new development* and *visitors* in that more visitors could lead to new facilities being required which could lead to new development being required). Where this is the case these are cross-referenced with the other relevant Capacity Issues in this section. In addition, where additional monitoring measures are required to support the analysis of any future triggering of a capacity threshold these are highlighted and cross referenced with Section 5 which presents in more detail on these other measures.
- 4.8 The relationships between the Capacity Issues, Indicators and the Monitoring Measures (see Section 5) are outlined on Table 1 (overleaf). For each Capacity Issue the relevant indicators are highlighted in the second column. These are broken down into two groups. Firstly, the principal indicator(s) for measuring capacity are highlighted in a box or boxes. Beneath these other relevant indicators that relate to the capacity issue are also identified. These indicators are those which have a bearing on the capacity of the Site to accommodate that particular use, change or development. For example, the capacity of the Site to accommodate visitors is affected by factors such as Traffic congestion (Indicator 2a) and Resident Satisfaction with car parking (Indicator 4A) but is primarily constrained by the impact of visitors on residents (Indicator 1).
- 4.9 The final column lists the Monitoring Measures or other Indicators that relate to the principal Indicator in terms of supplying additional data to support the analysis of that indicator should its threshold be exceeded.

Capacity Issue	Indicator(s)	Supporting data for analysis of indicator, if triggered
Capacity of the Site to accommodate visitors	Indicator 1: Impact of visitors on residents and other users	MM A: Overall resident satisfaction MM B: Visitor satisfaction MM C: Visitor count MM D: Modal share MM H: Areas of Site visited by visitors MM J: Overall other user satisfaction Indicator 2A: Traffic congestion on Saltaire Road and Bingley Road Indicator 3A: Through traffic on site away from Saltaire and Bingley Road Indicator 3B: Traffic speeds Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 5A: Provision of local retail and service facilities

Other related indicators

Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road

Indicator 3A: Through traffic on site away from Saltaire and Bingley Road

Indicator 3B: Traffic speeds

Indicator 4A: Level of resident satisfaction with car parking availability

Indicator 4B: Level of other user satisfaction with car parking availability

Indicator 5: Provision of local retail and service facilities

Indicators 6A & B: Vacant Premises

Indicator 9: Alterations to residential and other properties

Indicator 11: Condition of character areas

Capacity of site to accommodate new development (guidance only)

Capacity of the Site to accommodate traffic

Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road	MM A: Overall resident satisfaction
	MM C: Visitor count
Indicator 2B: Residents' view on traffic congestion	MM D: Modal share
_	MM E: Quality of public transport
Indicator 2C: Other users' view on traffic congestion	MM J: Overall other user satisfaction
-	MM K: Number of cars per household
	Indicator 1: Impact of visitors on residents and other users
	Indicator 3A: Through traffic on site away from Saltaire and Bingley Road
	Indicator 3B: Traffic speeds
	Indicator 4A: Level of resident satisfaction with car parking availability
	Indicator 4B: Level of other user satisfaction with car parking availability
	Indicator 5A: Provision of local retail and service facilities

Indicator 3A: Through traffic on site away from Saltaire and Bingley Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Road

Indicator 2B: Residents' view on traffic congestion Indicator 2C: Other users' view on traffic congestion

Indicator 3B: Traffic speeds

Other related indicators

Indicator 11: Condition of character areas

Indicator 13: The quality of the Immediate Setting and Approaches and

Gateways

Capacity of the Site to accommodate car parking

Indicator 4A: Level of resident satisfaction with car parking availability

Indicator 4B: Level of other user satisfaction with car parking availability

MM A: Overall resident satisfaction

MM C: Visitor count MM D: Modal share

MM E: Quality of public transport

MM F: Car parking utilisation and availability MM H: Areas of Site visited by visitors

MM J: Overall other user satisfaction MM K: Number of cars per household

Other related indicators

Indicator 1: Impact of visitors on residents and other users

Indicator 11: Condition of character areas

Indicator 12: Changes to key views into, across and out of the Site

Indicator 13: The quality of the Immediate Setting and Approaches and

Gateways

Capacity of site to accommodate new development (quidance only)

Capacity of the Site to accommodate different uses

Indicator 5A: Provision of local retail and service facilities	MM A: Overall resident satisfaction
	MM B: Visitor satisfaction
Indicator 5B: Active frontages on Victoria Road	MM C: Visitor count
	MM G: Charity Shops
Indicator 5C: Active frontages on Bingley Road	MM H: Areas of Site visited by visitors
	MM I: Visitor Spend
	Indicators 6A & B: Vacant Premises
	Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road
	Indicator 3A: Through traffic on site away from Saltaire and Bingley Road
	Indicator 10: Appropriateness of Shop frontages
	Percentage of residents and other regular users using local shops on a
	regular basis (see latest questionnaire surveys))
	Performance of local retail economy (external data)

Indicator 6A: Vacant Commercial and Retail Premises	MM C: Visitor count	
	MM G: Charity Shops	
Indicator 6B: Vacant Large-Scale Buildings	MM I: Visitor Spend	
	Percentage of residents and other regular users using local shops on a	
	regular basis (see latest questionnaire surveys)	
	Performance of local retail economy	

Other related indicators

Indicator 1: Impact of visitors on residents and other users

Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road

Indicator 3A: Through traffic on site away from Saltaire and Bingley Road

Indicator 3B: Traffic speeds

Indicator 4A: Level of resident satisfaction with car parking availability

Indicator 4B: Level of other user satisfaction with car parking availability

Indicator 9: Alterations to residential and other properties

Indicator 10: Appropriateness of Shop frontages

Indicator 11: Condition of character areas

Capacity of site to accommodate new development (guidance only)

Capacity of the Site to accommodate changes in its fabric

Indicator 7A: Overall condition of properties	Fabric Survey
	Character Survey
Indicator 7B: Condition of Outbuildings	MM I: Visitor Spend
	Indicator 5A: Provision of local retail and service facilities
	Indicator 6A & B: Vacant Premises
	Indicator 9: Alterations to residential and other properties
	Indicator 10A: Appropriateness of Shop frontages
	Indicator 11: Condition of character areas
Indicator 8: Condition of major industrial and civic buildings	Fabric Survey
	Character Survey
	MM I: Visitor Spend
	Indicator 5A: Provision of local retail and service facilities
	Indicator 6B: Vacant Premises
Indicator 9: Alterations to residential and other properties	Fabric Survey
	Character Survey
	Indicator 5A: Provision of local retail and service facilities
	Indicator: 6A: Vacant Premises
	Indicator 10A: Appropriateness of Shop frontages
1 11 1 10 10 10 10 10 10 10 10 10 10 10	F.1.1.0
Indicator 10: Appropriateness of Shop frontages	Fabric Survey
	Character Survey
	Indicator 5A, 5B, 5C: Provision of local retail and service facilities
	Indicator: 6A: Vacant Premises
	Indicator 9: Alterations to residential and other properties
	Indicator 11: Condition of character areas

Other related Indicators

Indicator 11: Condition of character areas

Capacity of site to accommodate new development (guidance only)

Capacity of the Site to accommodate changes to its character Indicator 11: Condition of Character Areas

Character Survey
Fabric Survey

MM D: Modal share

MM F: Car parking utilisation

MM H: Areas of Site visited by visitors MM K: Number of cars per household

Indicator 5B: Active frontages on Victoria Road Indicator 5C: Active frontages on Bingley Road Indicator 7A: Overall condition of properties Indicator 7B: Condition of Outbuildings

Indicator 8: Condition of major industrial and civic buildings Indicator 9: Alterations to residential and other properties

Indicator 10: Appropriateness of Shop frontages

Other related Indicators

Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 3A: Through traffic on site away from Saltaire and Bingley Road

Indicator 3B: Traffic speeds

Indicator 5: Provision of local retail and service facilities

Indicators 5B & 5C: Active Shop Frontages

Indicator: 6A & B: Vacant Premises

Indicator 7A: Overall condition of properties

Indicator 7B: Condition of Outbuildings

Indicator 8: Condition of major industrial and civic buildings Indicator 9: Alterations to residential and other properties

Indicator 10: Appropriateness of Shop frontages

Indicator 11: Condition of character areas

Capacity of site to accommodate new development (guidance only)

Capacity of the Site to accommodate new development

No indicator developed - guidance contained in Section 4

See Section 4

Other related Indicators

Indicator 1: Impact of visitors on residents and other users

Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road

Indicator 2B: residents' view on traffic congestion

Indicator 2C: Other users' view on traffic congestion Indicator 3A:

Through traffic on site away from Saltaire and Bingley Road

Indicator 3B: Traffic speeds

Indicator 4A: Level of resident satisfaction with car parking availability

Indicator 4B: Level of other user satisfaction with car parking availability

Indicator 5A: Provision of local retail and service facilities

Indicator 5B & C: Active Shop Frontages

Indicator 6A & 6B: Vacant Premises

Indicator 7A: Overall condition of properties

Indicator 7B: Condition of Outbuildings

Indicator 8: Condition of major industrial and civic buildings

Indicator 9: Alterations to residential and other properties

Indicator 10: Appropriateness of Shop frontages

Indicator 11: Condition of character areas

Indicator 12: Changes to key views into, across and out of the Site

Capacity Issue	Indicator(s)	Supporting data for analysis of indicator, if triggered
Capacity of the Site to accommodate changes to its setting	Indicator 12: Changes to key views into, across and out of the Site	Setting Survey Detail of relevant planning applications or proposed schemes
	Indicator 13: The quality of the Immediate Setting and Approaches and Gateways	Setting Survey Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Detail of relevant planning applications or proposed schemes
	Indicator 14: The impact of development on the Setting of the Site	Setting Survey Indicator 12: Changes to key views into, across and out of the Site Detail of relevant planning applications or proposed schemes
	Other Relevant indicators Indicator 11: Condition of character areas	Detail of relevant planning applications or proposed schemes

What is the capacity of the Site to accommodate visitors?

Background and Introduction

- 4.10 Visitors have formed part of Saltaire's character for much of its history and currently make a key contribution to its economy. The Site contains a number of key visitor attractions including Salt's Mill (a major retail, cultural and leisure destination), the canal and the village itself. The recent Visitor Survey (see Appendix F) identified that of the questioned visitors, 32% had primarily come to visit Salt's Mill, 24% had come to see the Village and 20% had come to see the Canal. In addition, a Visitor Impact Analysis undertaken in 2003 identified that 32% of people came to see Salt's Mill (including the Hockney and 1853 Galleries and Salt's Diner); whilst 59% had come to see the Village and 2% had come to see the canal. These differences between these figures possibly reflect sample size and locations of interviews. It is notable however that the Village and Salt's Mill feature strongly in both surveys. These elements are therefore seemingly the key drivers for visitors to the Site.
- 4.11 In terms of visitor spend, a key factor in the economic impact of visitors, the 2005 Visitor Survey (see Question 6 in Appendix F) indicates a broad range of spending levels with c.42% people spending less than £5 per head, c. 46% spending between £5 and £20 per head and c.12% spending £20 or more. This range reflects the wide retail and catering offer available on the Site and in particular that available within Salt's Mill. The 2003 survey did not gather data on spend levels but it did identify that c.79% of visitors bought souvenirs or gifts, whilst a further 32% purchased books and magazines. Given that Salt's Mill is the primary attractor on the Site, in terms of visitor spend, data on average visitor spend levels at the Mill could provide further information on the economic contribution that visitors make to the Site, however this is commercially sensitive information and may not be available.
- 4.12 Related to financial spend is the amount of time people stay at a Site as there is perhaps a link between the length of time and potential financial spend. Both the 2003 and 2005 studies asked people about the length of time they spent at the site, the following presents the results:

	<1 Hour	1 to 2 Hours	2 to 3 Hours	3 to 4 hours (2003) 3 to 5 Hours (2005)	More than 4 Hours (2003) All day (2005)
2003	1%	11%	31%	28%	29%
2005	4%	35%	32%	20%	9%

- 4.13 The figures are not exactly cross-comparable as slightly different questions were asked, however they do tend to indicate a relatively long visit time for many visitors, but there is a significant disparity between the surveys with regard to the 1 to 2 hours and over 4 hours categories. This could reflect a range of factors including sample size (2005 c. 75 respondents and 2003 c. 301 respondents), weather, location of the interview and time of year.
- 4.14 Both the 2003 and 2005 surveys revealed that visitors come from a range of destinations to visit the Site. The following table provides a summary of those locations:

Location	2005 results	2003 results
Bradford	17%	12%
Rest of West Yorkshire	31%	34%
Further afield	52%	53%

- 4.15 Saltaire is also a study visit destination for many schools and college groups of all ages. Subjects being studied are predominantly geography, social studies, planning and, for groups visiting the Mill, art. Currently, there are no formal facilities or booking systems for student groups, and it would not be possible to prevent teachers from bringing groups to the Site at their chosen time, given that it is a public area. This means that visitor numbers for these types of groups cannot be gauged. However, the Mill does require student groups to be pre-booked and refuses entry to unbooked groups; some data may therefore be available from Salt's Mill on numbers of booked groups. The Tourist Information Point (TIP) offers guided tours, pre-booked at £2.50 per head, and has also produced an education pack. Figures on the take up of these tours and packs may be available, but as with Salt's Mill, these figures are commercially sensitive.
- 4.16 One of the current problems with analysing visitors to the Site is the lack of available data on total visitor numbers. There are no daily counts of visitors and the open access non-fee paying structure of the Site makes this an unrealistic option. Salt's Mill holds data on its visitor numbers but this data is considered to be commercially sensitive. It is therefore not possible to provide any estimate on total visitor numbers at this time. This lack of data is addressed by Monitoring Measure C (see Section 5) as this is considered to be an important issue with regard to measuring and monitoring the capacity of the Site to accommodate visitors.

- 4.17 Given the economic contribution that visitors make to the Site e.g. the continued use of Salt's Mill and the support they give to a number of retail premises on Victoria Road (see *capacity of the Site to accommodate different uses* below) it will be important to ensure that visitors in the future are satisfied with the quality of their visit and with the provision of facilities. In terms of visitor satisfaction, this issue is discussed further in Section 5 where monitoring measures are recommended (see Monitoring Measure B). Issues regarding the desire for new facilities are discussed further below and in the *capacity of the Site to accommodate new development* section.
- 4.18 In summary, visitor activity has been a key part of the revitalisation of Saltaire in the late 20th century. It has helped maintain retail activity, bought major buildings on the Site into sustainable re-use and provided employment opportunities. In addition, the World Heritage Convention requires signatories to promote world heritage and the continued presence of visitors helps ensure that this occurs. For all of the above reasons, it is critical to ensure that the future management of the Site continues to balance the use of the Site by visitors with the needs of its residents, students, workers as well as ensuring that the accommodation of visitors does not degrade the significances and physical nature of the Site. The following explores these potential conflicts and issues in more detail.

Potential Impacts and Capacity Issues

Fabric and Character

4.19 There are no capacity issues associated with people visiting the Site in terms of their impact on its fabric as the Site's robust urban nature means that, physically, it should be able to accommodate a far larger number of visitors than current levels without adverse effects on fabric. This is due to the fact that, bar infrastructure demands (see below), visitors will never have a significant direct adverse impact on the fabric of Site as it would take many years and a sizeable increase in visitors before there is any noticeable impact on the fabric such as footpaths or buildings. There may be localised areas of erosion in high demand areas, e.g. on stairs or pavements on major thoroughfares, but these can be addressed through remedial measures such as replacement with appropriate fabric; something that would occur naturally within the life cycle of an urban area. Therefore visitors pose *No Threat* to the Fabric of the Site (a *Critical Value*) and there is *No Concern* associated with this issue and no requirement to monitor capacity.

The numbers of visitors and the way they behave can affect the character of the Site. The presence of large groups of "tourists" can influence how people experience the place and could alter its character from a residential / commercial area to a visitor attraction. Currently, visitors are having no appreciable impact on the dominant residential character of the Site. This is due largely to the fact that the majority of visitors remain in and around Salt's Mill although some do move out across the Site particularly along Victoria Road and to a lesser extent Robert's Park. The Site's size, layout and the location of current attractions (e.g. Salt's Mill and Victoria Road) mean that it is highly unlikely that without a vast increase in visitor numbers and a fundamental change in how they move around the Site that any impact on character would occur as a result of the presence of visitors (see Monitoring Measure H). Visitors therefore pose only a *Minor Threat* to the character of the Site (a Critical Value). This is therefore a Minor Concern and further monitoring is not required. However, should significant increase in visitor numbers be observed (see Monitoring Measure C) and increased disturbance of residents occur (see Indicator 1) then this issue may need to be reassessed in the future.

Conflict between Visitors and Others

- 4.21 There are potential conflicts between visitors, residents and other regular users (including students and workers), all of whom contribute significantly to the long-term conservation and sustainability of the Site. Anecdotal evidence has highlighted a number of issues including:
 - access to parking this is discussed elsewhere in this report (see capacity of the Site to accommodate to car parking see Indicators 4A and 4B and Monitoring Measure F) but many visitors use the Salt's Mill car park and the two other formal car parks on the Site rather than on-street car parking. It is also clear that some parts of the Site have some capacity, in terms of space, to accommodate more on street car parking but this may impact on the character of the site (see car parking and character below);
 - noise, litter and intrusion (see below); and
 - other problems associated with large groups of tourists (see below).
- 4.22 The main capacity issues arsing from accommodating visitors relate to intrusion, noise, litter, and large groups etc. The recent resident's survey (see Appendix E) asked a sample of residents a number of questions including:

- "How often do each of the following [in this case Visitors] cause you a problem at home?" (Q15 Appendix E) – 54% said Never a problem, 25% Rarely, 17% Occasionally and 4% Often.
- "How often do each of the following [in this case people in the street] cause you a problem at home?" (Q15 Appendix E) 46% said Never a problem, 34% Rarely, 17% Occasionally, 2% Often and 1% Nearly all the time.
- How much do you agree that more visitors should be encouraged to come to Saltaire? (Q17 Appendix E) – 46% Agree Strongly, 25% Agree Slightly, 22% Neither agree or disagree, 4% disagree Slightly and 3% Disagree Strongly.
- 4.23 These responses would indicate that visitors are having localised impacts on people's quality of life but that overall there is not a major conflict between visitor's and residents. Of the 19 respondents who indicated that visitors cause them a problem Occasionally or Often, 7 lived in Riverside Court. The others respondents lived on other streets relatively near to Victoria Road including amongst others Amelia St., Titus St. and George St. In an open question in the survey (see Q16 Appendix E) six residents made specific reference to visitor related issues including visitors looking in through windows, littering, parking and noise. All of these issues could be addressed through better management and information provision.
- 4.24 In terms of other regular users (including workers and students) questions regarding visitors were asked in the recent survey (see Appendix G).
 - "How often do each of the following [in this case Visitors] cause you a problem?" (Q10 Appendix G) 35% said Never a problem, 36% Rarely, 13% Occasionally, 3% Often, 3% nearly all the time and 10% no response.
 - How much do you agree that more visitors should be encouraged to come to Saltaire? (Q12 Appendix G) – 28% Agree Strongly, 33% Agree Slightly, 33% Neither agree or disagree, 3% disagree Slightly and 3% no response.
- 4.25 These indicate that, as with residents, there are some tensions but overall there is currently no major conflict between visitor's and other users.
- 4.26 With regard to educational visitors, Q17 of the residents survey (see Appendix E) identified that 39% of people Agreed Strongly and 29% of people Agreed Slightly with the idea that more school parties should be encouraged to come to Saltaire. 24% neither agreed nor disagreed and only 8% Disagreed Slightly or Disagreed Strongly. This would indicate that although there are conflicts

the majority of residents do not see these as reason for a reduction in educational visitors.

- 4.27 The key issues associated with educational groups seem to relate to tour management. In terms of management, groups on formal guided tours are given an introduction to the Site and its residential nature; they are also given 'ground rules' on behaviour. Experienced guides seek to ensure adequate group management, preventing groups spreading across streets to cause congestion or hazard, for example, and encouraging minimal noise. However, complaints have been received about guided and unguided tours.
- 4.28 The resolution of this issue through the development of guided and booked educational tours could help minimise conflict with residents and other users as well as increasing student benefit in terms of the enjoyment and education.
- 4.29 Overall, the impact of visitor activity on residents and other users is not currently a major problem as demonstrated by the fact that in the recent resident's survey (Appendix E) 99% of surveyed residents where satisfied or very satisfied with Saltaire as a place to live (see Monitoring Measure A). However, this possible tension between visitors and residents / users is important and it is considered that increased visitor intrusion on residents and other users could pose a moderate threat to these important values in the longer term this makes this a significant concern and one that merits monitoring through the capacity indicators (see Indicator 1 below).
- 4.30 This issue is therefore the key constraining factor (alongside the provision of new facilities see capacity of the Site to accommodate new development and Capacity of the Site to accommodate new uses below) in the Site's capacity to accommodate visitors. The issue lies not in the number of visitors to the Site (see Monitoring Measure C) but in how they behave and where they go (see Monitoring Measure H). It is possible that visitor numbers could decline but changes in behaviour and visitor movements could increase conflicts with residents, students and workers but it is also possible that visitor numbers could rise but that with better management and behaviour, conflicts could decrease. There is no direct connection between visitor numbers and this issue of conflict with residents, students and workers; although without enhanced visitor management it is probable (but not certain) that an increase in visitor numbers would lead to an increase in conflicts.

Development of new facilities

- 4.31 The recent visitor survey (see Appendix F) identified a number of areas in which visitor's felt that their visit could be improved, these included:
 - Toilets 30% considered them to be poor or very poor and 55% felt that improved toilet facilities would make Saltaire a more attractive or enjoyable place to visit
 - Museum 81% of respondents felt that a museum of village life would make Saltaire a more attractive or enjoyable place to visit
 - Information 70% of respondents had no background information for their visit
 - Traffic and car parking (see below)
- 4.32 Given the importance of visitors to the economic viability of the Site it will be important to examine the infrastructure and information demands and ensure that they are met in so far as it is achievable within the capacity of the Site's character and fabric to accommodate such changes. The capacity issues associated with new development on the Site are examined separately (see capacity of the Site to accommodate new development and the capacity of the Site to accommodate different uses). These issues would need to be considered in relation to the site's ability to accommodate visitors in that the location and type of facilities could also increase conflict between visitors, residents, student and workers. These facilities could also increase visitor numbers which could lead to car parking issues (see capacity of site to accommodate car parking) and traffic generation issues (see capacity of site to accommodate traffic).

Economic viability of the Site and key buildings

4.33 The presence of tourism and leisure visitors helps maintain economically viable uses for key buildings on the Site e.g. Salt's Mill which in turn assists its conservation. In theory therefore a decline in visitor numbers, satisfaction and / or spend (see Monitoring Measures B, C and I) could pose a threat to the ongoing use of this building and its continued conservation. However, other uses could supply a viable use for this building and other visitor orientated premises on the Site which would ensure their continued conservation and use. This issue is explored further in the *capacity of the site to accommodate different uses* section.

4.34 Should the visitor use of either Salt's Mill or other premises cease or decline then this could provide disbenefits or benefits for the resident's quality of life (through the loss or gain of services or the development of new less compatible or more compatible uses) and the economic viability of the Site. These issues are explored elsewhere in the document.

Indicators

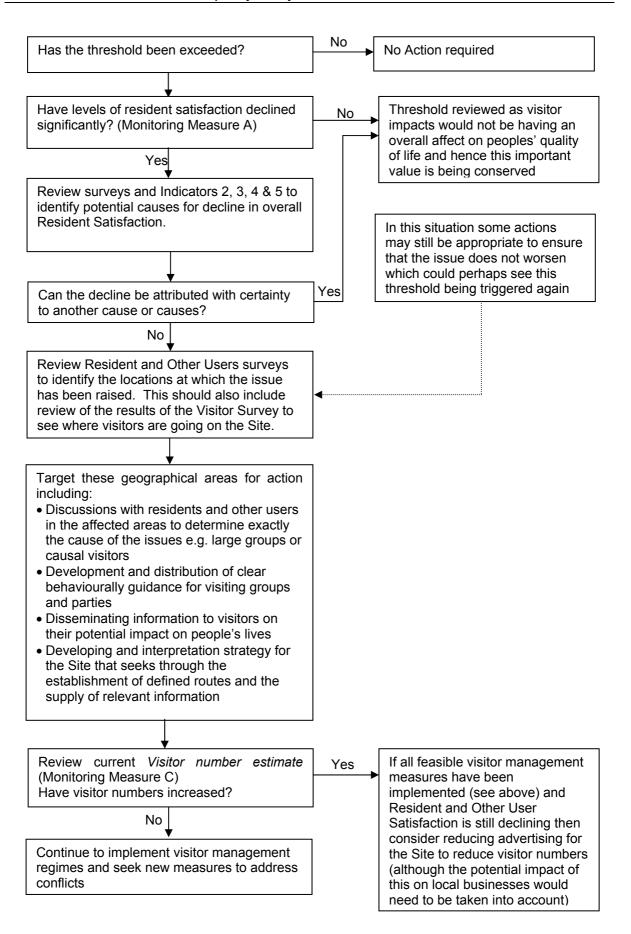
- 4.35 In terms of capacity, the key limiting factor for visitors to the Site is their impact on the residents, students and workers. There may be future issues with accommodating visitors related to the provision of new facilities, car parking and other issues and these are discussed further in the relevant capacity sections.
- 4.36 In terms of monitoring the capacity of the Site to accommodate visitors the following indicator has been developed:
 - Indicator 1: Impact of visitors on residents and other users
- 4.37 Data for Indicator 1 has been gathered as part of the 2005 Residents and Other Users Survey (see above and Appendices E and G). It seeks to measure change in the number of residents or other users who often / or nearly all ways experience issues with visitors. This measure has been chosen as it will enable future management to identify where critical issues are emerging.
- 4.38 The threshold has been established slightly above the existing levels to allow for some statistical fluctuations due to the small sample size of each survey (c.100). However, the threshold has been maintained at a low level to ensure any growing issues in this area are identified earlier rather than later. This low level also reflects the sensitivity of this issue for residents.
- 4.39 The threshold for this indicator will need to be reviewed through time in comparison with overall levels of satisfaction that residents have with Saltaire as a place to live (see Monitoring Measure A and Appendix E). The results of the recent survey indicated that 99% of surveyed residents where satisfied or very satisfied with Saltaire as a place to live. Should Indicator 1 be triggered it the future and there has been no significant decrease in the overall level of satisfaction then in may be acceptable to increase the threshold as any disturbance would not have reached levels sufficient to affect people's overall

quality of life (an *Important Value* – see Section 3). The following threshold should therefore be treated as provisional.

Indicator	Baseline	Trend	Threshold
1: Impact of visitors on residents and other users	2005 Resident and Other User Surveys 4% of residents and 6% of other users indicated that they Often or Nearly all the time had problems with visitors	To be determined at next survey	10% of Residents or 10% of other users indicate that they Often or Nearly all the time "Have Problems with Visitors" (see Questions 15).

Review and Options

4.40 The following flow chart identified the process for reviewing the situation if the threshold is exceeded.



What is the capacity of the Site to accommodate traffic?

Introduction and Background

- 4.41 Appendix D presents a baseline report on traffic and car parking issues on and around the Site. This has been compiled based on data held by CBMDC and through field observation. The following presents a summary of that appendix.
- 4.42 The main trip generators within the Site are the residential properties, the larger business properties on the Salts Mill complex (Pace Micro Technology and the NHS) and the institutional properties such as Shipley College. The Site also attracts visitors and tourists, the trip generators for which are principally centred around Salts Mill, Victoria Road and the busy shopping area on Bingley Road. Figure 2 in Appendix D shows the major trip generators and transport infrastructure on the Site.
- 4.43 The dominant transport modes within the Aire Valley corridor are road based, making use of the principal A650 (Bingley Road within Saltaire) and A657 (Saltaire Road) routes (see Figure 1 in Appendix D). The A650 runs from Keighley to the northwest, via Bingley, Cottingley and Saltaire, through to central Bradford. In Keighley it connects to the A629, attracting traffic bound for Bradford from Silsden, Skipton and beyond. The A657 joins the A650 in Saltaire (at Saltaire Roundabout) and runs via Shipley, Idle, Calverley, Rodley and Bramley before joining the A647 Stanningley Bypass, one of the primary routes from Bradford into Leeds City Centre. The A657 intersects with the A6038 in Shipley, the A658 in Greengates and the A6120 Ring Road at Rodley, making it the main route to Saltaire from Ilkley, Otley, Menston, Guiseley, Yeadon, Horsforth, Leeds Bradford Airport and the majority of suburban north-west Leeds.
- 4.44 Data provided by City of Bradford Metropolitan District Council shows that, within the site, Saltaire Road has a two-way flow of approximately 20,500 vehicles per average day, of which between 1400 and 1600 per hour travel in the peaks. On average, the percentage of this traffic flow that is made up of HGVs is 6%, though it tends to be lower than this during peak periods.
- 4.45 To the east of Saltaire roundabout Bingley Road has a two-way flow of approximately 24,500 vehicles per average day, of which between 1500 and 1600 per hour travel in the peaks. On average, the percentage of this traffic flow that is made up of HGVs is 10%, though is as much as 14% in the AM peak.

56

- 4.46 To the west of Saltaire Roundabout, Bingley Road is significantly busier, with a two-way flow of approximately 33,500 vehicles per average day, of which between 2300 and 2400 per hour travel in the peaks. On average, 10% of traffic is HGVs, though once again it is higher in the AM peak (16%).
- 4.47 One recent change has been the opening of the Bingley Relief Road. Origin-destination surveys were conducted prior to and after the opening of the Bingley Relief Road, to measure the effect this might have on the amount of traffic accessing and passing through the Site. The survey showed that there had been an increase in traffic using the residential streets in Saltaire to avoid congestion on the A650/A657 after the opening of the Bingley Relief Road, as shown below:

7am – 10am & 3.30pm – 6.30pm	Eastbound	Westbound
Before	20	17
After	73	40

- 4.48 The before volumes represent 2.6% of the total number of vehicles entering the Site during the survey periods, whereas the after volumes represent 5.8%.
- 4.49 It is clear that traffic has an effect on every aspect of the operation, environment and vitality of the Site. The structure and layout of the Site was not designed to cater for motorised traffic and parked vehicles, and certainly not in the numbers accessing and passing through parts of the Site today (primarily Saltaire Road and Bingley Road). The major issue from a traffic perspective is the high volume of through traffic passing along Saltaire Road and Bingley Road. This is causing problems on the Site in these locations (e.g. congestion and impact on character) as well as potentially associated problems in other parts of the Site (e.g. rat-running). However, the vast majority of the Site does not suffer from high volumes of vehicular traffic.
- 4.50 The traffic situation is caused by modern society's reliance on private vehicle based transport and the dominance of road-based fright transport. The issues associated with this situation are discussed below, but it should be noted that until the current dominance of road based transport is altered the basic issues are likely to remain in and around the Site.

Potential Impacts and Capacity Issues

Fabric

- 4.51 Currently, traffic movements are not causing any significant issues for the fabric of the Site. There are occasional localised issues with traffic strike but these are generally small-scale in nature and the result of low-speed manoeuvring. These do not pose a significant threat to the fabric of the Site, but can caused localised damage that would need to be addressed on a case-by-case basis. Traffic therefore poses *No Threat* to the fabric of the Site at this time.
- 4.52 The need for infrastructure to facilitate and manage traffic flows through the Site, e.g. traffic lights, pedestrian crossings and safety barriers, can impact on the fabric and character of the Site's public realm, this issue is discussed under the *capacity of the character of the Site to accommodate change* (see below).

Character

- 4.53 The high volumes of traffic and the regular peak time congestion on Saltaire Road and Bingley Roads are having an impact on the character of the Site in these locations. However, these two roads were, at the time of the Site's establishment, the principal road communication routes through the area and to the Site. In many respects, the presence of the Saltaire Road can be considered as one of the reasons why the Site was founded in this location. The use of the road as a major transport corridor can therefore be seen as a continuation of the historical reasons behind the Site's location, but the modern levels of traffic movements far exceed the historical levels and consequently they are impacting on the historical character of these locations.
- 4.54 Elsewhere on the Site traffic levels are relatively low and vehicle movements do not have a significant impact on the character of the Site.
- 4.55 Overall, the impacts on the site's character due to traffic movements are restricted to the Saltaire and Bingley Roads, given the fact that these impacts are geographically localised and do not affect the Site as a whole traffic movements and congestion (see below) pose a *Minor Threat* to this *Critical Value* and this issue is therefore a *Minor Concern*. In terms of monitoring capacity it is clear that current levels of traffic movements and congestion have exceeded the capacity of the Site's character in the Saltaire and Bingley

Road areas. As traffic congestion is intrinsically linked to volume of traffic and the physical nature of the highway, the use of the Traffic Congestion indicator (see below – Indicator 2a) should provide sufficient data to indicate whether this situation is improving or declining. This can be supported by visual monitoring of the situation through indicator 11 (see *capacity of the Site to accommodate changes to its character*).

Quality of Life of Residents

- 4.56 Key quality of life issues relating to traffic include congestion (see separate discussion below), safety, rat-running, intimidation and severance. Safety and intimidation are functions of the volume, speed and proximity of traffic to pedestrians in the Site, and can impact on residents' quality of life.
- 4.57 The resident's survey (Appendix E) asked "How often does traffic cause you a problem at home?" (Question 15) 12% stated it was Never a problem, 18% felt it was Rarely a problem, 30% had occasional problems, 23% felt is was Often a problem whilst 17% believed it was a problem Nearly all the time. The issue was raised by residents across the Site including those of Titus Street, Saltaire Road, Amelia Street, Shirley Street and Whitlam Street amongst others. In addition, other users when asked "How often does traffic cause a problem" (Question 10 Appendix G) had a similar level of response to users. This clearly indicates that traffic is causing quality life issues on the Site, particularly along the through routes through the Site.
- 4.58 The level of congestion suffered at Saltaire Roundabout has led to complaints of 'rat-running', where through-traffic uses local, residential routes to avoid congested parts of the main road network. This not only increases traffic flows on the residential streets, but also increases traffic speeds and risk of pedestrian injury, impacting on the Quality of Life of residents (see results of survey above). In terms of speed a traffic speed survey on Caroline Street in December 2004 showed that traffic speeds in the period from 8:45am to 10:45am averaged between 21 and 24mph. These lie within the current speed limits and do not indicate a significant problem with high-speed rat running on the site, although a number of residents indicated in their responses to the survey (see Appendix E) that cars moving at speed through the Site was a cause for concern.
- 4.59 In terms of safety, the injury rate within the residential streets is currently low. This reflects both the relatively low volumes of traffic across the majority of the Site and the low speed of traffic movements in most locations. Where traffic

volumes and speeds are higher appropriate pedestrian safety infrastructure and crossing points have been established which reduces potential safety issues, these include 2 crossings on Saltaire Road and Bingley Road. These additional infrastructure items do however have the potential to impact on the character of the Site and therefore care must be taken in ensuring that a balance is struck between safety and conservation.

- 4.60 The issue of rat-running and safety is a *Minor Threat* to the quality of life of residents (an *Important Value*) and therefore is a *Minor Concern*. This reflects the low levels of rat-running, the generally low speed of traffic on the Site and the low instance of pedestrian injury. Even given the currently low levels of vehicle movements, an indicator has been established for this issue (see Indicators 3B and 3C) given the possibility that it could become a more significant issue in the future if congestion does not improve (see Indicator 2A).
- 4.61 In terms of the overall impact of traffic on the quality of life of residents (see results of survey above) this issue would be monitored though the ongoing analysis of the overall satisfaction levels with Saltaire as a place to live (see Monitoring Measure A Section 5).

Congestion

- 4.62 Perhaps the key issue relating to traffic on the Site is congestion. Traffic congestion has a significant impact on journey times, driver stress and road safety. Increased journey times impose additional penalties on businesses that loose productive time through time spent in traffic queues and it can also discourage tourists and retail visitors. Congestion reduces the distances over which people are prepared to commute or travel for services, hampering local economies.
- 4.63 Growing traffic levels, in conjunction with restricted space for highway improvements, have led to the principal roads in the Site becoming congested. In particular, Saltaire Roundabout stands as a bottleneck in the Aire Valley corridor, increasing journey times and restricting network capacity. Congestion makes it more difficult and time consuming for residents to access workplaces outside of the Site, and for employees to access their workplaces on the Site. Furthermore, congested traffic detracts from the Character of the Site (see above) and substantially affects the quality of the public environment in the vicinity of the major roads.

- 4.64 The congestion is being caused in part by the Saltaire roundabout which forms a bottleneck through which the level of traffic demand cannot pass smoothly. Given the sensitivity of the area round the roundabout, in terms of its relationship to the Site, there is little, if any, space in the area to develop a highway scheme that could address the issue directly, so a solution from outside the Site may need to be sought, either to constrain traffic growth along the Aire Valley Corridor or to route traffic away from Saltaire altogether. However, there are significant topographical and environmental constraints associated with any such solution and it is unlikely that a viable route could be established to relive congestion in the area without significant adverse environmental effects and / or high economic costs.
- 4.65 The issue of congestion was raised in the surveys undertaken to support the study (see Appendices E, F and G). When asked to rate traffic congestion in the area these groups tendered the following responses:

Residents		Other Users		Visitors	
Very Good	0%	Very Good	3%	Very Good	3%
Good	1%	Good	15%	Good	29%
Average	14%	Average	37%	Average	23%
Poor	22%	Poor	17%	Poor	8%
Very Poor	48%	Very Poor	17%	Very Poor	4%
N/A	15%	N/A	11%	N/A	33%

- 4.66 These results clearly indicate that traffic congestion is a major issue for residents and a significant issue for other users. Visitors were the least affected, and least aware given the 33% n/a response. This probably reflects the timing of their visits outside of key congestion periods (e.g. at weekends and during holiday periods) and their use of the Salt's Mill car park which means that the majority of visitors do not necessarily come along the Saltaire Road. Although 64% of visitors seemingly arrive by car (see Monitoring Measure D: Modal Share), it is unlikely that they are significantly adding to congestion given the above responses.
- 4.67 It is important to note that the congestion currently present in Saltaire also serves to constrain traffic growth in the Aire Valley corridor. Whilst in a regional context this may be seen as a negative impact, it is clearly not desirable to have greater volumes of vehicles travelling through the Site. Therefore, any initiatives to reduce congestion should be concerned less with increasing the capacity of the roads and junctions in the Site, and more on the reduction of through-traffic levels, or through routing traffic away from Saltaire altogether.

- 4.68 The volume of traffic moving through the majority of the Site is relatively low (see above) and this issue is predominately confined to the Saltaire Road and Bingley Road areas. Here high levels of traffic and congestion, particularly at peak times, is having a broad range of impacts. Given the relatively restricted area affected by this issue it is only considered to be a *Minor Threat* to the overall character of the Site (see above). This issue is however a *Moderate Threat* to the Quality of Life of Residents (*Important Value*), the Use of the Site (*Important Value*) and the Natural Environment, in particular Air Quality (*Contributory value*). Congestion is therefore a *Significant Concern*.
- 4.69 It is important to monitor how congestion levels grow on the Site to inform any future discussion about how the traffic problems in Saltaire (especially at Saltaire Roundabout) might be addressed. This issue is as much of regional significance as it is local, so highlighting the impacts on the World Heritage Site might help to raise the agenda at a regional level. Consequently, Indicator 2 has been established to monitor this issue (see below).

Other Impacts

- 4.70 Traffic has other well established environmental impacts, with water pollution, noise, vibration and air pollution all being possible issues for the Natural Environment (a *Contributory Value*), as well as for residents' quality of life. Air quality in the long-term can also result in the deterioration of the fabric of the Site, although currently this is not an issue. The location of much of the traffic congestion and associated infrastructure also means that it is beginning to impact on the quality of the immediate setting of the Site (see Appendix B).
- 4.71 However, in terms of Use of the Site, the commercial businesses on Bingley Road will certainly benefit from passing trade with through-traffic, and the ability of residents and visitors to access the road network is an important factor in maintaining the viability of the Site.
- 4.72 This latter point is highlighted by the results of the surveys which indicate that the car (or motorbike) is a key method of transport for residents, other users and visitors (See Appendices E, F and G). For example 64% of questioned visitors arrived by car / motorbike, whilst 44% of other users also arrived by car / motorbike. In terms of residents, 31% of residents used a car / motorbike to get to work whilst 40% used a car / motorbike to go shopping. A key issue for the future will therefore be to reduce the reliance on car use to get to and around the Site. This issue is discussed further in the other monitoring measures section (see Monitoring Measure D: Modal Share).

Indicators

- 4.73 It is clear from the above that the Site has very limited capacity to accommodate traffic. This limited capacity is a result of its historic form and character, the fact that it is a generally quiet residential area and that the principal roads through the Site are already nearing their capacity to accommodate vehicular traffic at peak times. The Site will continue to need to accommodate vehicular traffic to ensure that the residents and businesses on the Site can continue to live and operate in a viable and satisfactory manner. However, these internal traffic generators are not the key issues facing the capacity of the Site in terms of traffic.
- 4.74 The majority of the issues in this regard relate to the Site's location along a strategic road whose physical capacity cannot be increased due to the need to conserve the fabric and character of the Site. Consequently, the majority of capacity issues arise from external and largely uncontrollable factors. The ongoing monitoring of the traffic issues is therefore likely to generate situations where the capacity of the Site to accommodate traffic is exceeded but where no action can be implemented on a local level to address the issue. The issues do however need to be monitored to help inform wider debates and decisions e.g. through the LDF process, and ensure that when required appropriate local action can be taken to reduce the impact of traffic on the Site.
- 4.75 The above analysis has identified a number of issues related to traffic in Saltaire. These include:
 - **Congestion**: This is a *Significant Concern* in terms of its potential impact on the quality of life of residents, impact on the use of the Site and its impact on the character of the Site. This is addressed through Indicator 2 (see below).
 - Traffic volumes and speed within the Site: Although currently only a
 Minor Concern in terms of its impact on the Quality of Life of Residents
 and the character of the Site, its potential to develop into a more serious
 concern in the future should congestion issues continue to grow means
 that this capacity issue is addressed by Indicator 3 (see below).
 - Impact of traffic on the Quality of Life of residents: This is considered to be a significant concern as it has the potential to degrade the quality of life of residents. Developing reliable quantitative measures for this are difficult but the overall impact will be monitored as part of the Quality of Life of residents monitoring measure (see Monitoring Measure A Section 5). This monitoring will also inform Indicators 2 and 3.

- Impact of traffic infrastructure on the fabric and character of the Site: This issue is discussed further under capacity of the Site's character to accommodate change (see Indicator 11).
- Air Quality: This will continue to be monitored by CBMDC as part of council wide measures for monitoring air quality.

Indicator 2: Traffic Congestion

- 4.76 The following indicator has been developed to measure the capacity of the Site in terms of the impact of traffic congestion. The indicator has been subdivided into 3 sub-indicators. Indicator 2A measures the actual level of congestion through the measurement of peak hour stress factors on a three yearly basis on the Saltaire Road / Roundabout and Bingley Road (the two most affected roads). Indicators 2B & C measure the views of Residents, and Other Users (students, workers etc) on congestion through the 3 yearly surveys. This will allow the measurement of perceived impacts to set against actual changes in congestion.
- 4.77 The small sample sizes used in the surveys mean that there is likely to be a significant degree of variation in responses to questions and consequently Indicators 2B & C may be triggered without a change in the traffic situation. As discussed below, any such triggering would need to be cross-referenced firstly with the results of Indicator 2A and then the results of Indicator 3 and Monitoring Measure A (see Section 5). This should allow for the assessment of the severity of the issue and to determine whether the thresholds established below have been established at correct levels.

Indicator	Baseline	Trend	Threshold
2A: Traffic Congestion on Saltaire Road and Bingley Road	Peak hour stress factors (peak hour flow / link capacity) supplied by CBMDC 2005. Baseline Stress Factors are Saltaire Rd – 0.70, Bingley Rd – 0.63:	To be established at next survey	0.85 on either road. The thresholds of 0.85 has been set as it is at this level that links and junctions often begin to suffer operational problems, imposing unreliable and increased journey times on users. Furthermore, beyond this point it is less likely that the highway authorities will accept new development proposals in the area, on the grounds that the development traffic cannot be accommodated on the network.

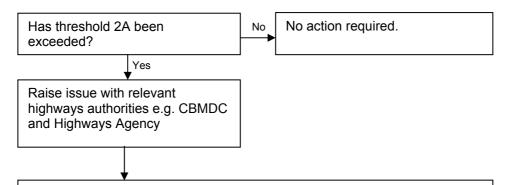
Indicator	Baseline	Trend	Threshold
2B: residents' view on	2005 Residents Survey	To be established at next survey	70% of those questioned rate congestion as Poor or Very Poor.
traffic congestion	70% of those questioned felt congestion to be Poor or Very Poor		Threshold established at current levels as overall levels of satisfaction (see Monitoring Measure A) remain high and therefore congestion does not seem to be undermining resident's overall satisfaction with Saltaire as a place to live. This will need to be reviewed on an ongoing basis.
2C: Other users' view on traffic congestion	2005 Other Users Survey 34% of those questioned felt congestion to be Poor or Very Poor	To be established at next survey	40% of those questioned rate congestion as Poor or Very Poor. Threshold has been established close to current levels as the congestion issues do not seem to be significantly affecting students' or workers' ability to use the Site (see Monitoring Measure J). Some allowance has been made for variation given the relatively small sample size. This will need to be reviewed on an ongoing basis.

Review and Options

- 4.78 Given the fact that society is increasingly choosing to use the car as the major form of transport it is highly unlikely that traffic congestion in and around the Site will decrease in the short term or even longer term. The potential of developing a bypass has been explored in the past but the high economic costs and potential environmental impacts mean that any such solution is unlikely to emerge in the near future.
- 4.79 Indicator 2 will potentially just confirm this ongoing societal trend, but may prove useful in highlighting and identifying this issue at a strategic level which may, in the longer term, enable the development of a solution.
- 4.80 The following presents approaches to reviewing and addressing the issues when one or more of the above indicators are triggered.

Indicator 2A triggered but not Indicators 2B or C

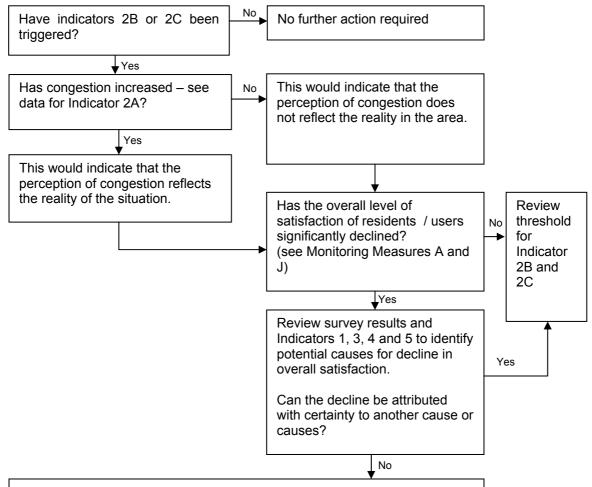
4.81 If Indicator 2A is triggered then congestion on Saltaire and Bingley Road would have reached the physical highway capacity limits of these roads. This level of congestion could begin to significantly impact on local businesses and residents e.g. through a decline in trade and / or increased rat-running. Addressing this issue would be a matter for the local highways authority and the Highways Agency. Overall, given the constraints on re-routing traffic in the area little can be done to alleviate this issue on these roads.



Discuss options for addressing issue, including

- Development of bypass (subject to financial and environmental constraints)
- Re-routing of traffic on a sub-regional basis away from roads (may not be achievable given local trip generators and nature of strategic traffic network)
- Traffic management measures to address junction issues (may not have a significant effect on congestion and may impact on the fabric, character or setting of the Site)
- Ensuring that high quality public transport is retained in the area to support the Site and its many users and residents and reduce reliance on car transport and to minimise its effects on the functionality of the Site (see Monitoring Measures D and E)
- Encourage visitors, residents and other users to use public transport in place or car journeys perhaps through information and education measures (see Monitoring Measures D and E)
- Develop new public transport routes to and from the Saltaire area to provide viable alternatives to car use
- Review local traffic management measures to reduce rat-running through Site (see Indicator 3)
- Review approaches to long-term redevelopment of the Aire Valley corridor

Indicators 2B or C triggered but not Indicator 2A or All indicators triggered



Given that the congestion is not primarily a local issue sub-regional / regional solutions may be required, possible actions include:

- Ensuring that high quality public transport is retained in the area to support the Site and its many users and residents and reduce reliance on car transport and to minimise its effects on the functionality of the Site (see Monitoring Measures D and E)
- Lobbying the relevant authorities to develop public transport and find road transport solutions to reduce congestion
- Encourage visitors, residents and other users to use public transport in place or car journeys perhaps through information and education measures (see Monitoring Measures D and E)
- Develop new public transport routes to and from the Saltaire area to provide viable alternatives to car use
- Review local traffic management measures to reduce rat-running through Site (see Indicator 3)
- Review approaches to long-term redevelopment of the Aire Valley corridor

Indicator 3: Traffic Volumes and Speed on the Site

- 4.82 One of the side effects of local congestion is the use of the Site by drivers taking short cuts down roads such as Caroline Street. This issue has been subject to recent surveys (see above) and although it has been noted as a minor issue, given the likely scenario of traffic congestion remaining a significant issue for the short to medium term an indicator has been developed to allow the issue of rat-running and attendant traffic speeds to be monitored.
- 4.83 Indicator 3A focuses on the volume of traffic using key streets for short cuts through the site to avoid congested roads at peak times. This survey data has been provided by CBMDC and would be subject to a three-yearly survey period to correspond with the resident surveys.
- 4.84 Indicator 3B measures average traffic speed on Caroline Street at peak periods. This street has been selected as it has previously been identified by residents as a particular area of concern; other streets may also need monitoring in the future. This survey data was initially collected by CBMDC at the request of local residents. This survey will be undertaken on a three-yearly basis to correspond with resident's surveys. The threshold has been established at the relevant legal speed limit for the road, namely 30mph.

Indicator	Baseline	Trend	Threshold
3A: Through traffic on site away from Saltaire and Bingley Road	Survey data provided by CBMDC after opening of Bingley Relief Road: 40 - westbound 73 - eastbound	Increased since opening of Bingley Relief road (see above) To be reviewed following next survey	50 – Westbound 90 - Eastbound Given the low number of vehicles passing through the Site the threshold has been established c. 25% above current levels as this allows for some fluctuation in numbers. In addition, current overall resident satisfaction levels remain high and this
3B: Traffic speeds	Survey data provided by CBMDC following survey in Dec. 2004 Currently 21 to 24mph	To be reviewed following next survey	issue is therefore not triggering an overall decline in satisfaction. excess of 30mph average speed The threshold has been established at the current speed limits for the residential roads in Saltaire.

Review and Options

- 4.85 Should either of these indicators be triggered then options to address through traffic and / or the speed of vehicles may need to be considered. These could include:
 - Reducing speed limits on the residential roads across the site to 20mph
 - Examining the possibility of establishing a "Home Zone" (the potential impact on the character of the Site would need to be taken into account in doing this)
 - Installing speed reduction traffic calming measures (the potential impact on the character of the Site would need to be taken into account in doing this)
 - Examining the possibility of closing roads on the Site to limit through traffic.
 - Examining the possibility of using signage to reduce use of shortcuts
 - Enforcement of speed limits on Site should speeding become a notable issue.
- 4.86 These responses would need to be implemented in a manner that did not erode the character or fabric of the Site.

What is the capacity of the Site to accommodate car parking?

- 4.87 Car parking is a sensitive issue for all users of the Site. The provision of parking spaces in the immediate proximity of the home, workplace, shop or attraction is a key factor in making those facilities attractive to residents, business and visitors. Car parking, therefore, plays a significant role in the continued viability of the Site.
- 4.88 Car parking on the Site is practically all located in public space (see Appendix D), be it on the carriageway edge, on the pavement or in public off-street car parks. This means that car parking makes significant demands on the available space in Saltaire, which in turn impacts on quality of life for residents and causes tensions between the various land uses on the Site. In addition, there is significant car parking available for visitors to Salt's Mill just outside the Site which removes the requirement for Salt's Mill visitor parking and traffic movements within the Site.

- 4.89 In terms of availability, Appendix D presents an analysis of current provision. In this analysis, utilisation has been calculated by dividing the number of cars observed to be parked on the street by the theoretical maximum number of spaces that could be accommodated on that street. Each space has been assumed to be six metres in length. Parking restrictions, corners and permit zones have been taken into consideration. In addition, the calculation has taken into account the fact that on many streets parking is only feasible on one side of a street due to the width of those streets.
- 4.90 Based on these assumptions, the theoretical capacity of the on-street parking in the Site is approximately 900 vehicles, which could only come about if all available kerb space were parked nose-to-tail with cars. The current levels of parking though not appearing to be close to capacity do in fact represent very high parking density, especially in the narrower terraced streets that form the bulk of the Site.
- 4.91 As demand for parking increases with increased car ownership it is likely that access to parking facilities in proximity to residents' homes will diminish. The 2005 Visitor and Other Users Surveys (see Appendices F and G) identified that the majority of visitors arrive by car and that many of those travelling to the Site for study or work also use cars (see Monitoring Measure D Modal Share). There is therefore a significant demand for parking spaces on the Site. The ease of access to parking, whilst possibly also being a contributor to the high level of car usage, is likely to be a significant factor in people's decision to visit or work in the Site.
- 4.92 For many people, accessibility is a function of journey time by car and access to parking close to their final destination. As such, the viability of the Site, and therefore its continued use, is affected by the level of parking provision on or near the Site. Whilst the larger employers tend to provide private parking for their employees, there are many other workers or visitors who must find parking either in the off-street car parks or in the residential streets.

Potential Impacts and Capacity Issues

4.93 Car parking on the Site has a number of issues related to it, these relate primarily to the impact of cars on the fabric and character and the availability of car parking for residents, workers, students and visitors.

Fabric and Character

- 4.94 Given the fact that the Site is a residential location, home to a number of businesses and institutions and that all of these users currently require car parking it is clear that cars are going to have to be accommodated on the Site. No streets within the site are free from parked cars and the physical extent of the streets effectively governs their capacity to accommodate parked cars. The issue here lies in how to repair damaged areas and accommodate pavement parking without harming the character and fabric of the Site. If appropriate maintenance and management measures (e.g. strengthened pavements that retain the physical historic character of the Site), can be implemented then the Site's capacity to accommodate car parking could increase as damage to the pavements will no longer be an issue, however this may lead to increased impacts on the character of the Site. The continuation of the damage without remedial measures poses a Moderate Threat to the fabric and character of the Site (Critical Values) due to the fact that the degradation of original or replacement floor surfaces can have a significant impact on the quality of the historic environment of the Site.
- 4.95 Current car parking arrangements along many residential streets is physically impacting on the pavement floor surfaces as many of the cars are currently partially parked on the pavement due to the lack of road width. This is particularly affecting the York stone flags. This damage affects the overall condition of the fabric of the public realm and hence its character. The current car parking arrangements and associated signage are also beginning to clutter numerous streets across the Site, particularly in the residential areas and this is having an impact on the character of the Site.
- 4.96 With regards to cluttering of the street scene, the Site needs to accommodate cars and should not be considered a museum piece. Should at some point in the future car use significantly decline and peoples' demand for cars decrease, then the character of the Site will be returned to its historic uncluttered form. In this respect, parked cars are only a temporary threat to the character of the Site and one that is naturally limited by the physical constraints of available roadsides to park on. Overall, this situation poses a *Moderate Threat* to the character of the Site (*critical value*) but this impact will have to be accepted to ensure that the residential and other uses on the Site are supported, as ultimately the conservation of the Site and its significances is dependant on its continued use.

Availability of car parking

4.97 Access to and availability of car parking for residents, students, workers and visitors was assessed as part of the surveys undertaken to support the ECS. These three groups were asked *How do you rate car parking availability*?

Residents	Other Users	Visitors
15% Very Poor	17% Very Poor	1% Very Poor
22% Poor	18% Poor	4% Poor
24% Average	27% Average	18% Average
16% Good	23% Good	40% Good
3% Very Good	4% Very Good	5% Very Good
20% N/A	11% N/A	32% N/A

- 4.98 The residents were also asked Q10. If household has one or more cars, how satisfied were they with provision of resident's car parking? Responses indicated: 21% very satisfied, 44% quite satisfied, 20% dissatisfied, 9% Very dissatisfied. This indicates a higher level of satisfaction than above.
- 4.99 These taken together indicate that there is an issue for residents and other users regarding access to car parking but not a significant issue for visitors; this perhaps reflects their use of the Salt's Mill car park. Therefore any drop in physical availability or an increase in demand (e.g. more cars per household) is likely to result in increased dissatisfaction. Given that the provision of additional space is unlikely to be available given the physical constraints of the Site it is likely that any increase in demand is going to increase dissatisfaction.
- 4.100 In terms of residential demand, the survey indicated that 33% of those who responded had no car, 54% had 1 car and 14% had two cars. There are c.766 households on the Site (excluding Riverside Court north of the canal which has allocated parking), by applying the percentage breakdown of cars per household derived from the survey this would equate to c.630 cars. As defined above, the theoretical on-road parking available amounts to c.900 spaces. This would indicate that there is scope to accommodate current car parking requirements, but perhaps not in a location adjacent to a person's property.
- 4.101 The issue with access to car parking is exacerbated by additional use potentially related to visitor, student and employee parking which can impact on residents' access to parking. In the recent survey this issue was highlighted on a number of occasions by residents as a key issue that affected their quality of life (see Monitoring Measure A).
- 4.102 Any reduction in car parking availability or a significant increase in demand (assuming that additional provision cannot be supplied due to physical constraints) could begin to have an adverse impact on the desirability of

Saltaire as a place to live, work, study and visit. Consequently, this is a *moderate threat* to the quality of life of residents and the use of the Site (*Important Value*) and is therefore considered to a significant concern that merits monitoring.

Indicators

4.103 As discussed above the issues associated with the impact of car parking on the character and fabric of the Site as discussed in the *capacity of the Site to* accommodate changes to its character section and addressed by Indicator 11. The issues relating to availability of car parking are addressed by Indicator 4 below.

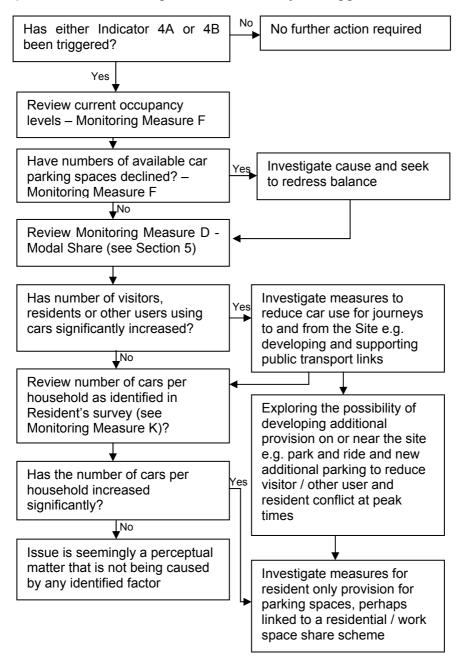
Indicator 4: Availability of car parking

- 4.104 As discussed above, parking provision is a key issue for residents, students and workers. It is therefore important to monitor the relative levels of satisfaction with availability of car parking. Indicators 4A and 4B measure how residents, students and workers rate the availability of parking. Indicators 4A and B would be measured through the 3-yearly questionnaire surveys.
- 4.105 Alongside this the actual levels of car parking utilisation would be monitored on a 3-yearly basis to provide empirical data to support future action. This monitoring is detailed under Monitoring Measure F.

Indicator	Baseline	Trend	Threshold
4A: Level of resident satisfaction with car parking availability	Data established through 2005 questionnaire survey: 15% Very Poor 22% Poor 24% Average		37% percent of residents rating car parking availability as poor or very poor. Although these are high figures, they do represent the current situation. Given that the historic nature of the site constrains the development of new car parking the threshold has been
	16% Good 3% Very Good 20% N/A		established at current levels to help identify any decline in the situation rather than establishing a target for reducing dissatisfaction.
4B: Level of other user satisfaction with car parking	Data established through 2005 questionnaire survey		35% percent of other users rating car parking availability as poor or very poor. See 4A for reasoning behind
availability	17% Very Poor 18% Poor 27% Average 23% Good 4% Very Good 11% N/A		establishment of threshold

Review and Options

4.106 The key indicators for monitoring are 4A and 4B. The following outlines the process for reviewing these should they be triggered.



What is the capacity of the Site to accommodate different uses?

- 4.107 The majority of the land area of the Site is currently used for residential purposes. The main area of residential use lies to the south west of the Mill complex, south of the Keighley/Bradford railway line. There are approximately 758 individual dwelling houses and a number of residential units to the north of the railway line at Riverside Court. There is one detached property on Albert Road. The majority of units are through terrace, with larger properties on Victoria Road, Albert Road and George Street. Following a site visit (made on 28 June 2005) dwelling occupancy appears relatively high, with only a small number of estate agency boards visible throughout the village.
- 4.108 There are a number of other uses on the Site including commercial, retail, tourism and educational establishments. Commercial uses are present in two distinct forms. First, there are a number of retail and business uses along Victoria Road, Gordon Terrace, Saltaire Road and at individual locations within the Site. Secondly, there are a number of commercial establishments within Salt's Mill.
- 4.109 Commercial uses can be separated, according to the provisions of the Use Classes Order (UCO) into the following Classes:
 - A1 This includes shops for retail of goods to the public, including shops, post offices, travel agencies, funeral directors and undertakers, domestic hire shops, dry cleaners, sandwich bars (for sale of cold food consumed off the premises) and internet cafes;
 - A2 Financial and professional services, including banks, building societies, bureaux de change, professional services (other than health or medical services), estate agents and employment agencies and betting shops;
 - A3 Restaurants and Cafes for the sale of food for consumption on the premises.
 - A4 Drinking establishments including public houses, wine bars and any other drinking establishment;
 - A5 Hot food takeaway for the sale of hot food for consumption off the premises;
 - B1 Business. Uses include offices (other than in A2), research and development (including laboratories and studios) and light industry;
 - B2 General industrial other than uses in B1; and

- B8 Storage and distribution, including wholesale warehouses, distribution centres and repositories;
- 4.110 A number of properties are considered to be for institutional uses. There are two identified use classes for institutions. These are:
 - D1 Non-residential institutions. These are identified as medical and health services, including clinics and health centres, crèches, day nursery and day centres and consulting rooms (not attached to a dwelling house). Also included in this class are museums, public libraries, art galleries, exhibition halls, non-residential education and training centres, places of worship, religious instruction and church halls.
 - D2 Assembly and Leisure included in this class are cinemas, dance and concert halls, sports halls, swimming baths, skating rinks, gymnasiums, bingo halls and casinos and other indoor and outdoor sports and leisure uses (except involving motorised vehicles or firearms).
- 4.111 Institutional uses predominately apply the Shipley College buildings. The commercial / institutional uses within the World Heritage Site boundary have been identified as part of this study (see Appendix C) in summary they breakdown as follows (based on data gathered in June 2005 updated November 2005):

Use Class	Number of premises / units	Vacant	Charity Shops
A1	41	2	1
A2	10	0	N/A
A3	8	0	N/A
A5	3	2	N/A
Class A sub- totals	62	4	1
B1	2	0	N/A
Class B sub- totals	2	0	n/a
D1	9	0	N/A
D2	1	0	N/A
Class D sub- totals	10		n/a
Sui Generis – Laundrette	1	0	N/A
Totals	75	4	1

- 4.112 Tables 1 and 2 in Appendix C provide a breakdown of the location of these uses.
- 4.113 This mix of residential, commercial, retail, institutional and professional uses is key to the continued vibrancy and economic vitality of the Site. The mix provides for a high quality of life for residents, ensures that the principal buildings are well maintained and that their fabric is conserved and maintains

the Site's strong historic character. A significant alteration to the mix of uses on the Site could place considerable pressures on its long-term conservation and viability.

Potential Impacts and Capacity Issues

- 4.114 The mix of uses on the Site presents a number of issues including traffic pressures (see *capacity of Site to accommodate traffic*), conservation issues arising from the need to use these historic buildings for modern purposes (see *capacity of site to accommodate changes to its fabric and character*), parking (see *capacity of site to accommodate car parking*), quality of life and the need to cater for significant visitor numbers (see *capacity of site to accommodate visitors*).
- 4.115 The successful balancing of the problems that arise from maintaining this mix of uses with the benefits that the active use of the Site delivers for its conservation and economic vitality is critical to the future management of the Site.

Fabric and Character

4.116 The use of buildings has a direct link to the conservation of the fabric. The most appropriate use of a building, from a fabric point of view, is the purpose it was originally designed for or one that it was historically converted for and which has dominated its pattern of use over its lifetime. However, with appropriate design and end-use, there is sometimes limited scope to change the use of historic buildings. The residential properties on the Site should, ideally, be retain their residential function as this will help ensure the conservation of their fabric and physical character as well as maintaining an appropriate sense of place for the area. There is some scope for limited change of use within the residential areas but any such changes would need to be carefully handled to ensure that no adverse impacts on the quality of the buildings and the character of the area occur. Former retail premises in these residential areas (e.g. former corner shops that have been converted) offer greater but still limited potential for conversion to new commercial uses e.g. retail or offices, as some uses would in fact take them back towards their original or historical functions. Any such conversion would need to provide a use that was appropriate to the residential area, in terms of maintaining the quality of life of residents and would need to be undertaken in a manner that conserved the fabric and character of the particular property.

- 4.117 Buildings originally designed or converted early in their history as retail premises e.g. those along Victoria Road and Bingley Road, would benefit from being maintained in retail uses as this respects their original / historical design and use, maintains a vibrant character for the Site and continues the supply of facilities for local residents (see below).
- 4.118 It is also important to examine the nature of the frontages in terms of whether they are "Active" or "Static". Active frontages tend to be associated with retail premises and have vibrant changing characters often associated with significant movements of people into and out of the premises. Static frontages are often associated with professional service providers. These frontages are often restrained in character and lack the vibrancy and people movements associated with more active frontages. It is important when managing the character of an area and the uses it contains to achieve a balance between active and static frontages and ensure that in vibrant retail dominated areas that static frontages do not dominate.
- 4.119 This is a particular issue for Victoria Road and Bingley Road (but only for premises inside the Site). The number of Active and Static frontages has been assessed as part of the Use Class survey undertaken for the ECS in June 2005 (see Appendix C). The following provides a breakdown of the figures for Victoria Road and Bingley Road.

	Active	Static ¹	Total
Victoria Road	10 ²	3	13
Bingley Road	18	4	22

¹ Static frontage's include estate agents

- 4.120 The larger industrial and civic buildings pose different issues. The original industrial use of some of the mill buildings continues in an altered form, through the presence of PACE technology, this also provides jobs for the wider area. Other mill buildings have had to be adapted to modern uses including commercial (Salt's Mill) and residential. In terms of the civic buildings these are now used predominately for institutional / educational purposes by Shipley College. These new uses have been accommodated within the buildings whilst retaining much of their original fabric and character. The primary issue for these buildings is about maintaining appropriate uses to ensure that vacancy, which could lead to dereliction, does not occur.
- 4.121 Future changes in use of these buildings e.g. the closure of the PACE establishment and its conversion to another use, could pose significant issues for the fabric and character of these buildings and ultimately the Site. The re-

² Includes one vacant premises that was formerly had an active frontage

use of historic buildings for modern uses is widely accepted as an appropriate way to ensure that buildings are conserved and retained for the long-term. Re-uses associated with mill buildings at Saltaire and other sites have included, retail and commercial, civic, office and residential and it is possible that any one or a mix of these uses may be appropriate for mill buildings should current uses cease in the future. The capacity of the fabric and character of the Site to accommodate such uses would largely depend on the scale of the proposed uses and the details of their design and would have to be assessed on a case-by-case basis (see below for further discussion).

Vitality and viability

- 4.122 The mix of use of buildings on the Site is also important to its continued economic viability, its vitality as a place to work, live and visit and the quality of life of residents.
- 4.123 An important part of this mix is the Site's retail offer. The majority of retail premises on the Site are located on Gordon Terrace (Bingley Road). These serve the local area including Saltaire and beyond and provide a diverse range of local shopping amenities and are supported by a number of other premises just outside the boundary of the Site. There are a number of other premises on Victoria Road. Two or three of these premises are focussed on the visitor market whilst the rest predominately serve local residents, workers and students, with some support from the visitor market.
- 4.124 This considerable local supply of retail premises (both within and immediately around the Site) means that local residents are well served in this regard. In the recent survey (see Appendix E) 93% of respondents indicated that local amenities (inc. Shops) was part of the reason they chose to live in Saltaire and 91% of respondents used local shops at least once a week. In addition, 45% of respondents use Salt's mill once a month and 34% visit a local restaurant / cafe once a month. This indicates that the current retail and food / beverage offer is both well used and valued by local residents. Students and workers (see Appendix G) used the shops less, with only 60% using them once a week but this probably reflects the geographical location of these users around Victoria Road with its smaller retail offer.
- 4.125 Overall, the current retail offer seems to be meeting the needs of regular users and residents and the presence of visitors does not seem to be degrading the amenity value of these premises for residents. Given the residential, work and

- educational population within the Site there is potentially economic capacity for further retail premises focussed on regular user and residential markets.
- 4.126 Should this retail offer decrease either through an increase in premises focussed on visitor markets or through changes of use to non-retail related activities (e.g. professional services rather than retail / catering outlets) then it is possible that the amenity value of areas of the Site (mainly Victoria Road) would decease for residents and regular users.
- 4.127 In addition, any decrease in the retail offer could result in locations with "active" shop-fronts becoming less-animated due to an increase in "static" frontage (see above). This could result in an overall decline in the vibrancy of the street scene and may have an adverse effect on the character of key streets e.g. Gordon Terrace which has a very active and vibrant retail character. This effect has already begun to occur along Victoria Road and further increases in "static" frontages could undermine the character of this street.
- 4.128 The amenity value of the retail sector for residents could also be degraded if the number of charity shops within Saltaire increase. This type of retail premises is linked to declining retail performance and their presence is an indicator of lower rental prices and declining spend. An increase in these types of uses would therefore indicate a declining retail sector at the Site.
- 4.129 The employment and educational uses on the Site are also important to its current vitality and viability. As discussed above, these large-scale employers ensure that major buildings are retained in active use and that jobs are provided for the local and wider areas. In addition, the presence of these large employers and educational establishments generate a certain level of trade for local businesses and give the Site a vibrant and active feel throughout the day and especially in term time.
- 4.130 A significant change in the mix of uses e.g. the conversion of current large commercial premises and retail establishments to residential use could have a significant impact on the vitality of the WHS. It would change its historical patterns of use and potentially reduce visitors to the Site, leading perhaps to an economic downturn. In addition, the cessation of major employment opportunities on the Site could impact on the wider economy and local communities. Any proposals for such changes would therefore need to be carefully assessed to ensure that they did not lead to the capacity of the Site being exceeded or the degradation of the Site's Outstanding Universal Value.

Assessing change of use applications

- 4.131 It is clear from the above that three primary areas of concern emerge in relation to possible changes of use for buildings on the Site, these are:
 - changes of use for residential properties;
 - changes of use for smaller premises and properties; and
 - changes in use of larger premises.
- 4.132 With regard to residential properties the factors to consider include:
 - appropriateness of the proposed physical changes in relation to the Site's character and fabric (see Indicators 5B, 5C, 9, 10 &11);
 - impact on residents (see Monitoring Measure A);
 - impact on parking and traffic capacity (see Indicators 2, 3 & 4); and
 - impact on retail and service offer for local residents and regular users (see Indicators 5A & 6A, 6B).
- 4.133 With regard to smaller premises and properties the factors to consider when considering proposed changes in use include:
 - continuation of a strong retail and service offer for local residents and regular users (see Indicators 5A & 6);
 - continuation of historical uses of buildings (see indicators 7, 9 &10);
 - impact on the local street scene and sense of place (see Indicators 5, 10 and 11); and
 - appropriateness of the proposed physical changes in relation to the Site's Character and Fabric (see Indicators 5, 7, 9, 10 & 11).
- 4.134 The situation with proposed changes in use for larger premises is more complex and could pose significant issues for the capacity of the Site to accommodate these changes, factors to consider include:
 - appropriateness of the proposed physical changes in terms of the fabric and character of the Site; (see Indicators 8 &11)
 - impact of proposals on car parking within the site; (see Indicator 4)

- impact of proposals on traffic movements and volumes; (see Indicators 2 & 3)
- economic impact of proposals on local businesses (see Indicators 5 & 6);
- impact of the proposals of the quality of life of residents (see Monitoring Measure A); and
- impact of proposals on local amenities (see Indicator 5 and Monitoring Measure A).
- 4.135 Many of these issues can be assessed through reference to the indicators and monitoring measures detailed in the ECS but all would require detailed consideration and applicants would need to provide an assessment of the potential impacts to support any applications.

Indicators

- 4.136 The site has the physical capacity to accommodate a range of different uses. Its larger buildings could be, and have been, converted to accommodate new uses that differ from the function they were designed for. This pattern could continue as long as the factors identified above were addressed.
- 4.137 For example, should proposals to convert one of the large buildings to residential or office use come forward this may be acceptable if the proposals respected the fabric and character of the Site and did not exceed its capacity to accommodate traffic and parking (see above). This situation would alter the economic role of the Site in the wider context but would not necessarily degrade its Outstanding Universal Value. The capacity indicators set out below do not therefore seek to determine what uses are, or are not, appropriate for the larger buildings on the Site.
- 4.138 With regard to residential properties it is clear that the aim of future management should be to retain the Site's dominant residential use. However, there is limited capacity to accommodate other uses in residential properties where such uses would not cause capacity issues or harm the Key Values of the Site. Such uses may include bed and breakfast, museum or small office space, but each instance would have to be assessed on its individual merits. The capacity indicators below do not therefore seek to establish a nominal and potentially arbitrary threshold for other uses in residential areas. It will be important however to ensure however that residential uses remain the dominant use in existing residential areas.

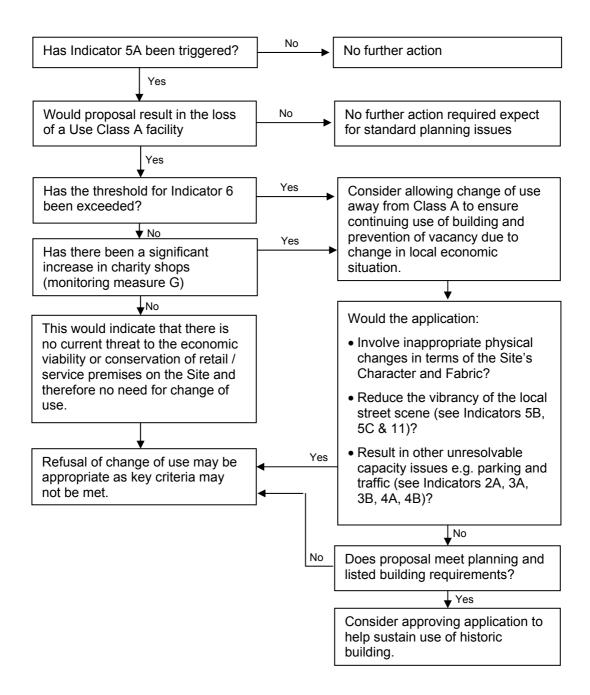
- 4.139 There are however capacity issues relating to the use of smaller commercial buildings on the Site (both those in current commercial use and those originally designed or converted historically for commercial use but no longer in such a such). In this regard, it will be important to ensure that the retail / service offer continues to serve the local population (both residential and other regular users) and visitors, and that the uses are appropriate to the character of the Site (see factors for consideration above). Indicators for the retail / service mix are set out below in relation to amenity value and the vibrancy of the street scene. Indicators 10 and 11 also monitor this in relation to the Character and Fabric of the Site.
- 4.140 Finally, there is an issue relating to the economic performance of the retail / service sector on the Site. This is addressed by both the Vacancy indicator and the presence of otherwise of charity shops (see Indicator 6 and Monitoring Measure G)
 - Indicator 5: Provision of local retail and service facilities and vibrancy of street scene
- 4.141 Currently there are 62 Class A1, A2, A3 and A5 premises on the Site. These provide an excellent and valued amenity for residents and regular users of the Site. A significant reduction in the number of Class A premises would reduce this amenity value. In addition, a substantial re-focussing of these towards the visitor market could also pose a threat to the amenity value of the premises for the local population.
- 4.142 At this stage it is not possible to set an absolute numerical threshold for the number of Class A premises on the Site at which a reduction would impact on their amenity value. The threshold for Indicator 5A should therefore be treated as provisional and should be reviewed if it is triggered (see review and options below). This review would include analysis of vacancy (Indicator 6) and the views of residents and other regular users (see questionnaire surveys Appendix E and G).
- 4.143 The threshold for Indicator 5A has been established just below the current levels. This reflects the fact that current provision is very good and a slight reduction is unlikely to significantly affect the amenity value of these premises to residents and regular users. This indicator would be reviewed whenever a change of use application is received and on a yearly basis as part of the Use Class Survey (see Section 6).

4.144 Indicators 5B and 5C address issues with active and static frontages on Bingley Road and Victoria Road. This issue directly relates to the mix of uses on the Site and also affects the character of the Site (see Indicator 11). The two roads are treated separately within the indicators as they have different characters and mixes of uses. The threshold has been established on a percentage basis. For Victoria Road this reflects the current situation because static frontages are beginning become increasingly dominant in this area which in turn is altering the character of the street and its mix of uses. For Bingley Road the percentage has been established just above the current levels as there is scope to slightly increase the static frontages without undermining the very active character of the area and its diverse mix of uses. These will need to be reviewed in the future.

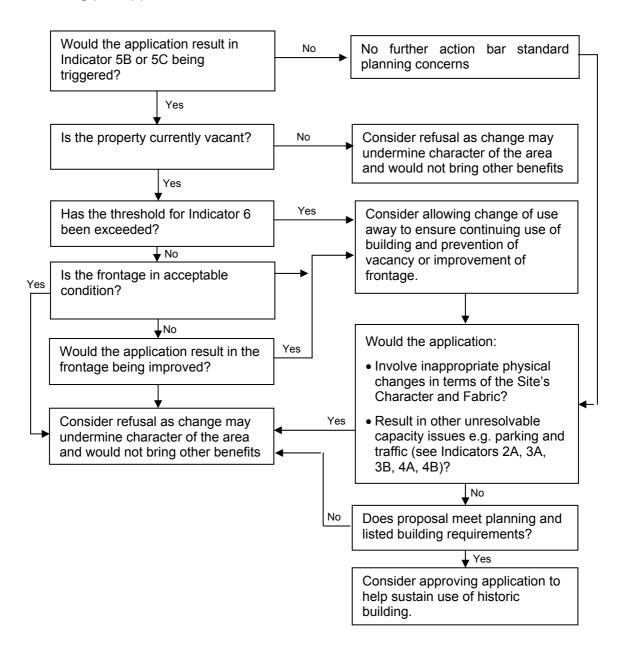
Indicator	Baseline	Trend	Threshold
5A: Provision of local retail and service	Use Class analysis data provided in Section 4 and	62 Class A premises in 2005	60 Class A uses in buildings originally designed or historically converted for commercial use
facilities	Appendix C of the ECS. 2005 Use class mix A1 41 A2 10 A3 8 A5 3 B1 2 D1 9	figures to be established for 2006	(see note on reason for threshold above)
	D2 1 Sui Generis (Laundrette) 1		
5B: Active frontages on Victoria Road	Data gathered as part of yearly Use Class Survey 2005 10 active 3 static		77% (10) active premises 23% (3)static premises Threshold established at current levels as more away from active premises could undermine the character of the street.
5C: Active frontages on Bingley Road	Data gathered as part of yearly Use Class Survey 2005 18 active 4 static		73% (16) active premises 27% (6) static premises Threshold established at slightly below current levels as the presence of a limited number of static premises is unlikely to undermine the character of this busy retail street. However, if there is a decline in retail premises on the road outside of the Site then this may need to be reviewed.

Review and Options

4.145 The following (see overleaf) outlines the approach to reviewing Indicator 5A and possible options for addressing proposed changes.



4.146 Indicators 5B and 5C would not be triggered without a prior planning application for change of use. The following approach to reviewing the threshold should therefore be undertaken at the time of the application or during pre-application discussions.



Indicator 6: Vacancy of non-residential premises on the Site

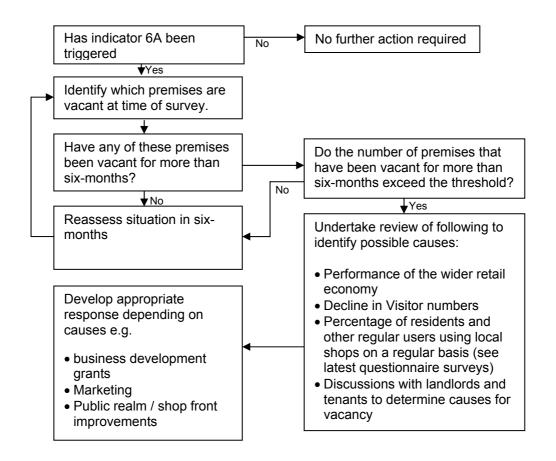
4.147 As discussed above the commercial and institutional uses on the Site play an important role in maintaining the Site's economic viability, its physical conservation and the provision of services for local residents and regular users. It is important therefore to monitor the performance of these sectors to gauge whether they are declining and if so what may be causing the decline.

- 4.148 Key issues in this regard include vacancy and the presence of charity shops. Indicators 6A and 6B addresses the issue of vacancy in commercial and institutional premises on the Site. The issue of charity shops is addressed in Section 5, under Monitoring Measure G.
- 4.149 Vacancy is a particular issue for the Site given the historic nature of the premises. Vacant properties can suffer decay and damage very easily due to a lack of active maintenance and everyday use. This can lead to problems with the Site's historic fabric and character. In addition, vacant properties can also reflect issues facing the commercial and institutional sectors, including rising rents (which may actually show a healthy economic outlook) or declining spend and viability which would indicate a worsening economic situation.
- 4.150 Indicator 6A has been developed to provide a snapshot of vacancy levels on a yearly basis and the data would be gathered as part of the yearly use class survey (see Section 6). This would consist of a visual inspection of premises within the Site to identify current class-use, vacancy and whether a charity shop has been established since the last survey. This data would be stored within the Fabric Survey Database.
- 4.151 The threshold for this indicator has been developed with reference to the *Performance Indicators for Retail* (PIR) provided by CBMDC for the Shipley area. For the Shipley area the current situation is as follows:
 - Shipley Vacant shops 6.0% (Target less than<5%)
- 4.152 The threshold for Saltaire has been established below that for Shipley due to the conservation issues related arising from vacancy in historic buildings.
- 4.153 Indicator 6B has been established to address potential issues associated with vacancies at any of the major industrial or civic buildings on the Site. These buildings are occupied by Pace, Shipley College, the NHS, Church and Salt's Mill. They are important in terms of land use and employment and are economically very significant to the commercial viability of the Site and the ongoing preservation of the fabric of the buildings. The closure of any of these operations could have serious economic consequences as well as potentially severe indirect effects on demand for services such as transport. Given the significance of these organisations to the use, fabric and character of the Site, it is important to monitor potential vacancy. In this context a reactionary indicator (6B) that triggers action should any of the principal buildings become vacant has been established.

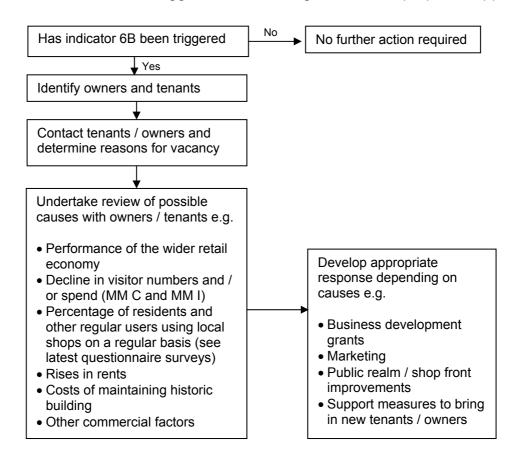
Indicator	Baseline	Trend	Threshold
6A: Vacant Commercial and Retail premises	Use Class analysis data provided in Appendix C of the ECS.	June 2005: 8%	4% vacancy (number of vacant premises divided by total number of premises)
	2005 vacancy levels 4 premises (June 2005) Total premises = 50 units		This has been established below the wider Shipley threshold to reflect the particular issues facing the conservation of historic buildings
6B: Vacant large-scale buildings	Current situation – No vacant buildings	June 2005: Zero	Any major building becoming vacant This threshold will ensure that action is taken should any major building become vacant or early indications that it may become vacant are received.

Review and Options

4.154 The following outlines the approach should Indicator 6A be triggered.



4.155 Should Indicator 6B be triggered the following outlines the proposed approach:



What is the capacity of the Site to accommodate changes to its fabric?

- 4.156 As noted in Section 3 the fabric of the Site and the character of the Site are Critical Values in terms of its Outstanding Universal Value. They are closely interrelated as the fabric of the Site is the foundation stone for its character. The use of place, its surroundings and general sensory ambience also play a role in establishing character, but in areas with a strongly defined historic environment (e.g. the Saltaire WHS) the fabric underpins and largely defines the character of the place.
- 4.157 The historic fabric of the Site is highly sensitive to change and has a very limited capacity to accommodate physical changes. It is a unique and authentic record of the Site's development and loss has the potential to degrade the Outstanding Universal Value of the Site.
- 4.158 The two key types of changes that could occur to the fabric are alteration (both small and large-scale) and degradation through lack of maintenance. These types of possible change are explored below with reference to the residential

terraced properties, smaller commercial premises and the larger industrial and civic buildings. These types of buildings have been examined separately as they have different issues due to the differences in scale, complexity and use.

Potential Impacts and Capacity Issues

Maintenance and condition of the residential terraced properties

- 4.159 The majority of the fabric of the Site consists of residential properties. Therefore maintaining and, where possible, improving the condition of these properties is critical for conservation of the World Heritage Site.
- 4.160 The age of the properties requires routine maintenance to keep them in good condition and free from substantial defects. The level and nature of maintenance that has been undertaken in the past varies from property to property and this has contributed to the varying conditions of the houses and associated features. However, the bulk of the properties are in relatively good condition (according to the 2001 CBMDC survey to be verified by the Fabric Survey in 2006).
- 4.161 A lack of maintenance will inevitably have an adverse effect on a property's fabric. Many different types of problems can arise from this situation including loss or damage to architectural detail, decline in the condition of roofs, issues with stability of chimneys, and water damage caused by guttering and drainage issues. Routine maintenance can help solve many of these issues and guidance on maintenance can be obtained from CBMDC and other organisations such as The Society for the Protection of Ancient Buildings (SPAB see www.spab.org.uk). However, care is required with historic properties as insensitive work can have adverse effects on a property. Examples of this include inappropriate re-pointing and strap pointing, and rendering of stone properties all of which can harm the fabric. Further guidance for residents and landlords could help reduce instances of inappropriate works.
- 4.162 In terms of the residential properties, issues relating to chimneys and roofs are becoming increasingly apparent and these were noted as part of the rapid condition survey undertaken for the ECS. These developing issues reflect the age of the properties and the fact that the vast majority have original roofs. The maintenance issues associated with the properties will be assessed in more detail as part of the 2006 Fabric Survey.

4.163 Another notable maintenance and condition issue relates to the outbuildings associated with the terraced houses. These are an important part of the Site's fabric and character and form an integral aspect of its original design. Currently, the condition of these structures is not assessed by the Listed Building Survey (CBMDC 2001) but the Fabric Survey (see Section 6) would include an assessment of these structures. Observations made during the surveys for the ECS indicated that many of the outbuildings have seemingly become redundant. Some are in very poor condition, others have been converted (not always appropriately) into larger structures whilst others have been removed to enlarge the rear yard or provide space for an extension to the property. This decline in condition is affecting both the physical fabric and the character of the Site. The removal and degradation of these structures could have a long-term impact on the significance and ultimately Outstanding Universal Value of the Site.

Maintenance and condition of small commercial and retail properties

4.164 In terms of retail properties there are issues with the maintenance and condition of some shop frontages and many have been significantly altered (see below for further discussion of the latter point). This lack of maintenance is causing issues for the conservation of surviving elements of the historic fabric on these properties. In addition, there are issues with the current maintenance of the upper floors of these properties often due to vacancy and under-use. As well as affecting the character of the area, the fabric of buildings in poor condition or suffering a lack of maintenance could deteriorate in the upper floors leading to significant conservation issues. This situation is common to many such properties and is widely recognised. Over the last five to ten years the Living over the Shop (LOTS) scheme has been developed on a nationwide basis to help tackle this issue and is now widely used to encourage the re-use and occupation of empty spaces above shops.

Conclusions

4.165 The lack of maintenance and deterioration in the condition of both of these types of properties poses a *Major Threat* to the fabric of the site as in the long-term this could result in the severe degradation of the Site's fabric (a critical value); this is therefore a *Primary Concern*. As discussed in Capacity of the Site's Character to accommodate change, a decline in the condition of these buildings also poses a Major Threat to the character of the Site. It is also a *Moderate Threat* to the Quality of Life and Other Uses (Important Values) on the Site as a decline in the condition of the buildings could reduce the area's

desirability as a place to live and do business, which in the long-term could affect the conservation of the Site.

Alterations to the residential terraced properties

- 4.166 Residing in older properties leads to issues itself. The desire to improve the property with modern devices or additions to enhance the quality of life of the residents can have an effect on the fabric. Additions such as extensions, conservatories or lean-to's can all alter the fabric of a building as well as altering the character of an area. These types of alterations have occurred on the Site in the past. The current planning and listed building consent regime has now addressed these issues and the issue is now very much considered to be a historical one.
- 4.167 The past insertion of service pipes, extractor fans and aerials was relatively commonplace across the Site and in some instances these have damaged fabric as well as changing the character of the facades. As with larger scale alterations these are generally historical in nature and robust planning and listed building consent regimes are now in place to address these matters. Other issues include the loss of architectural features and inappropriate additions (e.g. certain types of new windows) and poor maintenance (see above) all of which would potentially affect the character and fabric. Alterations are a particular issue in the residential areas where small differences between buildings in terms of exterior maintenance, stone cleaning and surviving detail can together provide a disjointed visual character to what was a harmonious architectural creation with a single distinctive style.
- 4.168 Overall, these types of small-scale incremental changes can, over the long-term, have a significant impact on the fabric and character of the Site and consequently pose a threat to its conservation and values.
- 4.169 Many of the issues associated with alterations to a property reflect the needs of the residents to adapt the property to meet modern living standards. It is therefore important, given the fact that the long-term maintenance of these properties is the responsibility of their owners, to encourage people to stay in their properties and maintain them. Consequently, a balance needs to be struck between the needs of residents, their quality of life and the conservation requirements.
- 4.170 As discussed above (*capacity of the Site to accommodate changes in use*) there is limited capacity for the residential properties to accommodate new

uses. Such changes of use however have the potential to alter the fabric and would consequently need to be undertaken in a sensitive manner that reflected current planning policy and guidance.

Alterations to small commercial and retail properties

- 4.171 Historical alterations to retail properties associated with their use as such include modern shop fronts, signs and new fascias. These past alterations have in some cases resulted in the removal of historic fabric, in other instances it is likely that this fabric has been masked by new additions and that although some damage may have occurred during the alterations it is possible that much of the fabric survives.
- 4.172 These historical alterations are also posing significant issues for the character of the Site. The quality of building frontages has been identified as a particular concern as all frontages, whether residential, commercial or retail, can be affected by a lack of maintenance and inappropriate alterations and these frontages make a significant contribution to the Site's character. This issue is particularly noticeable with shop frontages e.g. along Bingley Road, Saltaire Road and Victoria Road where commercial pressures have led to the development of a range of different formats and styles, some of which are at odds with the historic character of these streets (see Indicators 10 & 11).
- 4.173 As with residential properties there is a need to balance the conservation of the fabric with maintaining the economic viability of the retail and commercial premises. It is clear from national studies however that the retention of an area's historic character can contribute to the maintenance and enhancement of the retail sector. This issue is also now being addressed through the implementation of the current planning and listed building consent regime.

Conclusions

4.174 Given the planning controls that affect the Site it is unlikely that major alterations to these forms of properties would be permitted if they would harm the fabric or character of the Site. However, alterations do still occur (e.g. demolition of outbuildings) outside of the planning system that would damage the Site's fabric. These forms of alterations pose a major threat to the fabric of the Site and consequently require monitoring. Small-scale alterations such as new services, changes to doors etc are also a particular issue. The long-term incremental impact of these poses a *major threat* to the fabric and character of the Site; this is therefore a *primary concern* that requires monitoring. Given the

sensitivity of the Site's fabric and its importance there is little capacity for alterations to these properties.

Maintenance and condition of Industrial and Civic Buildings

- 4.175 These buildings are a critical aspect of the Site's Outstanding Universal Value. They form a fundamental element of its built fabric and reflect the industrial and paternalistic drivers behind the Site's establishment. The original use of the majority of these buildings has now ceased and new uses have been developed for these buildings. These uses include conversion into residential accommodation, use as commercial / industrial premises, educational uses and retail uses including an art gallery and cafés / restaurants. Some of the large buildings are still functioning with broadly original uses e.g. the Institute and the Church.
- 4.176 The uniqueness, scale and complexity of many of these buildings can mean that any impacts on fabric are potentially more significant than those associated with individual terraced properties. The fact that these buildings are often owned or managed by single organisations assists with the maintenance of these buildings, in contrast to the irregularities of maintenance at the terraced houses. However, the cost of maintenance of these buildings can be an issue for many of the occupiers e.g. the Church and Victoria Hall, particularly if current uses require modifications or additions to the original fabric. In the long-term funding for maintenance and conservation works may become a significant issue for the Site.
- 4.177 A decline in the maintenance and condition of these properties that led to issues with their long term conservation would be a Major Threat to the fabric of the Site (a critical value) this is therefore a primary concern. Such a decline would also pose a Moderate Threat to the Character, Quality of Life of Residents and Use of the Site.

Alterations to the Civic and Industrial Buildings

4.178 Perhaps the most significant issue facing these buildings at present is the need to modify them to accommodate current uses which in turn help maintain the building (see *capacity of the Site to accommodate different uses*). Modifications to enable modern uses and to meet modern safety, access and construction regulations can all impact on the fabric of these structures. A number of significant alterations to these buildings have already occurred to facilitate their current uses. These alterations have all received the necessary

consents and have not undermined the significance of the Site and its Outstanding Universal Value.

- 4.179 The need to adapt a building to meet modern needs which could affect its fabric should therefore be balanced with finding appropriate viable uses for the buildings. Without appropriate uses the buildings risk becoming vacant (see Indicators 6A & 6B) and consequently could suffer from a lack of maintenance and eventually dereliction. This risk is increased by the fact that some organisations occupying these buildings could decide to relocate or sell the buildings due to either external economic factors. This could leave the buildings at risk of being adapted to less suitable alternative uses or vacancy.
- 4.180 Given the planning controls that exist on the Site, due to the listed status of its buildings and its status as a Conservation Area and World Heritage Site, major alterations to accommodate new uses in these buildings would be controlled and alterations that would have a significant impact on these buildings would not be permitted, within this context such alterations should pose no threat to the Site's fabric. Smaller scale alterations do however pose a threat to the fabric as these may occur outside of the Listed Building Consent procedures and consequently in the long-term the incremental impact of such changes could pose a moderate threat to the fabric of these buildings.
- 4.181 Overall there is some capacity to accommodate alterations for these buildings where this can help secure their long-term use (see *capacity of the Site to accommodate uses*) as long as these are undertaken in a sensitive manner that respects the Key Values of the Site.

Indicators

- 4.182 The following indicators have been established to address the capacity issues identified above.
 - Indicator 7: condition of residential buildings and small commercial and retail properties
 - Indicator 8: condition of industrial / civic buildings
 - Indicator 9: alterations to residential buildings and small commercial and retail properties
 - Indicator 10: appropriateness of shop frontages

- 4.183 The thresholds for the above indicators would be established following the 2006 Fabric survey, the following therefore provides guidance on the approach to establishing thresholds for consideration once the fabric survey has been completed.
- 4.184 In terms of alterations to industrial / civic buildings an indicator has not been developed. These complex and large buildings have particular conservation and re-use issues that differ significantly from building-to-building. Consequently, a general indicator that measures the impact of alterations on these properties as a group would not provide data that would particularly help the management of the Site. Rather it is proposed, through the Fabric Survey to identify the nature of alterations that have occurred and then work with the owners and managers to address any resultant issues. This process would be supported by quinquennial surveys and other information supplied by property owners.
- 4.185 This would allow the impact of the alterations to be considered in the context of the need to retain the building in active, viable and safe use. It would also allow future proposed alterations to be discussed early in the planning process to ensure that they do not have a significant impact on the fabric of the building.
- 4.186 Where significant alterations have occurred without relevant consents then enforcement actions may be appropriate to ensure that inappropriate alterations are rectified.
 - Indicator 7: condition of residential buildings and small commercial and retail properties
- 4.187 The residential properties form the bulk of the Site's built fabric, it is therefore important to ensure that these properties are conserved in a manner that respects both modern needs and conservation requirements. The other smaller premises, e.g. shops, are also an important aspect of the Site's fabric.
- 4.188 All of the properties are Grade II listed buildings; therefore in addition to the following indicators, controls on alterations which affect their special character or interest can be achieved through the Listed Building Consent regime and Planning Application process. The following indicators can help measure the long-term effects of planning regimes on the Site and the effects of other socio-economic changes that could affect the fabric. The indicator includes

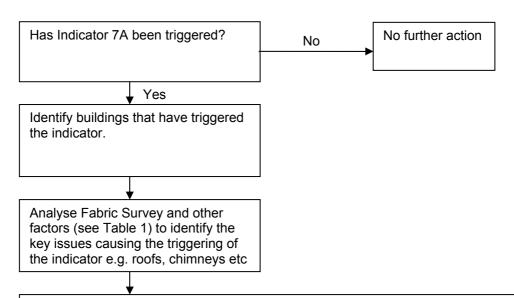
monitoring of the condition of the outbuildings, which have been identified as an area of particular concern (see above).

- 4.189 Indicator 7A relates to the overall condition of a property, a factor considered to be key in determining its relative state of conservation and maintenance. This overall level of condition would be established for each property through the 6 yearly Fabric Survey. This assessment will be based on a visual analysis of the exterior of each property. Appendix H outlines the factors that would be considered in relation to this assessment. These would include, amongst other aspects, the condition of the roof, windows, architectural detail, facades and boundary walls. Through an analysis of these factors an overall condition score ranked from Very Good through to Critical would be assigned to the property.
- 4.190 Given the importance of the buildings to the OUV of the Site it is vital that they do not deteriorate in terms of their condition and maintenance. Therefore a threshold of no buildings in Poor or Critical condition has been established. The target is therefore to ensure that all buildings on the Site are at least in Acceptable condition. Alongside this the percentage breakdown of buildings in Very Good, Good, Acceptable, Poor and Critical condition can also be monitored to establish the trend (see below).
- 4.191 The establishment of the threshold at this level would therefore set a standard below which the Site should not deteriorate. However, following future surveys it may be appropriate to raise this threshold if the number of buildings in Very Good or Good condition increases so that there are no buildings in less than Good condition as this will help facilitate the long-term conservation of the Site.
- 4.192 Indicator 7B focuses on the state of conservation of the outbuildings. This has been highlighted as a particular issue and one for a baseline situation needs to be determined and from this a threshold for monitoring future change developed. The level of the threshold will depend on the severity of the situation determined by the 2006 Fabric Survey. It may be appropriate to establish a threshold at current levels of condition, but a higher threshold which would require action may also be appropriate.

Indicator	Baseline	Trend	Threshold
7A: Overall condition of properties	Summary of overall condition of properties as established by the 2006 Fabric Survey	Established by fabric survey – measures overall change in percentages of condition ratings	No buildings in Poor or Critical condition
7B: Condition of Outbuildings	Summary of overall condition of outbuildings as established by the 2006 Fabric Survey		To be established (see above for discussion)

Review and Options

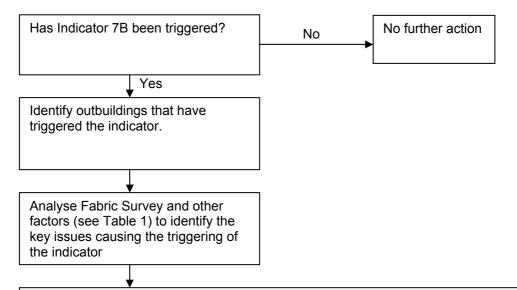
4.193 The following outlines the approach for further action should Indicator 7A be triggered.



Depending on the identified causes a number of options may be available to address the problem:

- Use of legal measures such as urgent works notices, repairs notices or enforcement actions.
- Further education and information could be supplied to property owners to assist them with their maintenance regimes e.g. recent SPAB productions.
- A site-specific historic building maintenance project could be established to assist owners with
 the ongoing maintenance of their properties. This model has been tested in the Netherlands
 where it has proved to be of some success. This project would probably require financial
 subsidy at the start but would potentially provide training opportunities in skilled craft areas.

4.194 The following outlines the approach should Indicator 7B be triggered:



Depending on the identified causes a number of options may be available to address the problem:

- Use of legal measures such as urgent works notices, repairs notices or enforcement actions.
- Further education and information could be supplied to property owners to assist them e.g. particular guidance on what is acceptable in terms of adapting outbuildings
- Increasing awareness of the fact that the outbuildings form part of the curtilage of the associated listed properties and that Listed Building Consent / Planning Permission for alteration or removal of these structures is required
- A site-specific historic building maintenance project could be established to assist owners with the ongoing maintenance of their properties (see Indicator 7A).

Indicator 8: Condition of industrial and civic buildings

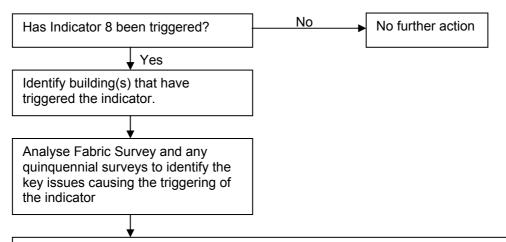
- 4.195 The Industrial and Civic Buildings are a critical aspect of the Site's Outstanding Universal Value and it is vital that these are conserved in the long-term and that appropriate viable uses for them are maintained. All of the buildings are listed; therefore in addition to the indicators, control on uses and alterations can be achieved through the Listed Building Consent regime and Planning Application process. The following indicator can help measure the long-term effects of planning regimes on the Site and the effects of other socio-economic changes that could affect the fabric.
- 4.196 Indicator 8 would be based on the summarised results of a detailed six-yearly Fabric Survey and should provide trend data for the overall condition of these buildings. It is anticipated that the work of the Fabric Survey would be supplemented by quinquennial surveys undertaken by property owners /

managers. This would allow for a more detailed analysis of the issues facing the building and the identification of positive corrective measures.

Indicator	Baseline	Trend	Threshold
8: Condition of major industrial and civic buildings	Summary of overall condition as established by the Fabric Survey	Established by fabric survey – measures overall change in percentages of condition ratings	No buildings in Poor or Critical condition

Review and Options

4.197 The following outlines the approach should Indicator 8 be triggered:



Depending on the identified causes a number of options may be available to address the problem:

- Use of legal measures such as urgent works notices, repairs notices or enforcement actions.
- Further education and information could be supplied to property owners to assist them with their maintenance regimes e.g. recent SPAB productions.
- A continuing decline may require grant aid assistance from local or national government bodies to address key issues.
- Finally, events such as fire or long-term vacancy could result in the degradation of a property to a Critical level. These issues would need to addressed, as and when they occur

Indicator 9: alterations to residential buildings and small commercial and retail properties

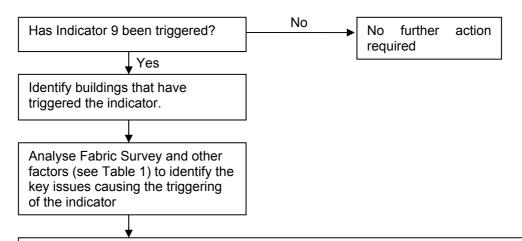
4.198 As discussed above alterations, both small-scale and large-scale, pose a threat to the conservation and fabric of these properties. The Fabric Survey (see Appendix H) would record visible external alterations to the properties on a six-yearly basis. It would identify whether these alterations have had significant impact on the fabric of the property as well as identifying the nature of these alterations, this will allow for the identification of which properties had been altered and the nature of those alterations. These properties or types of alterations e.g. flues, could then be targeted for action. This would exclude shop frontages as these are addressed separately under Indicators 5B, 5C and 10.

4.199 The threshold for this indicator will be established following the next Fabric Survey. Depending on the results of the survey it may be appropriate to set the threshold level at the current percentage of buildings that have not been subject to alterations that have had significant impact on fabric. This would then set a threshold below which the Site should not decline.

Indicator	Baseline	Trend	Threshold
9:	Level of		To be established (see above for
Alterations	alterations		discussion)
to	determined		
residential	by 2006		
and other	Fabric		
properties	Survey		

Review and Options

4.200 The following outlines the approach should the threshold for Indicator 9 be exceeded:



Depending on the identified causes a number of options may be available to address the problem:

- Where significant alterations have occurred without relevant consents then legal measures such as urgent works notices, repairs notices or enforcement actions may be appropriate to ensure that in appropriate alterations are rectified.
- Dependant on the nature of the problem further education and information could be supplied to property owners to assist them the ongoing use of their property and the acceptability of different types of alterations. This could also make them more aware of the constraints placed on them by the Listed status of their property.

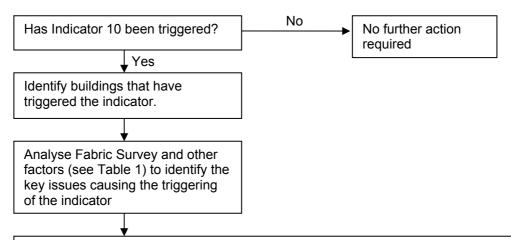
Indicator 10: Appropriateness of shop frontages

- 4.201 The quality, condition and nature of shop frontages poses a notable threat to the fabric of these premises and the character of three key streets within the Site Victoria Road, Saltaire Road and Bingley Road. The quality of a shop frontage is dependent on a number of factors. These include the condition of its fabric, the level of maintenance, the number of original features, the colour of painted surfaces and the nature of additions or alterations. These and other factors would be recorded and assessed by the Fabric Survey to form an overall assessment on the appropriateness of a shop's frontage (see Section 6). This overall score would form the basis for Indicator 10 but the presence of more detailed data within the fabric survey would help target future actions and policy. This Indicator is closely related to Indicators 5A and 5B monitor the active nature of shop frontages on Bingley Road and Victoria Road
- 4.202 The threshold remains to be established and would be based on the results of the Fabric Survey. Given the recognised issues regarding the appropriateness of a number of shop frontages on the Site, it may be acceptable to establish the threshold above (in terms of the number of the acceptable frontages) the current situation as this would encourage positive action to address the existing issues.

Indicator	Baseline	Trend	Threshold
10:	Data to be		To be established (see above for
Appropriateness	gathered as		discussion)
of Shop	part of 6		
frontages	yearly Fabric		
_	Survey.		

Review and Options

4.203 The following outlines the approach should Indicator 10 be triggered. As with Indicator 11 (see below), the implementation of some of these measures in the short term could reduce the possibility that the above threshold would be exceeded in the future.



Depending on the identified causes a number of options may be available to address the problem:

- A programme of awareness raising and guidance for shop owners / tenants on the maintenance and presentation of shop frontages
- Preparation of design guidance for shop frontages on the Site, perhaps with different guidance for different areas of the Site
- Exploring the possibility of providing grant / maintenance support for enhancing shop frontages
- Information for shop owners / tenants on the legal requirements relating to the alteration of Listed Buildings.
- Where necessary, legal measures such as urgent works notices, repairs notices or enforcement actions may have to be used.

What is the capacity of the Site to accommodate changes to its character?

- 4.204 The Site has a distinctive, authentic and integral character that directly reflects its historic origins and the fact that the Site has essentially changed little since its initial development. The character of the Site has been assessed by the WHS Management Plan and by a recent Conservation Area Appraisal and those assessments are not repeated here.
- 4.205 The character of the Site is derived from three underlying factors: Its strongly geometric form and layout; the architectural style employed on all its buildings and the areas of public realm and open spaces. The streetscape of the Site is dominated by the regular areas of residential properties grouped around the civic and industrial buildings, across the river the open space of Robert's Park forms a distinctive area of designed green space that contrasts with the built form of the Site.

Potential Impacts and Capacity Issues

- 4.206 The conservation of the Site's character is critical to its OUV. Due to current planning regimes the geometric form and layout of the Site is unlikely to ever change (unless some catastrophic event occurs) therefore the major focus of this conservation must be on the architectural form of the buildings and the areas of public realm and open spaces. For the purposes of this document, public realm is taken to be all publicly accessible spaces around and outside buildings, whilst public open spaces are considered to be other open areas whose size and lack of development distinguishes them from the surrounding built form e.g. Robert's Park and the allotments. In addition, there are privately owned open spaces including gardens that also contribute to the Site's character.
- 4.207 The issues discussed below therefore focus on changes relating to the built form of the Site and changes to the public realm, public open spaces and private open spaces.

Built form

- 4.208 Given the contribution that the built form of the Site makes to its character and the particular importance of the building frontages in that contribution, a decline in the quality of buildings, the loss of architectural detail and the degradation of the harmonious architectural style of the Site all pose a *major threat* to the Site's character, making this issue a *Primary Concern*. As noted previously, this issue is also a Primary Concern in relation to the Fabric of the Site. Overall, therefore the maintenance, alteration and conservation of the fabric of the Site can be seen to be perhaps the principal long-term issue facing the Site. In many respects the majority of other issues e.g. use etc arise from this need to conserve the Site's fabric.
- 4.209 Given this situation there is little capacity to change the built form of the Site both in terms of conserving its character and fabric without potentially degrading the OUV of the Site. There is however capacity for positive change to reverse past inappropriate alterations and encourage best-practice in the future and this should form a focus for education and action over the coming decades.

Public Open spaces

- 4.210 The public open spaces on the Site make a significant contribution to its character. The recent Open Spaces Conservation Management Plan (CMP) (HTLA 2004) identified many of the issues facing this aspect of the Site and the ECS has drawn upon its findings. The major areas of open space within the Site are the almshouses frontage, the allotments and Roberts Park. The general conclusions of the CMP and the results of the questionnaire surveys (see Appendices E, F and G) all indicate that these open spaces are, and are perceived to be, in poor condition. This has a negative impact on the character of the Site as well as affecting the quality of life of the residents.
- 4.211 The issues facing the public open spaces on the Site include maintenance, retention of original design features and intentions and general condition. All of the public open spaces on the Site were designed landscapes, on a variety of scales. As such they have very limited capacity to accommodate change without the original design being lost or altered in a manner that undermines its key characteristics. The changes can be both episodic (e.g. redesign or development) and gradual (e.g. maintenance and failure to retain design features through successive generations of work). The issues at Saltaire generally relate to gradual changes and few of the public open spaces have been subject to major episodes of alteration. It should also be noted that currently, HLF funding is being sought to restore Robert's Park and should this be successful then many of the issues facing that important area of designed open space would be addressed.
- 4.212 The loss of any of the public open spaces on the Site would pose a major threat to the character and OUV of the Site and the Site does not have the capacity to accommodate such a loss without degrading its overall significance. Under current planning regimes this would not occur and is therefore not a realistic issue for consideration. The gradual decline of the open spaces does however pose an ongoing moderate threat to the character of the Site and is consequently a significant concern. Potential future episodes of change that could result in the loss of original features or a significant move way from the historical character of these open spaces would also pose a moderate threat to the character of the Site making this a significant concern.

Private Open Spaces

- 4.213 In addition to the large open spaces, the private open spaces (e.g. gardens etc) in front of the residential and other properties (that have them) also contribute to the character of the Site. The nature of these spaces varies across the Site. Many have been retained as gardens whilst some have been wholly or partially paved. Issues with these include the nature of the boundary wall treatments, which in places have been altered to reflect late 20th century garden fashions (e.g. decorative concrete materials) and the level of maintenance of the space itself. Unmanaged gardens can affect the character of a place, albeit to a limited scale and generally not on a permanent basis, whilst inconsistent boundary wall treatments can create a disjointed and cluttered character at odds with the uniform design of the Site. The removal of boundary walls and other features also degrades the character of the Site creating a disjointed visual aspect.
- 4.214 The condition, maintenance and alterations of these spaces pose a *Minor Threat* to the character of the Site. This reflects the fact that these areas are relatively limited in extent and confined to discrete portions of the Site. The magnitude of the threat is also lessened by the fact that alterations and maintenance regimes will change through time reflecting ownership changes and fashions in garden design. The Site has capacity to accommodate temporary changes in these private open spaces (e.g. new planting or designs) but very limited capacity to accommodate more permanent changes such as drive ways and the removal of boundary walls.

Public Realm

4.215 The public realm of the Site is fundamental to its character. Key elements of this include the floorscape, street furniture, trees, areas of planting and signage. The presence or absence of these elements and variations in their condition and physical form can have positive or negative impacts on the character of the Site. Currently, the public realm of the Site is in a mixed state of repair and lacks the overall homogeneity that would have originally characterised the Site at the time of its construction. This situation reflects a process of long-term gradual change that has occurred since the Site was first developed. Should this overall decline in the condition and authenticity of these areas continue then this would pose a major threat to the character of the Site. This issue is therefore a *Primary Concern* for the long term management of the Site.

- 4.216 The floor surfaces on the Site are in many places part of its original fabric and form a distinctive element of its character e.g. York Stone fan corner arrangements. The nature of the floor surface varies from the York Stone flags on footpaths and in some of the rear yards to stone setts and tarmac on the roads. The condition of these elements is highly varied, a fact noted in the recent Conservation Area Assessment (CBMDC 2003) and the Open Spaces CMP (HTLA 2004). The condition of the floor surfaces can be affected by a wide range of factors including maintenance, theft of York Stone, inappropriate replacement, traffic movements e.g. lorries moving over pavements, and car parking. For example, the original setts in the roads were not constructed to withstand the weight and frequency of modern vehicles. Increases of traffic due to the presence of more cars on the Site belonging to residents, more visitors, rat running and delivery vehicles is affecting the condition of the floor surfaces, and in particular the setts. The continued loss of and damage to original floor surfaces and their gradual replacement with modern and sometimes inappropriate (in visual terms) materials would degrade the character of the site and is a moderate threat to that character. This issue is therefore a significant concern. The loss of so much of the original style of floor surfacing means that the Site has little capacity to accommodate more such loss without further degradation of its character. It does however have significant capacity to accommodate new floor surfacing where this is implemented using authentic materials and styles.
- 4.217 Car parking is a particular issue for footpath surfaces and the use of pavements for parking cars has resulted in a significant degradation of the condition of many pavements and the loss of characteristic York Stone surfaces. As discussed previously (see Capacity of the Site to accommodate car parking on the Site) car parking on pavements can be accommodated if appropriate maintenance and strengthening measures can be implemented. Ideally, however cars should not park on the pavements. The continuation of the trend of parking on pavements poses a Moderate Threat to the character of the Site due to the fact that the degradation of original or replacement floor surfaces can have a significant impact on the quality of the historic environment of the Site.
- 4.218 The York stone flags in the rear yards of properties and around the industrial / civic buildings may also be affected when alterations, extensions or maintenance occurs. This can lead to a reduction in original fabric and the creation of new surfaces that may be out of character with the Site. This issue is generally relatively localised in its extent but through time the gradual loss of these areas has the potential to degrade the character of the Site. It is only

considered to be a minor threat on a site-wide basis due to its localised extent, however it could pose a greater issue for the setting of adjacent listed buildings.

- 4.219 Another issue is the retention of original street furniture items such as railings, signage and sculptural elements. These are not currently recorded as part of the listed building survey and consequently no complete baseline data regarding their presence and condition is available. Field observations and the recent Open Spaces CMP (HTLA 2004) indicate that original street furniture items are in a mixed state of repair and that a number of items have been removed and replaced with late 20th century materials of sometimes inappropriate styles. Future works may also alter the surviving street furniture, for example modern safety railings replacing original decorative railings, or street signs being replaced or removed; this could significantly contribute to the loss or deterioration of these assets. The gradual loss of these items has altered the character of the Site and inappropriate replacements have also contributed to a decline in the Site's character. Should this pattern continue then the gradual loss and inappropriate replacement of street furniture would pose a moderate threat to the character of the Site. The loss of such original street furniture means that there is little capacity left to allow for further removals, however there is certainly capacity for the replacement of inappropriate items with more appropriate pieces that more accurately reflect the historic traditions of the Site.
- 4.220 Currently the Site and the immediate setting are notably cluttered by modern signage and materials; this issue is currently being addressed by CBMDC. Clutter within the Site includes modern street furniture such as lampposts, telegraph poles, signage and railings. This mostly results from the modern use of the Site as a living working community. The fact that the Site was designed in the Victorian period has meant that these modern elements have had to be inserted in order to keep it functional and safe. Interlinked with this issue, is the level of traffic and visitors, since increased traffic and people usually results in increased signage and requirement for services. Although this modern adaptation alters the character of the Site, it is required to help maintain the quality of life for residents and support its continued use; both of which directly contribute to its conservation and its significances.
- 4.221 As with many issues, a balance needs to be struck between supplying an appropriate level of safety and convenience and maintaining the historic environment. However, further increases in clutter presents a *Moderate Threat* to the character of the Site, particularly in those areas (e.g. principal roads

such Victoria Road, Saltaire Road and Bingley Road) where modern safety and traffic management regimes require modern infrastructure such as signs, safety barriers etc. Based on field observation and the analysis contained in the Open Spaces CMP and Conservation Area Assessment it is clear that the character of the Site cannot accommodate further increases in signage and other clutter. The rationalisation of such material would have significant benefits for the character of the Site and could allow for the presence of a limited number of new signs highlighting the Site's WHS status or providing interpretational material.

Indicators

- 4.222 The above presents a complex picture of a number of elements that all come together to influence the character of the Site. These elements cannot be looked at in isolation and indicators provided for each as this would result in a disaggregated approach to addressing the issues and triggering action. Instead a single indicator looking at the character of a series of small areas across the Site has been developed, the only exception to this is the issue of Shop frontages and these have been addressed separately above (see Indicators 5B, 5C and 10).
- 4.223 This single indicator would be based on the results of a six-yearly Character Survey undertaken alongside the Fabric Survey (see Section 6). The Character Survey would examine the current character of individual streets on the Site and a number of defined small areas (see Figure 1 in Appendix H) and record the current condition and issues facing the many elements of each area. As with fabric survey the conclusions of the survey for each street / area would be summarised into a single score that focussed on the condition of that street / area. This overall score would then be used to inform the indicator (see below). Behind this indicator the results of the Character Survey and Fabric Survey could be analysed in more detail to reveal what issues (e.g. condition of floor surfaces, impact of alterations to buildings, signage and clutter etc.) were of particular concern either on a site-wide, street-by-street or area-by-area basis. The use of small discrete areas will also allow for particular areas of the Site to be targeted for action should that be required.

Indicator 11: Condition of Character Areas

4.224 Indicator 11 would be assessed through a 6-yearly Character Survey. This survey is currently being developed by CBMDC in the form of a matrix for assessment. An outline of the initial factors for consideration is presented in

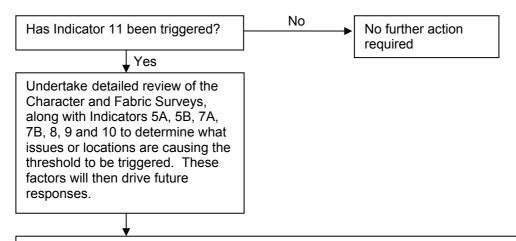
Appendix H and this will be subject to further development over the life-time of the study.

- 4.225 The indicator would present headline data on the overall condition of the Site's character on an area-by-area / street-by-street basis (see Figure 1 in Appendix H). The condition of each area would be graded based on a detailed and recorded assessment of a large range of factors (see Section 6 and Appendix H). The geographical extent of the areas would also be defined within the GIS.
- 4.226 As with Indicators 7A and 8 the threshold has been established at a level where no areas or streets are judged to be in Poor or Critical condition. This sets a standard for the overall condition of the Site's character. If in the future, the condition of all areas on the Site rises to Good or Very Good then this threshold could be raised accordingly.
- 4.227 The data collected will also allow for the development of trend data about the overall condition of the Site's character. This will be calculated on a percentage basis with the area of each condition level (e.g. Very Good, Good etc) being set against the overall total area of the survey areas, for example it may be that 20% of the Site is in Very Good condition whilst 60% is acceptable. This would allow action to be targeted on those areas which may be decreasing in terms of their overall condition before they become Poor or Critical, hence triggering the indicator.
- 4.228 The data for this indicator would be collected by the next Character Survey.

Indicator	Baseline	Trend	Threshold
11: Condition of character	Data would be gathered as part of the 6-yearly	To be established	No areas / streets in Poor or Critical condition
areas	Character survey.		

Review and Options

4.229 The following outlines the approach should the threshold for Indicator 11 be exceeded. The implementation of many of these measures in the short-term would also help ensure that the threshold for Indicator 11 is not exceeded in the future.



Depending on the nature of the issues and their locations a range of possible approaches exist for addressing the issue, these include:

- Liaising with highways and other departments to enhance maintenance and management regimes on the Site
- Implementing the recommendations in the Open Spaces CMP (HTLA 2004)
- Restoring Roberts Park and other key open spaces on the Site
- Developing a programme of public realm works such as railings conservation, pavement enhancements
- The implementation of the recommendations of the CAA
- The development and implementation of a signage strategy based on guidance produced by bodies such as English Heritage. For example, signage can be assimilated onto single posts rather than a series of signs on different posts or the use of lower level signs on poles rather than standard tall poles.
- Development of a street furniture renewal programme to provide a coordinated and streamlined response to the provision of necessary infrastructure on the Site

What is the capacity of the Site to accommodate new development?

- 4.230 Due to the integral and authentic nature of the Site's built fabric, character and open spaces there is little available land that would be able to accommodate new built development without impacting on the character and fabric of the Site. There are a limited number of areas within the Site where historic buildings relating to the development of the Site have been removed since the Site was established. The locations of these areas are clearly shown in the Nomination Document (see Page 25 of Nomination Document reproduced as Figure 4 in this report). There may be some scope for new built development in these locations, where this can enhance and conserve the character of the Site. The merit and acceptability of any such proposals would need to be judged on a case-by-case basis.
- 4.231 In other parts of the Site there is little scope for new built development. The existing open spaces (both public and private) are an integral aspect of the

Site's character and these are therefore not considered suitable for new built development. The existing buildings are a critical aspect of the Site's OUV and as such their replacement with new development would result in a degradation of this value.

- 4.232 There may be very limited opportunities to accommodate other small-scale new development within the Site. These could include extensions to retail and commercial properties; however the acceptability of these extensions would need to be tested on a case-by-case basis to ensure that the Site's character and fabric was not being degraded. A number of such extensions have already been built across the Site to varying standards and with varying levels of impact on the character and fabric of the Site. The impact of these past examples would indicate that in terms of the Site's character there is very limited scope for such extensions.
- 4.233 As noted in the recent Open Spaces Conservation Plan, the public realm of the Site is in need of enhancement and restoration. This process could include the introduction of new elements. For example, it has been suggested that a sculptural / fountain feature could be accommodated on the site of the former washhouse. Whilst this may prove to be acceptable, dependent on the scale and nature of the final design, it would inappropriate given the dominant historic character of the Site to seek to realise opportunities for new public art in all of the Site's open spaces. Such developments can have a significant impact on the character of a place and they would consequently need to be assessed on a case-by-case basis to ensure their acceptability.
- 4.234 Overall, the integral and authentic nature of the fabric and character of the Site precludes major new development within its boundaries. There is some scope for limited new development within discrete areas of the Site. These include the site of the former washhouses on Caroline Street, the car park on Caroline Street (although any such development could result in the loss of important car parking provision and may not be acceptable in that regard), the site of the former station buildings, the creation of a new bridge over the River Aire at the bottom of Victoria Road (see Open Spaces CMP for further discussion) and the future redevelopment of the c.1970 Methodist Chapel off Harold Place.
- 4.235 However, due to the highly sensitive nature of the Site's character any such developments would need to meet rigorous design standards. Given the existing planning regime and the very particular requirements that would face any such development proposals a general capacity indicator to monitor new development on the Site is not appropriate. Any such indicator could be used

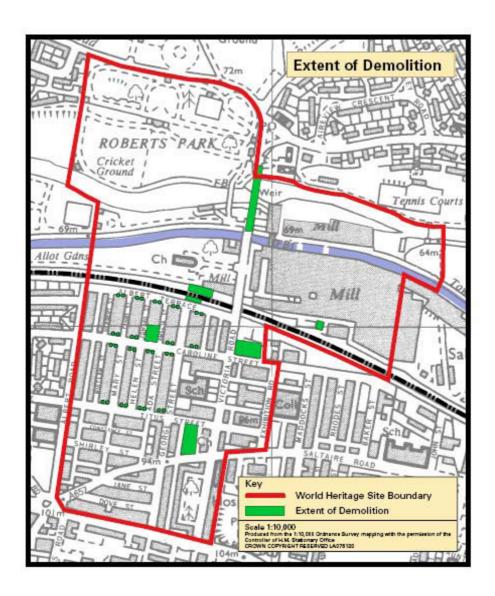


Figure 4: Areas of Historic Demolition From Nomination Document (CBMDC 2001, page 25)

to support inappropriate development or restrict potentially appropriate development. Consequently, it is recommended that the issue of new development is tackled on a case-by-case basis in accordance with current planning and listed building policy and statute. This process would be undertaken in the general context of the Site's very limited capacity to accommodate new built development.

What is the capacity of the Site to accommodate changes to its setting?

- 4.236 The setting of the Site has been analysed as part of the study and is described in Appendix B. This analysis identified 6 key components for the setting of the Site:
 - · Views out of and across the Site;
 - Views to the Site;
 - Key backdrops for the views;
 - Approaches and gateways to the Site;
 - Immediate Setting; and
 - Historically related features.
- 4.237 The setting of the Site is an important aspect of its significance and contributes to its sense of place and character. As such it is important to ensure that future change around the Site does not have a significant impact on its setting. The issues facing the setting of the Site relate to two factors, namely potential development which could impact on key elements of the Site's setting and gradual change in the quality of the Site's immediate setting and the rural backdrops.

Potential Impacts and Capacity Issues

New development

4.238 New development within the Site's Buffer Zone (see Figure 3) and in the case of tall buildings / structures outside of the Buffer Zone (see Appendix B - Figure 20), has the potential to impact on the setting of the Site depending on its location and form. For instance, proposals for change close to the Site (e.g. on the site of current social club or along Saltaire Road) could have significant impacts on the setting of the Site, particularly if the proposals were out of scale with their surroundings or clearly visible from the Site e.g. obscuring or

appearing in key views to and from the Site (see Appendix B). In the wider area, new development on the Rural Backdrops or adjacent to these backdrops could also have a significant impact on the setting (see Appendix B). The general historic pattern is one of growing urbanisation and a corresponding decrease in rural areas (see Appendix B). This pattern of change was until the mid-20th century largely confined to the south and east of the Site but in the last 50 years has begun to alter the areas to the north and west of the Site. A continuation of this pattern would have a considerable impact on the character and integrity of the Site's setting.

- 4.239 However, this does not mean that all developments would impact on the setting of the Site. Given the geographical scope of the Buffer Zone and the nature of the Site's setting there is scope for new development within the Buffer Zone where its location, scale, mass and height is appropriate in terms of the Site's setting.
- 4.240 The principal issues arising from new larger-scale built development in the buffer zone relate to potential impacts on key views to and from the Site and on the quality of the Site's immediate setting, particularly along key gateways and approaches to the Site (see Appendix B for a description of these elements). With regard to the latter point, many of these areas are in need of enhancement and new development could bring substantial benefits for the character and quality of these areas, however it will be important to ensure that such developments do not impact on the visual and historical qualities of the Site's setting. In terms of impacts on views into and out of the Site, these are clearly identified in Appendix B and proposals that would significantly intrude, clutter or obscure these views would degrade the setting of the Site.
- 4.241 The issue of new tall buildings / structures presents particular challenges for the setting of the Site. This type of development could include both modern urban developments and rural developments such as wind turbines and communication infrastructure. The modelling undertaken for the setting report (see Appendix B) identifies the heights that a structure would have to reach in order for this to become a possible issue. The use of this model to identify when proposed developments may affect the setting of the Site could be useful to trigger further detailed investigation as to whether the proposed development would impact on the setting of the Site early in the development planning process. Currently, there are no known proposals for such structures in the setting of the Site but in the current economic and planning climate (e.g. the new PPS 22) this could change.

- 4.242 In terms of identifying locations where there is capacity to accommodate new development in the setting of the Site, the following are broad guidelines:
 - Rural backdrops (see Figure 15 Appendix B): The areas identified as being Critical or Important play a major role in the setting of the Site both in terms of their contribution to the character of the setting and the role they play as termini for key views to, from and across the Site. They have a strong rural character and as such do not have capacity to accommodate significant built development in terms of the possible impact on the setting of the Site. The contributory areas may be able to accommodate limited development where this could be implemented without significant visual intrusion.
 - Termini of Axial Views (see Figure 12 Appendix B): The backdrops to the
 axial views across the Site are critical to these views. In some cases
 development in the backdrops to these views has already degraded them.
 These areas have no significant capacity to accommodate new built
 development where that development would be visible within these views.
 - Immediate Setting of the Site (see Figure 19 Appendix B): There are locations within the identified immediate areas around the Site that have capacity to accommodate appropriate new built development where this would not visually impact on views to, from and across the Site or affect historically related features or degrade the approaches and gateways to the Site. It is not possible to accurately map these areas without defining the nature of the proposed new development in terms of its height, mass and design. Each development would therefore need to be judged on a case-by-case basis to determine whether it would impact on the setting of the Site.
 - Views into, out of and across the Site (see Figures 12, 13 and 14 Appendix B): The areas situated within these views and along their edges are very sensitive to change. New development that would obscure, clutter or degrade the quality of these views would therefore exceed the capacity of the Site's setting. Some replacement development in these areas may be acceptable but this would need to be assessed on a case-by-case basis.
- 4.243 Overall, inappropriate new development poses a *Moderate Threat* to the setting of the Site. Where this development would impact on Key Views (see above) this would constitute a *Major Threat*. Tall buildings / structures are a particular issue and these, if inappropriately sited, could constitute a *Major Threat* to the Site's setting. Therefore, new development in the setting of the Site is a *primary concern*.

Non-development related changes

- 4.244 In addition to new development discussed above, there are other changes that potentially lie outside of the planning process that could impact on the setting of the Site. Particularly significant amongst these are alterations to land management regimes in the rural areas around the Site and alterations to the townscape of the immediate setting of the Site and in particular along the key approaches and gateways to the Site.
- 4.245 Land management changes are an issue for the Critical and Important Rural Backdrops (see Figure 15 Appendix B). Here changes in land management e.g. removal of trees could significantly degrade the character of the setting and the character of key views. Given the importance of these views to the setting of the Site this is considered to be a *Major Threat* to the setting. These views are also important to the character of the Site and significant changes would pose a *Moderate Threat* to this important value. Overall changes in land management are a *primary concern*. Although the management of these areas lies outside of the day-to-day control of the CBMDC it is important to monitor long term changes in these areas to identify when support or action may be required to address emerging issues.
- 4.246 The immediate setting of the Site provides an important context for the Site and helps structure people's experience and initial perceptions of the Site. There are a range of possible changes that could impact on the quality and appearance of these areas. These include changes to shop frontages, the public realm, new traffic management infrastructure, signage etc. Changes of this type can dramatically affect, both negatively and positively, the perceptions of the area and peoples' experience of the Site. As such inappropriate changes in these areas pose a moderate threat to the setting of the Site (an important value); this makes this a significant concern.
- 4.247 There are also a number of existing issues such as the quality of buildings and frontages, the quality of the public realm on key approaches to the Site and the impact of traffic and congestion that could however be addressed through positive change which would enhance the setting of the Site. In the longer term, opportunities to soften the harsh urban edges and remove detractors identified around the Site (see Figure 18 Appendix B) could also be addressed as these areas emerge for redevelopment.

Indicators

- 4.248 It is clear that the setting of the Site is sensitive to change and that some areas within its setting have very limited capacity to accommodate certain types of change, whether this is the result of new development or alterations to land management. There are areas around the Site where it may be possible to accommodate certain types of changes with minimal or no impact on the setting of the Site. The issues in these areas would depend on the nature and extent of the change. Given that development can take a wide range of forms it has not been possible to plot the locations of areas where new development may be acceptable. Paragraph 4.242 identifies broad locations where development is unlikely to acceptable (in terms of the impact on the setting of the Site) and supplies guidance on the constraints that the setting of the Site places on local development.
- 4.249 The following three indicators have therefore been developed to allow both the long-term assessment of the change in the setting of the Site and to allow for a response when proposals for change are bought forward within the context of the planning system.
- 4.250 Indicator 12 provides a long-term monitoring mechanism for assessing change in the key views to, from and across the Site. This includes monitoring the backdrops to these views. The supporting surveys for this indicator could also be used to help assess the potential impact of changes on the setting of the Site.
- 4.251 Indicator 13 provides a similar monitoring mechanism for the immediate setting of the Site and the key approaches and gateways to the Site. Here there are opportunities for both positive and negative change that would need to be reviewed and assessed on a case by case basis as and when they emerge. In addition, the surveys undertaken to support this indicator would provide a long-term mechanism for assessing the current situation in these areas.
- 4.252 Indicator 14 is a reactive indicator designed to be monitored whenever a major development application or development plan allocation is proposed for the Buffer Zone or in the case of tall structures in the wider area around the Site. Its purpose is to provide a clear process for the assessment of the potential impact of such a development and consequently to determine whether that development could be accommodated without degrading the Site's Setting.

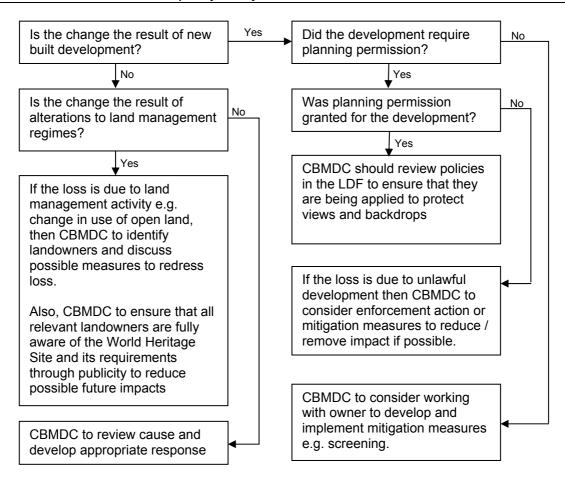
117

- 4.253 Taken together these indicators provide a tool for the long-term monitoring and management of the Site's setting.
 - Indicator 12: Changes to key views into, across and out of the Site
- 4.254 As discussed above the analysis of the Site's setting (see Appendix B) identified and described a number of Critical and Important views into, across and out of the Site. These form a key component of the Site's setting and long-term changes to these views have the potential to degrade their character and impact on the setting of the Site. The Critical and Important backdrops identified in Appendix B form termini for many of these views and are consequently an important aspect of the views. These views and backdrops also form part of the character of the Site and, as such, changes in these have the potential to impact on the overall character of the Site.
- 4.255 Indicator 12 has been prepared to assess long-term changes to these resulting from development and land management changes. The Indicator would be monitored through a six-yearly Setting Survey based on the analysis contained in Appendix B (see Plates). This setting survey would consist of a photographic record of the views with supporting text that highlighted the key elements of the views. This would be updated on a six-yearly basis and changes in the views would be noted and assessed. Where these changes had affected key characteristics or generally degraded the nature of the view, this could lead to the threshold being triggered.

	Trend	Threshold
a nered as of 2005 rey.		Any loss of significant features and characteristics or presence of any new intrusive feature.
2005 tograph rey tained in endix B ificant ures		The threshold has been established to ensure that any loss of important elements are identified and addressed and that new intrusive features are appropriately addressed
t ,	ered as of 2005 ey. 2005 cograph ey ained in endix B	ered as of 2005 ey. 2005 cograph ey ained in endix B ificant ures

Review and Options

4.256 Should changes be observed as a result of the 6-yearly Setting Survey that result in the loss of significant features in the views then the following review should take place:



- 4.257 It would also be beneficial to identify the relevant land management bodies in the short term to raise these potential issues and develop measures through which the character of these areas could be conserved.
 - Indicator 13: The quality of the Immediate Setting and Approaches and Gateways
- 4.258 The immediate setting of the Site and the key gateways and approaches have been identified and described in Appendix B and they are considered to be a key element of the Site's setting as they particularly contribute to people's appreciation of the Site.
- 4.259 Indicator 13 provides a long-term monitoring tool to assess change in these areas and identify when changes have resulted in or may result in the degradation of the quality of these areas. The data for this analysis would be gathered every six years as part of a rapid photographic survey undertaken as part of the Setting Survey. This would consist of a photographic record of key approaches and gateways and streets / open spaces immediately adjacent to

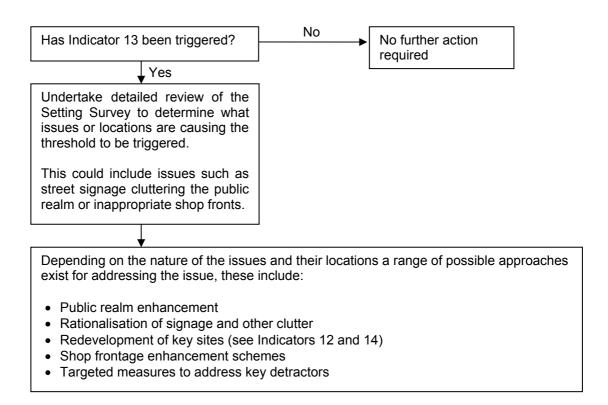
the Site (see Appendix B for extent of areas). This survey would examine a range of issues including:

- Impact of traffic and transport on the character of the area
- Condition of building frontages
- Presence of detractors (as defined in Appendix B)
- 4.260 The survey would be repeated every six years and significant positive and negative changes identified.
- 4.261 The current situation would be taken as the baseline. Although this is not ideal, in that there are a significant number of detractors, it is considered that it is acceptable as it reflects the situation when the Site was inscribed on the World Heritage List. An increase in negative elements over time would therefore trigger the threshold.
- 4.262 The baseline survey would also identify current negative issues and detractors. These could be subject to positive action (e.g. public realm improvements), to help enhance the quality of these areas, gateways and approaches. This enhancement would increase the quality of the area and reduce the possibility of the threshold being exceeded in the future.

Indicator	Baseline	Trend	Threshold
13: The quality of the Immediate Setting and Approaches and Gateways	Current situation established through Setting Survey based on initial results of analysis of setting presented in Appendix B	Tona	Any increase in negative factors compared with baseline (see above for discussion)

Review and Options

4.263 Should there be an increase in negative factors identified through the survey which lead to Indicator 13 being triggered then the following approach would be taken. It would also appropriate to consider implementing these measures in areas identified as having issues in the first Setting Survey. This positive action would help prevent the threshold for Indicator 13 being exceeded in the future.



Indicator 14: The impact of development on the setting of the Site

- 4.264 New developments within the Buffer Zone or tall structures inside or outside the Buffer Zone have the potential to impact on the setting of the Site. All such developments should be reviewed as part of the planning process to determine whether any impacts could occur. This indicator is therefore reactive and would need to be monitored on a continual basis. Annual reporting as part of the current management regime presents the most appropriate mechanism for monitoring trends in the data.
- 4.265 Monitoring for indicator 14 would be triggered by all new planning applications in the Buffer Zone and for tall buildings outside of the Zone but within the area identified on Figure 20 in Appendix B. It will be important to ensure that these applications are assessed in terms of their potential impact on the key views into, across and out of the Site and other aspects of the Site's setting (see Appendix B). Following any such development it may be appropriate to reassess, on an ad-hoc basis, Indicator 12 (changes to key views) to ensure that no change has occurred. Any such reassessment could then be reported as part of the yearly reporting cycle.
- 4.266 The major aim of this indicator is to ensure that the setting of the Site is appropriately considered and given due weight in the planning process. It is

therefore critical that all applications are reviewed in light of the potential impact on the setting of the Site. This may include the need for photomontages from key viewpoints to determine the potential effect. This analysis would need to be undertaken by the applicant where significant concerns are identified e.g. when a building is proposed that would be taller than the height identified on Figure 20 (Appendix B) for that location or when a building is proposed within or adjacent to a key view or backdrop.

- 4.267 In situations where it is considered that the proposed development would impact on the setting of the WHS this should be highlighted as a material consideration during the determination of the planning application. It may also be possible to discuss these issues early in the development process with the applicant to seek designs and mitigation measures that would reduce or remove potential impacts and therefore not degrade the setting of the Site.
- 4.268 The following indictor is therefore only assessed after the application is determined and the development implemented.

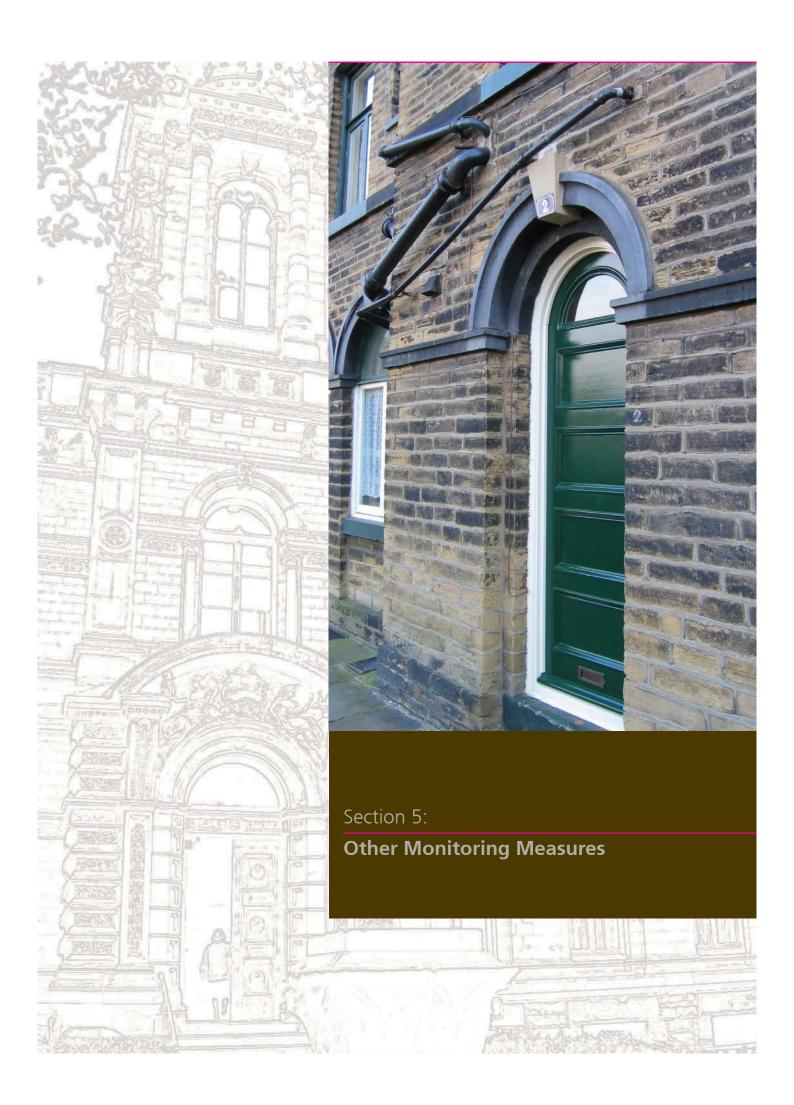
Indicator	Baseline	Trend	Threshold
14: The	Current		Any new development that has impacted
impact of	development		on the setting of the Site
development	situation		
on the	around the		
Setting of	Site		
the Site			

Review and Options

- 4.269 Should the threshold for this indicator be exceeded then all possible actions by CBMDC would have already been undertaken as part of the planning process. Therefore nothing can in effect be done to address the impact. It would therefore be appropriate to adjust the baseline to reflect the new development situation around the Site, perhaps with a proviso that should the development site come forward for redevelopment in the future a more appropriate development would be sought.
- 4.270 However, the triggering of this threshold should lead to a review of current planning policy for the buffer zone and wider area around the Site. This review should seek to enhance the protection offered to the setting of the Site to ensure that future issues in this regard do not occur. The issue of impacts on the setting of World Heritage Sites is a particular concern to UNESCO at the moment and in the case of Cologne has seen the WHS placed on the In

Danger list due to impacts on the setting of the Cathedral resulting from new development. The strengthening of planning policy may therefore be necessary in the future to prevent this situation occurring at Saltaire.

4.271 It would also be beneficial to keep a record of the number and nature of development applications in the Buffer Zone, or applications for Tall Buildings around the Site, which could affect the setting of the Site. Should there be an ongoing increase in inappropriate applications over any given 6 year period then it may be worth reviewing existing planning guidance to ensure that applicants are fully aware of the constraints on development in the area and to reduce instances where inappropriate developments are submitted for planning approval.



5. OTHER MONITORING MEASURES

Introduction

5.1 In addition to the Capacity Indicators identified in Section 4, a number of other monitoring measures have been developed to provide supporting information for the analysis of the Capacity Indicators and to provide data to support the management of the Site. These are outlined below and Table 2 shows which of the indicators each of the Monitoring Measures relates to.

Table 2: Relationship between Monitoring Measures and Indicators

Monitoring Measure	Indicator(s)
A: Overall Resident Satisfaction	Indicator 1: Impact of visitors on residents and other users Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2B: residents' view on traffic congestion Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 5A: Provision of local retail and service facilities
B: Overall visitor experience rating	Indicator 1: Impact of visitors on residents and other users Indicator 5A: Provision of local retail and service facilities
C: Visitor numbers	Indicator 1: Impact of visitors on residents and other users Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2B: residents' view on traffic congestion Indicator 2C: Other users' view on traffic congestion Indicator Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 5A: Provision of local retail and service facilities Indicators 6A & 6B: Vacant Premises
D: Modal Share	Indicator 1: Impact of visitors on residents and other users Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2B: residents' view on traffic congestion Indicator 2C: Other users' view on traffic congestion Indicator Indicator 3A: Through traffic on site away from Saltaire and Bingley Road Indicator 3B: Traffic speeds Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking

	Indicator(s)
	availability Indicator 11: Condition of character areas Indicator 13: The quality of the Immediate Setting and Approaches and Gateways
E: Quality of Public Transport	Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2B: residents' view on traffic congestion Indicator 2C: Other users' view on traffic congestion Indicator 3A: Through traffic on site away from Saltaire and Bingley Road Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability
F: Car parking utilisation and availability	Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 11: Condition of character areas
G: Charity shops	Indicator 5A: Provision of local retail and service facilities Indicator 5B & 5C: Active Shop Frontages Indicator 6: Vacant Premises
H: Areas of site visited by visitors	Indicator 1: Impact of visitors on residents and other users Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 5A: Provision of local retail and service facilities Indicator 11: Condition of character areas
I: Visitor Spend	Indicator 5A: Provision of local retail and service facilities Indicator 5B & 5C: Active Shop Frontages Indicator 6: Vacant Premises Indicator 7A: Overall condition of properties Indicator 8: Condition of major industrial and civic buildings Indicator 10A: Appropriateness of Shop frontages
J: Overall other user satisfaction	Indicator 1: Impact of visitors on residents and other users Indicator 2A: Traffic Congestion on Saltaire Road and Bingley Road Indicator 2C: Other users' view on traffic congestion Indicator Indicator 4B: Level of other user satisfaction with car parking availability
K: Cars per household	Indicator 3A: Through traffic on site away from Saltaire and Bingley Road Indicator 4A: Level of resident satisfaction with car parking availability Indicator 4B: Level of other user satisfaction with car parking availability Indicator 11: Condition of character areas

Measure A: Overall resident satisfaction

- 5.2 Maintaining the quality of life of residents is important if the Site's dominant residential use is to continue. A decline in the quality of life of residents could pose a significant threat to the desirability of Saltaire as a place to live. This in the longer term could see a decline in the conservation and maintenance of the residential properties on the Site as people may become less willing to invest in the upkeep of the property. The maintenance of the area as a well established, stable and prosperous residential community is therefore important to the long-term conservation of the Site.
- 5.3 The issue of overall resident satisfaction is pertinent to a number of indicators (see Table 2). This measure has been introduced to help ascertain whether a particular capacity issue is causing overall levels of satisfaction to decline (e.g. Indicator 1 Impact of visitors or other users). If the issue can be linked to an overall decline in resident satisfaction then it would be a priority for action. Conversely, indicators may be triggered (e.g. Indicator 4A Level of resident satisfaction with car parking availability) but no corresponding decrease in overall levels of satisfaction are noted. These situations would possibly indicate that the issue is not critical to their overall satisfaction and that people are accepting the current situation.
- The data for this monitoring measure would be derived from the 3 yearly resident surveys. The first of these asked residents "How satisfied overall are you with this area as a place to live?" (see Q23 Appendix E). This prompted a very positive response, with 72% of the 95 residents asked stating that they were very satisfied and 27% saying they were quite satisfied. This high level of satisfaction is notable and supplies a suitable measure for long-term monitoring. The results of the future 3-yearly surveys would also be used to provide trend data for this starting from the 2005 baseline.

Monitoring Measure	Baseline	Trend
A: Overall resident satisfaction	2005 Survey: 99% Very Satisfied or Quite Satisfied	

Monitoring Measure B: Overall Visitor Experience

5.5 As discussed previously (see - capacity of the Site to accommodate visitors) visitors are a key part of the Site's economic viability and consequently important to helping maintain key buildings on the Site. However, they also bring issues such as their impact on residents and parking. This measure has

been developed to provide data on visitors' views on the overall experience they had of the Site during their visit. This has been developed to support the analysis of Indicators 1 and 5 as well providing general information for the Site's managers and attraction operators.

5.6 The data for this measure was collected in 2005 by the first of the 3 yearly visitor surveys (see Appendix F) and in an earlier study undertaken on behalf of CBMDC (2003). Question 27 of the 2005 survey asked: "Overall, how would you rate your experience today?", whilst the 2003 survey asked interviewees to rate the "Overall quality of the visitor experience" the responses were as follows:

Rating	2003 (c.400 sample)	2005 (c.90 sample)
Very Good	20%	43%
Good	77%	52%
Average	2%	5%
Poor	0%	0%
Very Poor	1%	0%

- 5.7 These results would indicate that visitors are generally very satisfied with Saltaire as a place to visit. However, as noted in the visitor capacity section, there are areas of dissatisfaction with some facilities and levels of information currently provided. A failure to provide adequate facilities could see a decline in visitor satisfaction. A significant decrease in visitor satisfaction could pose a Moderate Threat to the maintenance of appropriate uses on the Site. This could in the long-term lead to conservation issues relating to the fabric and character of the Site, consequently this issue is a Significant Concern.
- 5.8 Should visitor satisfaction begin to decline either by a rise in poor ratings or a decline in very good and good ratings, then a detailed analysis of the Visitor Survey could provide useful information to determine the reasons for any such change. This could be supported by follow up interview and focus groups with visitors to determine what further issues need to be addressed to enhance visitor experience.

Monitoring Measure	Baseline	Trend
B: Overall visitor experience rating	2003 Survey: 97% Very Good or Good	Stable
	2005 Survey: 95% Very Good or Good	

Monitoring Measure C: Visitor Numbers

- 5.9 The number of visitors to the Site has the potential to affect it in a range of ways. An increase in visitors could see pressures on parking and increased conflicts with resident but it could also bring economic benefits and help ensure the continued conservation of key buildings. A decrease could lessen pressure on the Site but may undermine the economic viability of certain establishments on the Site leading to long-term conservation issues.
- 5.10 It is therefore important to monitor visitor numbers when assessing why any of a range of indicators may have been triggered. The data will also provide useful supporting information for the Site's managers and retail / attraction operators.
- 5.11 Data for visitor numbers does not yet currently exist. There are no daily counts of visitors and the open access non-fee paying structure of the Site makes this an unrealistic option. Instead, it may be possible to undertake a yearly snapshot of visitor numbers to provide a systemic baseline of visitor numbers that can be extrapolated to form an overall estimated figure. This could be developed in partnership with Salt's Mill, the key visitor attraction on the Site.
- 5.12 Given that a variety of external factors may influence visitor numbers, including weather, world events, the economy and specific events or exhibitions, for example at Salt's Mill it will be important to identify a limited number of suitable dates across the year to provide the snapshot. These dates will need to be established in discussions with key partners on the Site supported by professional advisors with experience in developing similar models.

Monitoring Measure	Baseline	Trend
C: Visitor Numbers	TBD	TBD

Monitoring Measure D: Modal Share

5.13 One of the most notable capacity issues facing the Site relates to transport. Transport is critical to the business and institutional use of the Site and is also linked to the quality of life of residents and has contributory effects on the character and potentially fabric of the Site. As such it is an important issue that needs to be monitored to inform the long-term management of the Site and a significant number of indicators (see Table 2).

- 5.14 The modal share between the different forms of transport used by the main groups that use the Site (namely Residents, other users and visitors) is an important measure as this provides information on the dominant transport types being used in and around the Site. This measure supports ten indicators (see Table 2) reflecting the fact that changes in modal share are likely to influence the capacity of the Site in a number of areas. For example, a decrease in the use of public transport could lead to increased issues on the Site with regard to through traffic (Indicator 3A), congestion (Indicators 2A and 2B) and impacts on Character (Indicator 11). It may also indicate a decline in the quality of public transport (see Monitoring Measure E). Measuring modal share is therefore important as it can provide information on why certain changes may be occurring.
- 5.15 Currently, the Site is served by a mix of public transport (rail and bus), walking and cycling routes, road access and the canal. Current modal share as identified by the 2005 questionnaire surveys (see Appendices E, F and G) for different groups is outlined below:

Residents (main form of transport)	Other Users (used on day of survey)	Visitors (used on day of survey)
Car / Motorcycle: 46% Rail: 28% Bus: 13% Walk: 11% Cycle: 2% Boat: 0% N/A: 0%	Car / Motorcycle: 44% Rail: 4% Bus: 33% Walk: 16% Cycle: 2% Boat: 0% Taxi: 1% N/A: 0%	Car / Motorcycle: 64% Rail: 12% Bus: 3% Walk: 10% Cycle: 1% Boat: 4% Taxi: 0% Coach 6% N/A: 0%

- 5.16 It is clear from the above that car / motorcycle use is the dominant form of transport used by all groups. Bus and rail are well used by residents and other users and to a lesser extent by visitors. Walking features strongly in the survey but cycling is hardly represented.
- 5.17 Given the issues associated with transport on the Site a key goal of future management is therefore to reduce reliance on car based transport and to transfer modal share to other more sustainable forms of transport including bus, rail, foot and cycles. The above figures for modal share can be monitored through time to identify key target groups for reducing car use e.g. visitors and for measuring the effectiveness of attempts to shift the modal share.

Monitoring Measure	Baseline	Trend
D: Modal Share	2005 Surveys: (see table above)	

Monitoring Measure E: Quality of Public Transport

- 5.18 Public transport, as well as contributing to reducing the reliance of residents and visitors on private cars, promotes social inclusion for people who do not have access to a car, through improved access to public and social amenities. It is the case that having access to a choice of transport modes contributes to quality of life. Furthermore, the quality of the links into the centres of Bradford and Leeds helps make Saltaire a desirable commuter and business base. This maintains a high demand for residential properties and promotes employment land uses, ensuring that the Site remains economically viable.
- 5.19 Should the quality of public transport decline there is the possibility that the modal share (see above) will shift further in favour of car based transport. As discussed previously this could lead to further capacity issues. Should issues with traffic and car parking (e.g. Indicators 2A to 4B inc.) begin to worsen then it may be that public transport usage is declining perhaps as a consequence of a perceived decline in quality. It is therefore important when examining traffic and transport issues on the Site to review whether public transport is declining in terms of its quality as well as its usage (see above- Modal Share).
- 5.20 The quality of public transport (both in terms of service levels and quality of vehicles) to and from the Site was measured in the questionnaire surveys. For residents 86% of those surveyed (see Appendix E) stated that Public Transport was a very important or fairly important reason for why they choose to live in Saltaire. In addition, 47% of residents stated that the quality of the local bus service was Very good or Good (44% did not answer) while 81% of residents stated that the quality of the local rail service was Very Good or Good (16% did not answer). These responses indicate that public transport is a considerable asset to residents and enhances their quality of life. Similarly positive responses were also received from the other users questioned (see Appendix G). These responses can be used to establish baseline levels of satisfaction for long-term monitoring through the 3-yearly surveys.

Monitoring Measure	Baseline	Trend
E: Quality of Public	2005 Surveys:	
Transport		
	Residents:	
	Bus: 84% of respondents (exc.	

N/As) Very Good or Good Rail: 96% of respondents (exc. N/As) Very Good or Good	
Other Regular Users: Bus: 58% of respondents (exc. N/As) Very Good or Good Rail: 68% of respondents (exc. N/As) Very Good or Good	

Monitoring Measure E: Car Parking Utilisation and Availability

- 5.21 Car parking has been identified as an issue for residents and other regular users on the Site (see Indicators 4A and 4B). Alongside these perceptual responses it is also important to identify the physical reality of car parking utilisation and availability on the Site. This can support the analysis of the indicator should it be triggered to determine, in conjunction with other measures (e.g. Monitoring Measure K Cars per household), what factors may be causing any decline in resident or other user satisfaction.
- 5.22 Car parking is also an issue for the character of the Site and consequently car parking utilisation is an important factor to examine when looking at the character of the Site's streets and public realm. This measure therefore also supports the analysis of that indicator in that high levels of utilisation are likely to impact on the character of the Site and their may be a correlation between any areas in Poor condition and areas with high levels of parking utilisation; perhaps due to footpath damage or crowding of streets with cars.
- 5.23 The measure is based on an initial survey undertaken for the ECS in 2005. This measure would be updated through a parking utilisation survey that could be conducted every three years alongside the 3-yearly questionnaire surveys.

Monitoring Measure	Baseline	Trend
F: Percentage occupancy of on-street parking spaces and	Data established as part of ECS survey (see Appendix D)	
percentage occupancy of off-street parking	On-street - Daytime 41% - Evening 55% Off-street - 90% during daytime	
Available capacity (restricted and unrestricted)	Data established as part of ECS survey (see Appendix D)	
	900 spaces	

Monitoring Measure G: Charity Shops

- 5.24 As discussed in Section 4 the retail sector on the Site plays an important role in maintaining the Site's economic viability, its physical conservation and the provision of services for local residents and regular users. It is important therefore to monitor the economic performance of the retail sector on the Site to gauge whether it is declining and if so what may be causing the decline.
- 5.25 The presence of charity shops is often linked to declining retail performance and their presence can be taken as an indicator of lower rental prices and declining spend. The monitoring of this factor can therefore give some indication of the health of the retail sector on the Site. This is recognised by CBMDC and they have developed *Performance Indicators for Retail* (PIR) which includes a measure for charity shops, in Shipley the following target has been established:
 - Shipley Charity shops 4.0% (Target less than<5%)
- 5.26 The main function of this measure is to provide supporting information for making decisions regarding potential change of use applications or alterations to existing shops through Indicators 5A, 5B, 5C, 6A, 6B and 10. For example, where the numbers of charity shops are increasing it may be acceptable to allow the change of uses of retail premises to secure their long-term conservation as insistence on the continuation of retail uses may result in vacancy (see Indicator 6). This measure therefore becomes one of many considerations when addressing these forms of applications
- 5.27 The presence of charity shops on the Site has been assessed by the useclass survey for this study (see Appendix C). Currently there is only one charity shop on the Site.

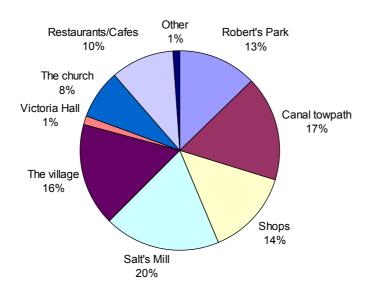
Monitoring Measure	Baseline	Trend
G: Number of Charity Shops	Use Class analysis data provided in Section 4 and Appendix B of the ECS	
	Charity shops in 2005: 1	

Monitoring Measure H: Areas of the Site Visited by Visitors

5.28 The issue of visitor impacts on resident and other regular users is clearly a concern for the long-term management of the Site. In this context it is important to know how many visitors are coming (see Monitoring Measure C) and where they are visiting. This information will enable the management

team to cross-reference where the issues with visitors are occurring (through an analysis of the resident and other user surveys) and where visitors are actually going on the Site. This can then inform the development of strategies and approaches to addressing the issue should Indicator 1 be triggered. It will also be helpful when analysing the car parking indicators (4A and 4B) to determine if people are visiting parts of the Site and consequently parking away from the main areas and in analysing the issues facing the retail sector in the Site (Indicator 5A) as visitors may not be accessing the parts of the Site that contain the key retail premises.

5.29 The data for this monitoring measure has been collected through the Visitor Survey (see Appendix G). The following chart outlines the responses to *Question 16 – Which of these places have you visited today?:*



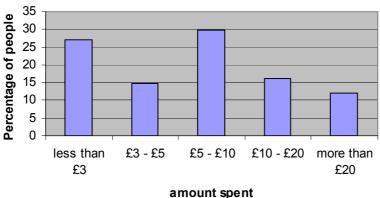
5.30 Although this lacks the detail required to identify streets, a alteration to this question for the next survey (perhaps with a small map to guide respondents) should be able to refine the results.

Monitoring Measure I: Visitor Spend

5.31 Visitor spend on the Site contributes to the local economy and supports a number of local businesses. A decrease in visitor spend could begin to undermine the local retail and service sector economy perhaps leading to increased vacancy (Indicator 6), changes of use (Indicators 5A, 5B, 5C and 10) and maybe a decline in maintenance (Indicators 7A, 8 and 10). Measuring this factor can therefore help understand why these changes may be occurring as well as informing change of use applications.

5.32 The data for this measure has been derived from the 2005 Visitor Survey (see Appendix F). The following chart presents the level of spend associated with the surveyed visitors.

amount spent in saltaire



Monitoring Measure	Baseline	Trend
I: Visitor Spend	2005 Visitor Survey	
	Less than £3 – 27% £3 to £5 – 15% £5 to £10 – 30% £10 to £20 – 16% More than £20 – 12%	

Monitoring Measure J: Overall Other User Satisfaction

- 5.33 The regular users of the Site, including students and employees, form an important aspect of the local community and their presence contributes to the Site's economic viability, its vitality and sense of place.
- 5.34 The issue of overall other user satisfaction is relevant to a number of indicators (see Table 2). As with Monitoring Measure A – Overall Resident Satisfaction, this measure has been introduced to help ascertain whether a particular capacity issue is causing overall levels of satisfaction to decline (e.g. Indicator 1 – Impact of visitors or other users). If the issue can be linked to an overall decline in satisfaction then it would be a priority for action. Conversely, indicators may be triggered (e.g. Indicator 4A – Level of resident satisfaction with car parking availability) but nor corresponded decrease in overall levels of satisfaction are noted. These situations would possibly indicate that the issue

is not critical to their overall satisfaction and that people are accepting the current situation.

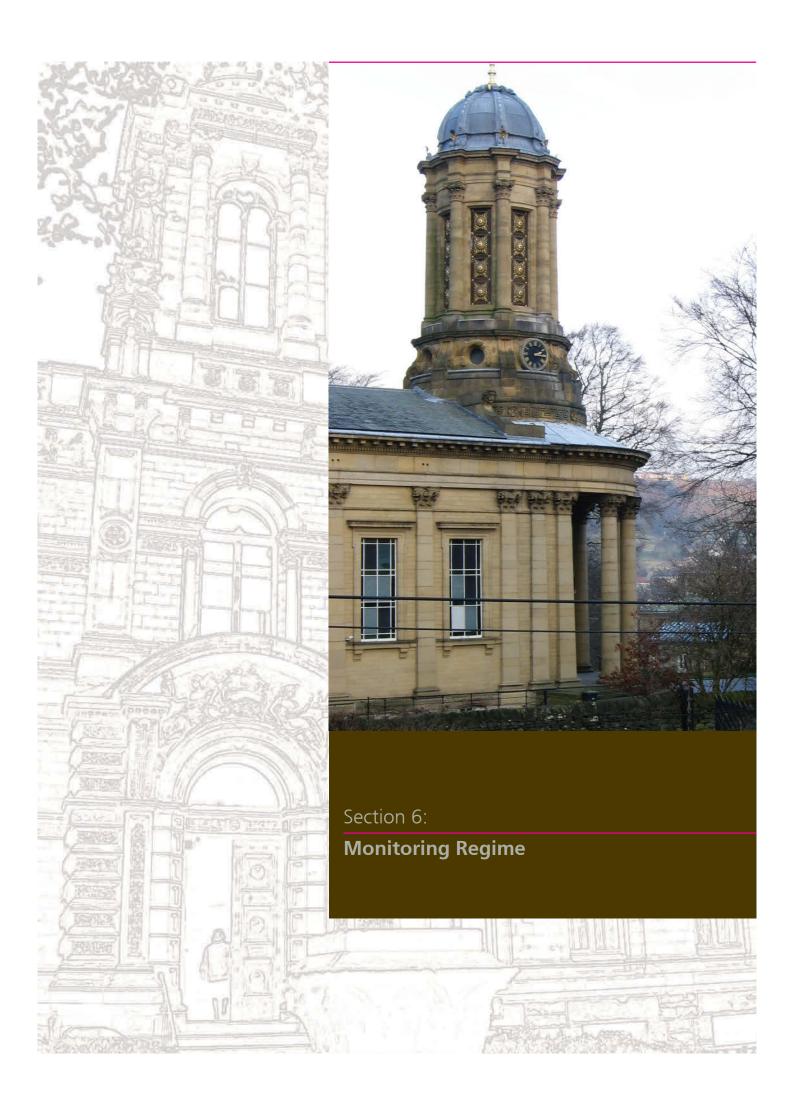
5.35 The data for this monitoring measure would be derived from the 3 yearly other user surveys. The first of these in 2005 asked "Overall, how satisfied are you with Saltaire as a place to work / study?" (see Q18 - Appendix G), the results can be seen below and the results of the future 3-yearly surveys would also be used to provide trend data for this starting from the 2005 baseline.

Monitoring Measure	Baseline	Trend
J: Overall Other User Satisfaction	2005 Survey:	
	Very satisfied 389 Fairly satisfied 509 Neither satisfied or dissatisfied 89 Slightly dissatisfied 49 Very dissatisfied 19	6 6

Monitoring Measure K: Number of Cars per Household

- 5.36 This measure particularly relates to car parking on the Site (see Indicators 4A and 4B). An increase in the number of cars per house will lead to increased pressure on car parking spaces on the Site. It is therefore important to monitor this situation. It will also have a bearing on the levels of through traffic in the Site (Indicator 3A) and the character of the Site (indicator 11).
- 5.37 The data for this monitoring measure was collected as part of the 2005 residents survey (see Appendix E), this indicated that 33% of those who responded had no car, 54% had 1 car and 14% had two cars. There are c.766 households on the Site, by applying the percentage breakdown of cars per household derived from the survey this would equate to c.630 cars.

Monitoring Measure	Baseline	Trend
I: Cars per household	2005 Residents Survey	
	No car – 33% 1 car – 54% 2 cars – 14%	
	This equates to c.630 cars on the Site	



6. MONITORING REGIME

- 6.1 Key to the implementation of the ECS is the establishment of a monitoring regime to provide data for the indicators and future evolutions of the ECS. Given the six yearly cycle of periodic reporting for UNESCO World Heritage Sites and the six yearly cycle for the review of the Saltaire WHS Management Plan it is considered appropriate to establish a six year cycle for the monitoring regime.
- 6.2 This cycle includes undertaking a number of regular surveys to inform the Indicators outlined in Section 6, these are summarised below:

Survey	Frequency
Fabric Survey	6-yearly
Character Survey	6-yearly
Use Class Survey	Yearly
Resident Questionnaire	3-yearly
Other Users Questionnaire	3-yearly
Visitor Questionnaire	3-yearly
Visitor Count	Yearly
Peak hour stress flow measure	3-yearly
Car parking utilisation	3-yearly
Setting survey	6-yearly

6.3 The following table outlines key events and activities for each year over the six year cycle. The outline schedule below assumes that the revised Management Plan will be developed in 2006, in time for its launch and adoption at the start of 2007. This would therefore be the start date for the monitoring cycle with work in 2006 providing a baseline for the Management Plan.

Year	Action	Outputs	Management Plan Cycle
Year 0	Undertake Fabric Survey	Full presentation of	Revised plan
2006	Undertake Character Survey	indicators and	developed and
	Undertake Use Class Survey *	establishment of	launched at the end
	Undertake Visitor Survey *	baseline	of 2006 or start of
	Undertake Other User Survey *		2007
	Undertake Residents Survey *	Identification of key	
	Undertake Setting Survey *	actions for revised	
	Undertake Visitor Count	Management Plan	

Year	Action	Outputs	Management Plan Cycle
Year 1 2007	Undertake Car Parking Utilisation Survey * Gather peak hour stress flow data* Monitor Planning Applications in Buffer Zone (inc. Tall buildings in wider area) Monitor Planning Applications on Site Undertake Use Class Survey Undertake Visitor Count Monitor Planning Applications in Buffer Zone (inc. Tall buildings in wider area) Monitor Planning Applications on Site	Report results of surveys and gathered data. Update other surveys to reflect any known changes Report modified indicators	Revised Plan launched either start 2007 or end 2006 Plan implemented
Year 2 2008	As year 1	As year 1	Plan implemented
Year 3 2009	Undertake Use Class Survey Undertake Visitor Survey Undertake Other User Survey Undertake Residents Survey Undertake Visitor Count Undertake Car Parking Utilisation Survey Gather peak hour stress flow data Monitor Planning Applications in Buffer Zone (inc. Tall buildings in wider area) Monitor Planning Applications on Site	Report results of surveys and gathered data. Update other surveys to reflect any known changes Report modified indicators	Plan implemented
Year 4 2010	As Year 1	As year 1	Plan implemented
Year 5 2011	As Year 1	As year 1	Plan implemented
Year 6 2012	As Year 0	As Year 0	Revised plan developed and launched at the end of 2012 or early 2013

Note: entries marked with a * have been undertaken as part of this study or prior to this study

6.4 The following outlines the nature of each of the surveys identified above:

Fabric Survey

6.5 The 6-yearly fabric survey is a key element for the future management of the Site. In essence it comprises a detailed survey of the exterior condition of all buildings on the Site to assess their overall condition, the nature and impact of

any alterations and the key issues facing their conservation. The fabric survey database would be particularly applicable for the residential and small-retail premises. For the larger buildings the survey database entry would present a summary of existing quinquennial surveys undertaken by owners / managers supported by field observation.

- 6.6 The survey would be linked to property entries in the GIS with photographs included with the associated access database (see Appendix H). This would allow for the geographical analysis of patterns and trends e.g. in terms of condition, problems with roofs and chimneys.
- 6.7 Appendix H presents an outline of the proposed structure for this survey.

Character Survey

- 6.8 The 6-yearly character survey would analysis the general character of each street or open area based on a breakdown of the Site in a street-by-street / area-by-area basis. The analysis would include a general description supported by an analysis of the impact of issues such as car parking, impact on pavements, clutter etc. This data would be held in a database attached to the GIS to allow for a geographical analysis of the data.
- 6.9 Appendix H presents an outline of the proposed structure for this survey and the proposed geographical structure for the street-by-street analysis. The current proposals for this survey will be developed further by CBMDC as part of a wider programme of work in other conservation areas and consequently the structure and outline in Appendix H should be treated as provisional and experimental.

Use Class Survey

- 6.10 The Use Class Survey data would be gathered on a yearly basis and would comprise a rapid site visit to identify the use of buildings on the Site. This would be restricted to commercial and retail uses on a yearly basis and all properties would be updated on a 6-yearly basis through the Fabric Survey. The Survey would also be linked to any change of use applications received on the Site.
- 6.11 The use class survey would also cover aspects such as vacancy and presence of charity shops (see Indicators 6 and Monitoring Measure G). This data would be stored in the Fabric Survey Database.

Resident, Other Users and Visitor Questionnaires

6.12 These questionnaires (as outlined in appendices E, F and G) would be repeated on a 3-yearly basis with samples of c.100 people per survey. The resident survey could be undertaken at any time of year, but the visitor and other user surveys would need to be targeted at times when high numbers of visitors and / or students are present on the Site.

Visitor Count

6.13 As previously discussed, a visitor count snapshot regime needs to be established on the site to identify long-term trends. The exact methodology for this survey remains to be determined, but it is currently anticipated that a series of snapshots would be taken over the year to form a model of potential visitor numbers. This would be repeated yearly, and 3-yearly trends reported.

Peak hour stress flow measure

6.14 CBMDC would supply information on this element on a 3-yearly basis for the Saltaire Road / Saltaire Roundabout and Bingley Road.

Car parking utilisation

6.15 This survey would be undertaken on a 3-yearly basis to analyse utilisation of car parking spaces on the Site. The survey undertaken for the ECS has not reviewed occupancy of the off-street car parks and this would need to be included in future surveys.

Setting survey

6.16 The setting survey would analyse changes to key views based on the data presented in Appendix B. In addition, an analysis of the Immediate Setting Zones (see Appendix B) would need to be undertaken to determine their relative quality and the issues facing them.

Review of planning applications on Site and in Buffer Zone (inc. tall structures in wider areas)

6.17 This would occur on an ad-hoc basis throughout the year. The results of any applications would need to be fed into the above surveys following the granting of any permissions.



Atkins Heritage

3200 Century Way Thorpe Park Leeds LS15 8ZB

http://www.atkinsglobal.com/skills/environmentalservices/heritage

