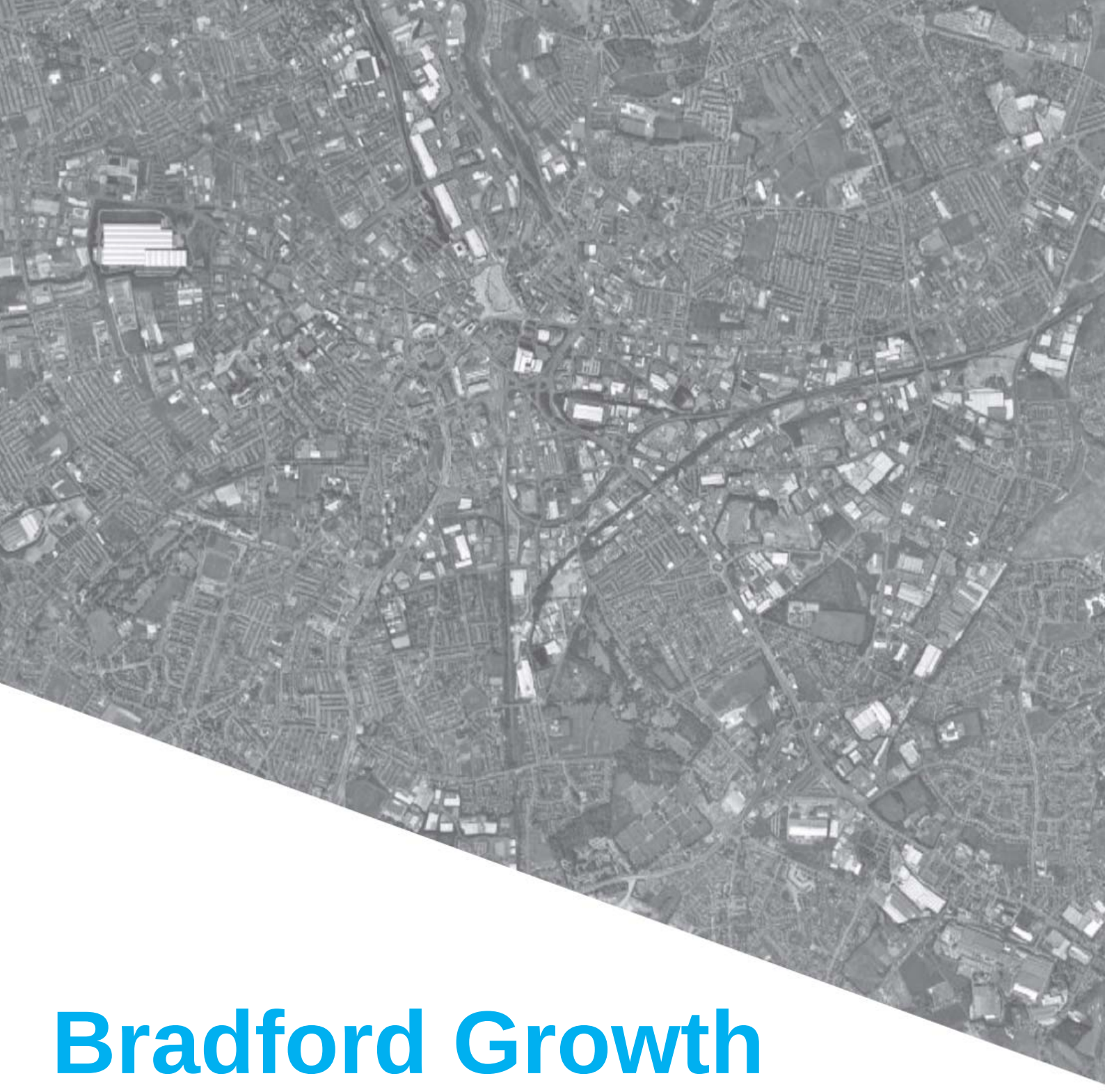

Bradford Growth Assessment

Introduction and Methodology

November 2013

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Contents

1. INTRODUCTION

1.1 The City of Bradford Metropolitan District Council (CBMDC) is preparing a new Local Plan to cover the period to 2029. The Local Plan will set out the spatial planning framework about where new homes, jobs and supporting community facilities and services and infrastructure will be located. This Growth Assessment has been undertaken to inform and support the Local Plan by identifying more sustainable locations for future housing growth based on a range of factors.

1.2 The National Planning Policy Framework (NPPF) identifies that the purpose of planning is to help achieve sustainable development. The NPPF sets out that there are three dimensions to sustainable development: economic, social and environmental; and that each of these dimensions perform a role within the planning system:

'an economic role' – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

'a social role' – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and

'an environmental role' – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

1.3 In preparing the Local Plan, CBMDC are assessing the District's housing needs and demand over the period to 2029. The District's population is projected to grow rapidly over this period. This together with the heavily built up nature of the main urban areas means that to meet this identified housing need in full, the use of Green Belt land will be required in addition to reusing previously developed land within the existing urban area. This Growth Assessment therefore assists decision-making about where the most suitable and sustainable locations are surrounding the District's key settlements.

1.4 The Growth Assessment is broken down into two distinct elements:

Element One: Directions for Growth. This element identifies the potential Green Belt opportunities contiguous to existing settlement boundaries that should be analysed in greater detail through Element Two of the Growth Assessment. Based on a range of constraints, within a defined search area surrounding each of the Districts key settlements the amount of 'highly constrained', 'medium constrained', 'partly constrained' and 'unconstrained land' has been identified and mapped. Land comprising 'partly constrained' and/or 'unconstrained land' has been considered the most appropriate land to analyse in greater detail for the contribution it could make towards identifying potential locations for growth.

Element One also analyses each of the District's key settlements current environmental, social and economic role to help inform decision making about the appropriate and sustainable level of growth that each settlement could potentially accommodate vis-à-vis the level of 'partly constrained' and 'unconstrained land' identified.

Element Two: Sustainability Testing of Green Belt sites. This element subjects the Green Belt sites promoted for housing development through the Bradford Strategic Housing Land Availability Assessment (SHLAA) and other potential strategic Green Belt locations identified through Element One, which are contiguous to existing settlement boundaries and comprise land as being either 'partly constrained' or 'unconstrained' by a selection of existing policy designations to an assessment against a set of environmental, social and economic sustainability testing criteria.

1.5 It is important to note that it is not the purpose of this study to recommend that areas of land should be allocated for development nor that particular settlements should accommodate certain quantum's of development, although the study will be one of the documents which help inform the decisions which the Local Planning Authority will need to make in its Core Strategy on these matters.

1.6 The inclusion of any parcel of land as unconstrained or partly constrained in this report and the scoring and assessment of these parcels should not be taken as a guarantee that they will be considered appropriate for allocation since the Council will need to make decisions based on the overall targets for development in each area, and the deliverable options available at the time. The Local Planning Authority will also need to undertake further and more detailed assessments of the potential impacts of any sites which may be defined as a result of the outputs from this work.

1.7 The remainder of the Growth Assessment follows the following structure:

Section 2: Methodology and Approach sets out the how the Element One and Two testing has been undertaken, including the definitions and assumptions used. This section is contained within this document.

Section 3: The Regional City of Bradford sets out the Element One and Two outputs for the settlement areas comprising the Regional City of Bradford. Section 3 of the Growth Assessment is set out within a separate document.

Section 4: The Principal Towns sets out the Element One and Two outputs for the settlements defined as principal towns within the Bradford settlement hierarchy. Section 4 of the Growth Assessment is set out within a separate document.

Section 5: The Local Growth Centres sets out the Element One and Two outputs for the settlement defined as local growth centres within the Bradford settlement hierarchy. Section 5 of the Growth Assessment is set out within a separate document.

Section 6: The Local Service Centres sets out the Element One and Two outputs for the settlement defined as local service centres within the Bradford settlement hierarchy. Due to the number of Local Service Centres Section 6 of the Growth Assessment is set out within two separate documents – Volume 1 and Volume 2.

2. METHODOLOGY AND APPROACH

Element One: Directions for Growth

2.1 This section sets out how the Element One assessment has been undertaken and the definitions and assumptions used. The aspects covered comprise:

- Assessed settlements
- Area of Green Belt search
- Green Belt land constraint sieving
- Potential strategic locations for growth
- Understanding a settlements environmental, social and economic roles.

Assessed Settlements

2.2 Strategic Core Policy 4 in the Core Strategy Further Engagement Draft Document introduces and defines the hierarchy of settlements. The Growth Assessment therefore uses 25 settlements identified within the District's settlement hierarchy as the basis for the assessment[1]. These settlements are set out in hierarchy order below.

The Regional City of Bradford: Within the Core Strategy Further Engagement Draft (CSFED) the Council has identified the Regional City as the prime focus of housing, employment, shopping, leisure, education, health and cultural activities in the District. The central areas of the City Centre and Canal Road are adjoined by five defined settlement areas which could be the focus for growth:

- South East Bradford
- North East Bradford
- South West Bradford
- North West Bradford
- Shipley.

[1] There are 27 elements to the Bradford settlement hierarchy as the Regional City also has Bradford City Centre and Canal Road. However, as the City Centre and Canal Road area are not contiguous with the countryside they have been excluded from the Growth Assessment.

The Principal Towns: Within the CSFED the Council identifies these towns as the main local focus for housing, employment, shopping, leisure, education, health and cultural activities. The District's principal towns are:

- Keighley
- Bingley
- Ilkley.

Local Growth Centre: Within the CSFED the Council has identified these as settlements, which are located along key public transport corridors and therefore accessible and sustainable locations to focus local housing, employment and supporting community facilities. The local centres are:

- Burley in Wharfedale
- Menston
- Queensbury
- Silsden
- Steeton with Eastburn
- Thornton.

Local Service Centres: Within the CSFED the Council has identified these as attractive and vibrant settlements within the District's rural areas. While these settlements are identified for protection and enhancement the CSFED also suggests that provision should be made to meet local needs for both market and affordable housing. The District's local service centres are:

- Addingham
- Baildon
- Cottingley
- Cullingworth
- Denholme
- East Morton
- Harden
- Haworth
- Oakworth
- Oxenhope
- Wilsden.

Area of Green Belt Search

2.3 Around each settlement a 500 metre zone has been defined. All land within the 500 metre zone has been automatically included within this assessment. Land outside the 500 metre zone has been excluded as unsuitable land as this is considered to be significantly detached from the existing settlement.

2.4 In a number of instances, given the close proximity of neighbouring settlements, the areas of search zones overlap. As the assessment has been undertaken on a settlement by settlement basis there is therefore some potential for double counting if constraint area totals are summed across a number of different settlement areas. Each settlement should therefore be considered individually. Existing urban areas of neighbouring settlements, which overlap into neighbouring search zones has been discounted from the search area.

2.5 A summary map showing the search area zones around each settlement is included in Appendix 1.

Green Belt Land Constraints Sieving

2.6 To help identify potential suitable locations for future growth a constraints sieving exercise has been undertaken of the land within the 500 metre search area zones. This process has categorised land covered by a range of existing policy and other constraints into three broad constraint category levels:

- High constraints
- Medium constraints
- Partial constraints.

<u>Identified Highly Constrained Green Belt Land</u>

2.7 Within the 500 metre zone, the land covered by constraints that would significantly affect the appropriateness of the land for development have been identified and mapped. Land falling within these constraint designations has been termed as ‘highly constrained Green Belt land’. Given the implications of these constraints development potential within these areas will be limited The constraint designations within this category are set out within the schedule below:

Constraint	Summary of constraint
Special Protection Areas (SPA)	Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union counties. They are European designated sites, classed under the Birds Directive.
Special Protection Area 400 metre zone	Within 400m of the SPA (measured as the crow flies from the SPA perimeter to the point of access on the curtilage of the dwellings) the impact of net new residential development on the SPA is likely to be such that it is not possible to conclude, at a strategic level of assessment, that there is no adverse effect on the SPA. There should therefore be a presumption against development within this zone.
Special Areas of Conservation (SAC)	Areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.
Sites of Special Scientific Importance (SSSI)	Sites designated by Natural England under the Wildlife and Countryside Act 1981.
Ancient Woodland	An area that has been wooded continuously since at least 1600 AD.
Flood Risk Zone 3	Land that could be flooded from a river by a flood that has a 1 per cent (1 in 100) or greater change of happening each year. Zone 3 is the Environment Agency's highest risk zone.
Hazardous Installations/ Major Hazards Sites	Sites where significant quantities of potentially hazardous chemicals are used and stored. These chemical plants are a major source of local employment, but the storage and use of these chemicals can place significant restrictions on development in the surrounding area.
Landfill sites	Sites where waste has been buried and compacted with other wastes. These can be either active sites which are currently in use, or inactive sites which are no longer receiving waste.
Active Quarries	Land where minerals are currently being extracted or has planning permission for mineral extraction.

2.8 For each constraint the amount of 'highly constrained' Green Belt land within each of the areas of search has been calculated, both in hectares and as a percentage of the total search area. A case study example illustrating how these areas have been calculated has been included in Appendix 2.

2.9 A key aim of this study is to assess potential growth areas and in most cases these areas will be within the currently defined Green Belt which surrounds all settlements within the District. For this reason Green Belt has been excluded from the constraints within the Element One sieving process. The NPPF continues to give strong protection to the Green Belt whilst allowing for the fact that Local Plans may have to look to green belt land to meet the needs for development where exceptional circumstances can be demonstrated. However it is important that the study incorporates a strategic appraisal of the Green Belt within its methodology since areas of land will inevitably vary in their characteristics and their sensitivity to change. Therefore, for each settlement a strategic testing of the nature and purpose of the Green Belt surrounding the settlement has been undertaken. The contribution to the function of the Green Belt is also one of the site-specific sustainability elements assessed under Element Two.

Medium Constrained Green Belt Land

2.10 Within the 500 metre zone, the land covered by medium constraints that are likely to have moderate, but still significant sustainability implications for future development consideration have been identified and mapped. Land falling within these constraint designations has been termed as 'medium constrained' land. The constraint designations within this category are set out within the schedule below:

Constraint	**Summary of constraint**
Special Protection Area 400 metre -2.5km zone	A buffer zone has been identified 'Within 2.5km and 400m of the SPA (measured as the crow flies from the SPA perimeter to the curtilage of dwellings). The South Pennine Moors Special Area of Conservation/ Special Protection Area supports a number of internationally important breeding bird species. The Draft Habitat Regulations Assessment of the Core Strategy identified a 2.5km buffer around the SAC/SPA as the main area within which supporting habitat is utilised by the birds. The Council have commissioned surveys to better understand the role of this zone in supporting SPA bird species and this data will be used to inform the most

Constraint	Summary of constraint
	appropriate policy approach to development in such areas. It will help to determine the extent, if at all, to which development might be capable of being accommodated within parts of the buffer area. As this assessment is currently ongoing, this constraint has been included within the medium category but has not been used to rule out areas from appraisal as part of Element Two.
Tree Preservation Orders (TPO)	The purpose of a Tree Preservation Order is to protect trees which make a significant impact on their local surroundings. TPOs can be applied to all types of tree, including hedgerow trees, but not hedges, bushes or shrubs. The order can cover anything from a single tree to woodlands. It should be noted that TPO's need not rule out development, particularly where individual TPO's or small groups can be accommodated within the design of development schemes.
Open Space Typologies	The open space typologies defined within the Bradford Open Space and Recreation Assessment have been used.
Internationally or Nationally Important Heritage/ Archaeological Assets	A building, monument, site, place, area or landscape identified as having international or national significance because of its heritage or archaeological interest.
Bradford Wildlife Areas	These are areas that have local wildlife value within the District.
SEGI/ RIGS	Site of Ecological or Geological Importance are locally designated sites as being of country wide importance for their flora, fauna or geology. Regionally Important Geological Sites are also locally designated sites as being of regional importance.

2.11 For each constraint the amount of 'medium constrained' Green Belt land within each of the areas of search has been calculated, both in hectares and as a percentage of the total search area. A case study example illustrating how these areas have been calculated has been included in Appendix 2.

Partially Constrained Green Belt Land

2.12 Within the 500 metre zone, the land covered by partial constraints has been identified and mapped. Land falling within these constraint designations has been termed as 'partially constrained' land. The constraint designations within this category are set out within the schedule below:

Constraint	Summary of constraint
Conservation Areas	Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposes a duty on local planning authorities to designate as conservation areas any 'areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'. Designation does not mean that development cannot take place, either within the area or within its setting, but that special consideration is required to preserve or enhance the character or appearance of the area.
Listed Buildings	There are three grades of listed buildings: Grade I buildings are of exceptional interest, Grade II* buildings are particularly important buildings of more than special interest; Grade II buildings are nationally important and of special interest.
Flood Risk 2	Land that is likely to be affected by a major flood, with up to a 0.1 per cent (1 in 1,000 year) chance of occurring each year.
Habitats; Grassland, Heathland, Wetland, Woodland and 'other' sites of Landscape or Wildlife Interest	Strategic wildlife habitat networks that identify areas of grassland, heathland, wetland, woodland and the potential to link sites of similar habitat types. The networks identify potential for protecting and enhancing habitats within the District

2.13 For each constraint the amount of 'partially constrained' Green Belt land within each of the areas of search has been calculated, both in hectares and as a percentage of the total search area. A case study example illustrating how these areas have been calculated has been included in Appendix 2.

Unconstrained Green Belt land

2.14 Within the defined 500 metre zones surrounding each settlement any land that not covered by 'highly constrained', 'medium constrained' or 'partly constrained' land designations has for the purposes of this Growth Assessment been termed 'unconstrained Green Belt land'. It is important to note that this land is not necessarily land that is sustainable or suitable for development as there many factors such as topography, recreational use, Saltaire world heritage site buffer, and historic landscapes, which were not fully taken into account in the study and which would require more detailed appraisal work.

2.15 The amount of 'unconstrained' and 'constrained' Green Belt land within each of the areas of search has been calculated, both in hectares and as a percentage of the total search area. A case study example illustrating how these areas have been calculated has been included in Appendix 2.

Potential strategic locations for growth

2.16 Element Two of the Bradford Growth Assessment subjects the sites that were put forward for development as part of the Bradford SHLAA and which are contiguous to the settlement boundary and comprise 'unconstrained' or 'partly constrained' land to sustainability testing.

2.17 However, the SHLAA sites on the edge of the built up area in the main represent only those sites which happen to have been promoted by landowners or developers. Some of these areas may eventually be considered as unsuitable development sites while there may also be other areas of land not promoted via the SHLAA process which perform better in sustainability terms than those that were. A key role of Element One of this study was therefore to supplement those SHLAA sites and ensure a comprehensive search for the most sustainable edge of settlement Green Belt locations has been undertaken. These additional areas arise from the remaining 'unconstrained' and 'partly constrained' land within the 500 metre zone and have been identified as 'strategic parcels' for potential growth. The strategic parcels surrounding each settlement have been mapped alongside the sites put forward for development within the SHLAA.

2.18 Thus although these strategic parcels have not have not been promoted for development, in whole or part, since they could potentially be considered to be locations to accommodate new development at some point in the future, they have been subjected to the Element Two sustainability testing.

Understanding a settlements environmental, social and economic roles

2.19 The NPPF outlines that the assessment of environmental, social and economic roles should not be undertaken in isolation, because they are mutually dependent. To help understand the current sustainability role each settlement within the District's settlement hierarchy performs, a consistent set of environmental, social and economic indicators have been identified and reviewed for each settlement. This review develops an understanding of the settlements various sustainability elements, such as: environmental capacity; provision of local services and community facilities; and employment and public transport accessibility etc.

2.20 As much as possible these indicators have used publicly available information drawn from the Local Plan evidence base as well as other up-to-date and relevant studies and assessment prepared by other statutory bodies and organisations. Some of the data used relates to electoral wards and therefore care is needed as in some cases the Core Strategy settlement areas cut across ward boundaries. The key sources of information used to understand the settlements environmental, social and economic roles include:

Environmental Element	**Principal Sources of Supporting Information and Evidence Source**
Green Belt	A strategic Green Belt review surrounding each of the settlements has been undertaken by Broadway Malyan using the Green Belt principles set out within the NPPF.
Previously Developed Land	Bradford Strategic Housing Land Availability Assessment.
Landscape	Bradford Landscape Character Supplementary Planning Document, October 2008.
Topography	The Bradford Landscape Character Supplementary Planning Document, October 2008 and topography analysis undertaken by Broadway Malyan.
Archaeology and Heritage	Bradford Conservation Area Appraisals; District archaeological and heritage records and the English Heritage online mapping service.
Nature Conservation	Bradford Replacement Unitary Development Plan Proposals Map and the Bradford Landscape Character Supplementary Planning Document, October 2008.
Flood Risk	Bradford Replacement Unitary Development Plan Proposals Map and the Environment Agency online mapping service
Hazards and	Bradford Replacement Unitary Development Plan Proposals

Environmental Element	Principal Sources of Supporting Information and Evidence Source
Contamination	Map and the Bradford Settlement Study Update, October 2011.
Renewable Energy	Renewable and Low Carbon Energy capacity Study for Yorkshire and Humber (2011).

Social Element	Information / Evidence Source
Social Demographics	Office for National Statistics 2001 and 2011 Census Ward level statistics and Population Counts at Output Area data; MOSAIC Household Count data; the Bradford Settlement Study Update, October 2011; and the Bradford Ward Economic Profiles, February 2012.
Retail Provision	Bradford Retail and Leisure Study, June 2008 and the Bradford Retail and leisure Study update, December 2012.
Education Capacity	Bradford District Education Organisation Plan, October 2012.
Local Community Facilities and Services	The Bradford Settlement Study Update, October 2011.
Public Open Space	Bradford Open Space and Recreation Study (2006).
Public Transport	Bradford District-Wide Transport Study in Support of the Core Strategy, October 2010; the Bradford Settlement Study Update, October 2011; National Rail Enquiries; and service information from public transport provider websites, e.g. First Connect.
Infrastructure	City of Bradford Metropolitan District Council Infrastructure Plan and CIL Viability Local Infrastructure Plan, December 2012.
Housing	Bradford Strategic Housing Market Assessment (2010)

Economic Element	Information / Evidence Source
Travel to work and job accessibility	Office for National Statistics 2001 Census Ward level statistics, the Bradford Settlement Study Update, October 2011; and the Bradford Ward Economic Profiles, February 2012.
Economic Demographics	Office for National Statistics 2001 and 2011 Census Ward level statistics; the Bradford Settlement Study Update, October 2011 and the Bradford Ward Economic Profiles, February 2012.
Local employment	The Bradford Settlement Study Update, October 2011, the Bradford Ward Economic Profiles, February 2012 and the Bradford Employment Land Review Update, 2011.
Employment Land	Bradford Employment Land Review, 2007, the Bradford Employment Land Review Update, 2011, the Bradford Settlement Study Update, 2011.
Regeneration	The Bradford Settlement Study, 2008; and the Bradford Settlement Study Update, 2011.
Transport Capacity and Opportunities	The Bradford Settlement Study Update, 2011; the Bradford District-Wide Transport Study in Support of the Core Strategy, October 2010; and the City of Bradford Metropolitan District Council Infrastructure Plan and CIL Viability Local Infrastructure Plan, December 2012.

Element Two: Green Belt Site Sustainability Testing

2.21 This section sets out how the Element Two assessment has been undertaken and the definitions and assumptions used. The aspects covered comprise:

- Assessed SHLAA Sites
- Assessed Strategic Parcels Derived from Element One of this Study
- Sustainability Testing Elements
- Assessment Outcomes.

Assessed SHLAA sites

2.22 To assist understanding of a sites contribution to achieving sustainable development, the SHLAA sites that are located outside the existing settlement boundary, but contiguous to the settlement boundary and comprise only land that is 'partially constrained' or 'unconstrained', as defined through the Bradford Growth Assessment Part One process, have been tested. SHLAA sites that are not contiguous to the settlement boundary, and/ or comprise land that is defined as medium or highly constrained land through the Bradford Growth Assessment Part One process have not been tested.

2.23 However, excluded SHLAA sites that are not contiguous to the settlement boundary, but comprise partially constrained or unconstrained land will still be subject to sustainability testing as they will fall within the larger strategic parcels of potential Green Belt land identified through the Element One existing policy constraints sieve process.

2.24 Although the Special Protection Area 400 metre to 2.5km buffer zone has been identified as a medium policy constraint within the Element One sieve mapping process, any SHLAA site that falls within this buffer zone has also been subjected to the Element Two sustainability assessment. The reason being that at the time of undertaking this Growth Assessment further SPA technical work surrounding the development and mitigation implications of providing new homes within this buffer zone was still being undertaken by CBMDC. Therefore the SHLAA sites falling within the 400 metre to 2.5km buffer zone have been subjected to the Element Two sustainability testing, but have been reported separately.

Assessed Strategic Parcels

2.25 The Bradford Growth Assessment Element One process identified land surrounding each of the 25 assessed settlements that is unconstrained within the definition of this study, or is land that is covered by partial constraints. Using durable boundary features, such as roads, rivers and protected woods etc, radiating away from the defined settlement boundaries, parcels of potential strategic Green Belt land that may be suitable for development were identified. These strategic parcels are all contiguous to the settlement boundary.

2.26 Although these strategic parcels have not been promoted for development and do not take account of aspects such as land ownership etc, they could, in whole or part, potentially accommodate new housing development at some point in the future. On that basis these

strategic parcels have been subjected to the same sustainability testing as the promoted SHLAA sites.

2.27 Strategic parcels that fall within the SPA 400m to 2.5km buffer zone have also been subjected to the Element Two sustainability testing, but have been reported separately.

Sustainability Testing Elements

2.28 To understand the contribution development would make towards achieving sustainable development, the SHLAA sites and strategic parcels have been subjected to testing against 10 environmental, 12 social and 2 economic sustainability elements. An assessment rating approach has been used that results in each site / strategic parcel being given a score for performance against the criteria elements. To provide an overall criteria assessment performance score the individual elements for each site and strategic parcel have been totalled. The maximum score a site can achieve is 96. The higher the score the better performing the site is against the assessment criteria.

2.29 The methodology and assumptions used to determine each of the assessment elements scoring thresholds is set out within the following schedule. It is important to note that sustainability testing has taken place at a strategic level and that further sustainability appraisal and assessment will take place in relation to later stages of Local Plan work.

Sustainability Criteria Element	Criteria Testing Threshold	Score	Testing Methodology and Assumptions
Environmental			
Green Belt	The land has a limited contribution to the function of the Green Belt and has durable boundary features	4	Consideration against the purposes of the Green Belt as outlined within paragraph 80 of the NPPF. Consideration has also been given to whether the land has durable or less durable boundary features. The methodology used for the Green Belt element is set out within Appendix 3.
	The land has a limited contribution to the function of the Green Belt and has less durable boundary features	3	
	The land contributes to the function of the Green Belt and has durable boundary features	2	
	The land contributes to the function of the Green Belt and has less durable boundary features	1	
	The land makes a significant contribution to the function of the Green Belt	0	
Previously Developed Land	The land is approximately 75 to 100% previously developed land	4	The NPPF encourages the effective use of land by reusing land that has been previously developed, provided that it is not of high environmental value, ahead of Greenfield land. This element determines the approximate previously developed land area. The NPPF's definition of previously developed land is used within this assessment.
	The land is approximately 50 to 74% previously developed land	3	
	The land is approximately 25 to 49% previously developed land	2	
	The land is approximately 1 to 24% previously developed land	1	
	The land is approximately 100% Greenfield	0	
Biodiversity, or Ecology	Development on the land is likely to maintain and potentially enhance existing biodiversity, or ecological features.	4	This element reviews the potential impacts and risk that development would have on existing identified international, national and local biodiversity, or ecology features within and immediately surrounding the site. The testing draws on existing publicly available information and evidence.
	Development is unlikely to result in a net loss or gain of existing biodiversity, or ecological features.	3	
	Development is likely to result in the loss of, or have a negative impact on existing biodiversity, or ecological features	2	
	Development is likely to result in the loss of, or have a negative impact on existing international or nationally important existing biodiversity, or ecological features. Potential	1	

	mitigation measures are identifiable		
	Development is likely to result in the loss of, or have a negative impact on existing international and nationally important existing biodiversity, or ecological features. There are currently no identifiable mitigation measures	0	
Flood Risk	The land is wholly within Flood Risk Zone 1	4	This assessment draws on the Environment Agency online Flood Risk mapping and the Bradford Strategic Flood Risk Assessment (SFRA). Flood Risk 1: This is land outside the functional flood plain. Flood Risk 2: These outlying areas are likely to be affected by a major flood, with up to a 0.1 per cent (1 in 1000) chance of occurring each year. Flood Risk 3: This area could be flooded: • from the sea by a flood that has a 0.5 per cent (1 in 200) or greater chance of happening each year; • or from a river by a flood that has a 1 per cent (1 in 100) or greater chance of happening each year.
	50% or more of the land is within Flood Risk Zone 1	3	
	Up to 50% of the land is within Flood Risk Zone 1	2	
	50% or more of the land is within Flood Risk Zone 2	1	
	50% or more of the land is within Flood Risk Zone 3	0	
Landscape	The land has 'High' existing landscape capacity	4	The landscape capacity of the SHLAA sites has been determined by the adopted Bradford Landscape Character Area Supplementary Planning Document and landscape appraisals undertaken by Broadway Malyan from public view points. The landscape assessment for the larger strategic parcels has been drawn from the adopted Bradford Landscape Character Supplementary Planning Document. The methodology for both the SHLAA and strategic parcel testing is set out within Appendix 4.
	The land has 'Medium-High existing landscape capacity	3	
	The land has 'Medium' existing landscape capacity	2	
	The site has 'Medium-Low existing landscape capacity	1	
	The site has 'Low' existing landscape capacity	0	
Topography	The land is broadly is flat	4	The more topographical variance across the site the more site levelling is required to accommodate development. The topography of a site therefore influences the suitability of a site. Using ordinance survey mapping and where
	The land is undulating	3	

	The land has a gentle slope	2	possible from public viewpoints site survey testing a subjective view of the lands overall topography has been undertaken.
	The land has a moderate slope	1	
	The land has a steep slope	0	
Trees and Woodland	Development would not result in the loss of any existing woodland or trees and there is potential for significant woodland creation on-site	4	This element comprises an aerial photography and where possible on site testing of existing tree and woodland coverage on the land. Checks for Tree Preservation Orders and Ancient Woodland that may impact the suitability of the land has also been undertaken. This element does not assess the arboricultural value of individual or groups of trees within or surrounding the land.
	Development on the land is unlikely to not result in the loss of any existing woodland or trees	3	
	Development on the land would potentially result in the loss of some woodland or trees, but any loss is likely to be appropriately mitigated on the land	2	
	Development is likely to result in the loss of woodland or trees, which is unlikely to be fully mitigated on land through new tree planting or woodland creation	1	
	Development is likely to result in the loss of Ancient Woodland and/or trees with Tree Preservation Orders	0	
Air Quality	Development has the potential to improve air quality by removing an existing source of potential air pollution	4	This element comprises a testing of potential identified air quality pollution sources within and surrounding the site. Add information about how this was assessed.
	There are no existing identifiable sources of pollution within close proximity to the land	3	
	The land is located within close proximity to a potential existing source of air pollution	2	
	The land is within close proximity to an AQMA	1	
	The land is located within an AQMA	0	
Contaminated Land	Over 75% of the land is likely to be of 'low to medium risk'	4	This element analyses potential existing identified contaminated land sources within and surrounding the site, for example active and former landfill sites. Further detailed technical assessment would be required in due course to verify and determine the exact extent of any contamination.
	Between 50 and 74% of the land is likely to be of 'low to medium risk'	3	
	Up to 49% of the land is likely to be either 'low risk' or 'medium to high risk'	2	
	Between 50% and 74% of the land is likely to be of 'high risk'	1	
	Over 75% of the land is likely to be of 'high risk'	0	

Historic Environment and Heritage	Development is likely to result in the enhancement and protection of a designated international, or national heritage asset	4	Existing identified historic environment and heritage assets that may be impacted by development on the land have been identified using existing publicly available evidence and assessments. The assessment has drawn from the Bradford and English Heritage historic asset lists.
	Development is likely to result in the enhancement and protection of an local heritage asset	3	
	Development is unlikely to have any impact on an identified heritage asset	2	
	Development is likely to have a negative impact on an identified heritage asset, but the impact could potentially be mitigated	1	
	Development is likely to result in the loss of a heritage asset	0	
Social			
Integration with the existing built character	The land has existing built form on all sides	4	The assessment is based on the number of sides the land abuts existing built form e.g. housing, employment, road etc. Land which integrates the most with the existing settlement is land that already abuts existing built form on all four sides; whereas the least integrated land will only abut existing built form on one or less one side.
	The land has existing built form on three sides	3	
	The land has existing built form on two sides	2	
	The land has existing built form on one side	1	
	The land only has partial built form on one side (less than 50% of the boundary)	0	
Settlement Hierarchy	The land is within the settlement zone surrounding the Regional City of Bradford	4	The Bradford Core Strategy Further Engagement Draft sets out a settlement hierarchy which focuses growth towards the higher order settlements. Consideration is given to where in the settlement hierarchy the land is located.
	The land is within the settlement zone surrounding a Principal Town	3	
	The land is within the settlement zone surrounding a Local Growth Centre	2	
	The land is within the settlement zone surrounding a Local Service Centre	1	
Existing health/ medical facilities	Within 400 metres	4	This element identifies accessibility to existing local health/ medical facilities e.g. the doctor's surgery. The rating assessment uses the 'Institute of Highways and
	Between 401 and 800 metres	3	

accessibility	Between 801 and 1,200 metres	2	Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance. Measured distances – see footnote at the end of the table.
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Existing primary school accessibility	Within 400 metres	4	This element identifies accessibility to the nearest existing primary school. The rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Existing secondary school accessibility	Within 400 metres	4	This element identifies accessibility to the nearest existing secondary school. The rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Nearest City, Town or District Centre accessibility	Within 400 metres	4	This element identifies accessibility to the nearest city, town or district centre identified within the Bradford town centre hierarchy. These centres provide convenience and comparison retail. These centres are also the focus for wider town centre activities such as leisure, entertainment, arts, culture and tourism. The rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	

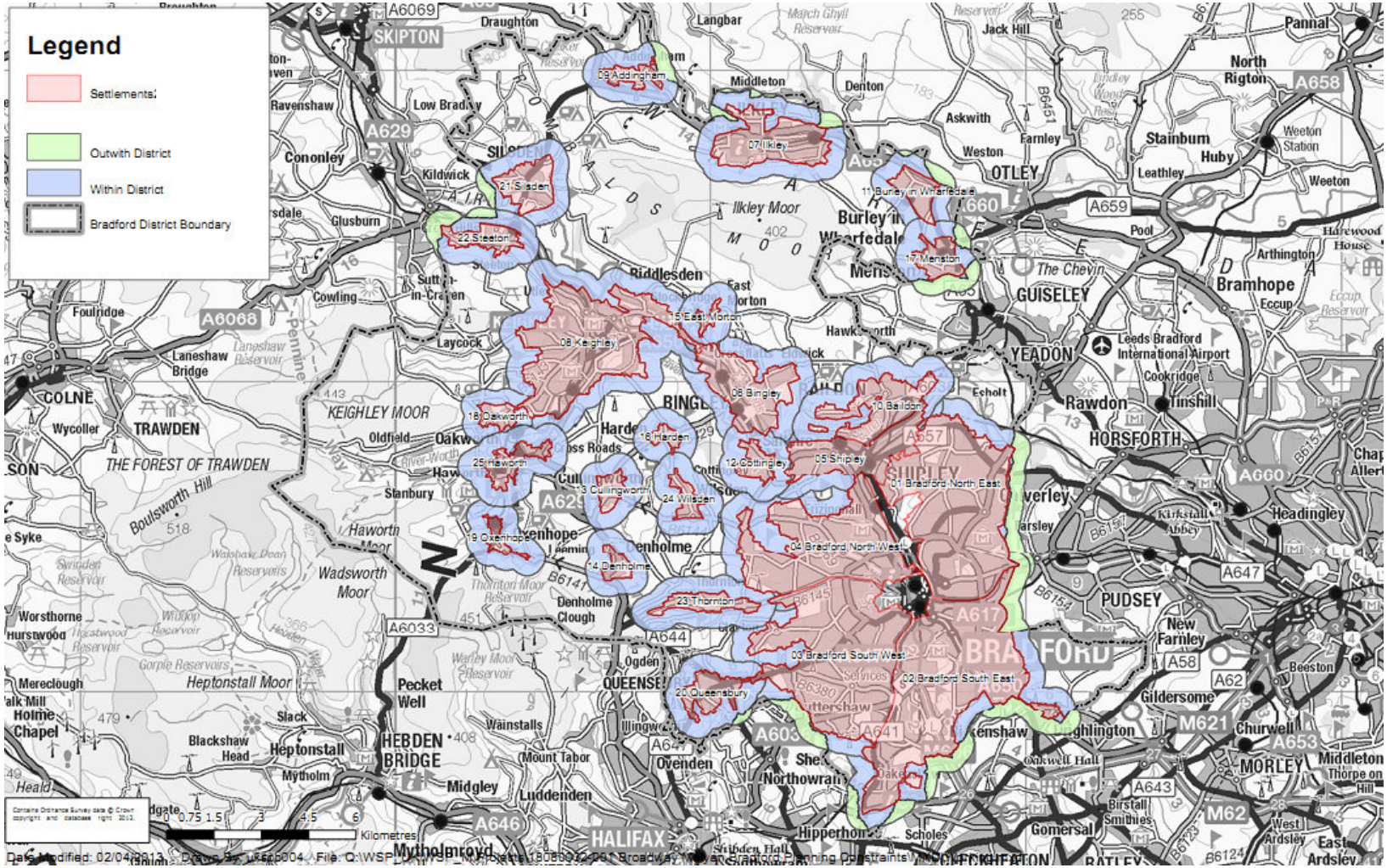
	3,861 metres +	0	Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
Existing local convenience store accessibility	Within 400 metres	4	This element identifies accessibility to the nearest existing local convenience store which is likely to meet day-to-day retail needs, such as a pint of milk. The rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Existing railway station accessibility	Within 400 metres	4	This element identifies accessibility to the nearest existing railway station. The rating assessment uses BMDC's established thresholds for assessing public transport accessibility. This looks to ensure where possible that development is within 800 metres of public transport. For this reason, distances greater than 800 metres have been scored zero.
	Between 401 and 800 metres	2	
	801 metres +	0	
Existing bus stop	Within 400 metres	4	This element identifies accessibility to the nearest existing bus stop towards the nearest town centre. The rating assessment uses BMDC's highway departments established thresholds for assessing public transport accessibility. This looks to ensure where possible that development is within 800 metres of public transport. For this reason, distances greater than 800 metres have been scored zero.
	Between 401 and 800 metres	2	
	801 metres +	0	
High frequency bus services	The site is within 400m of a bus service with 4+ buses to either Leeds, Bradford, Halifax, Skipton, Ilkley, Keighley, Bingley and/or Shipley per hour	4	Consideration is given to whether the land is located within a 400 metre zone of a high frequency bus service. The higher the bus service frequency the better the

	The site is within 400m of a bus service with between 2 and 3 buses to either Leeds, Bradford, Halifax, Skipton, Ilkley, Keighley, Bingley and/or Shipley per hour	2	accessibility public transport accessibility. However, where it was very apparent that the closest facility as the crow flies was not practically the closest facility, due to issues such as river or railway line crossing points, a comment has been added within the schedule and where appropriate, the score has been modified.
	The site is within not with 400m of a high frequency bus service to either Leeds, Bradford, Halifax, Skipton, Ilkley, Keighley, Bingley and/or Shipley per hour	0	
Existing public open space or recreation ground	Within 400 metres	4	This element identifies accessibility to the nearest existing public open space, urban greenspace, recreation open space, playing fields, village green space etc . To provide a consistent rating for all activities, the rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Existing children's equipped play area	Within 400 metres	4	This element identifies accessibility to the nearest existing children's equipped play area. To provide a consistent rating for all activities, the rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	
Economic			
Existing employment zone accessibility	Within 400 metres	4	This element identifies accessibility to the nearest existing Bradford employment zone as defined within the RUDP. These are locations within the main urban areas where existing industrial and business uses predominate. These zones provide potential employment opportunities for new
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	

	Between 1,201 and 3,860 metres	1	residents. To provide a consistent rating for all activities, the rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	3,861 metres +	0	
Existing employment site accessibility	Within 400 metres	4	This element identifies accessibility to the nearest medium to large employment site/ premises that provide potential local employment opportunities for new residents. These are businesses/ premises that are likely to have 25+ employees. To provide a consistent rating for all activities, the rating assessment uses the 'Institute of Highways and Transportation: Guidelines for Providing for Journeys on Foot' for the generally acceptable distances people will walk and the 'National Travel Survey: 2006 Bulletin: Average Length of Trips' average cycling distance.
	Between 401 and 800 metres	3	
	Between 801 and 1,200 metres	2	
	Between 1,201 and 3,860 metres	1	
	3,861 metres +	0	

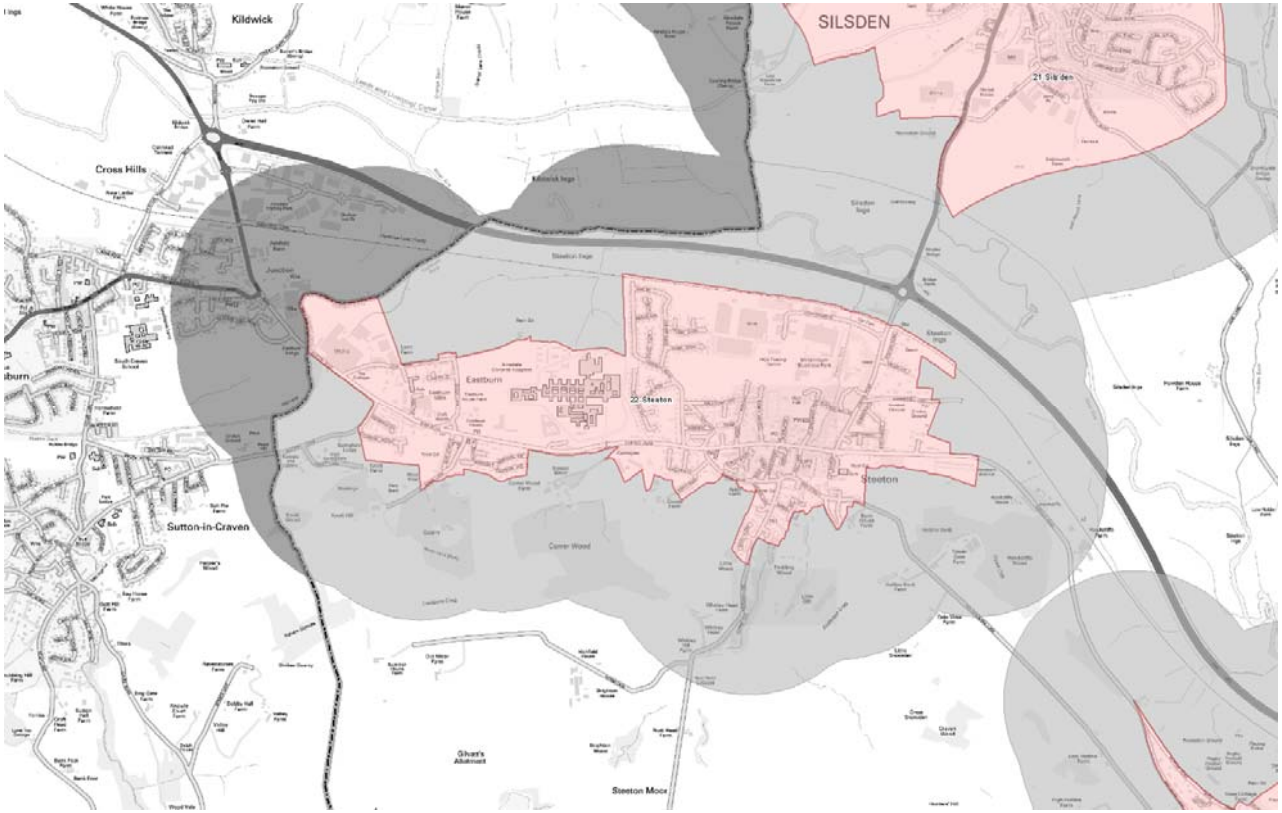
Measured Distances: Distance is measured 'as the crow flies' from the edge of the site to the edge community facility or service. Although this rating methodology does not take into account factors such as topography, legibility, safety etc it does provide a useful way of comparing general walking and cycling accessibility to key services and facilities. Aspects such as site topography are covered by specific assessment elements and also within the Element One settlement testing. However, where it was very apparent that the closest facility as the crow flies was not practically the closest facility, due to issues such as river or railway line crossing points, a comment has been added within the schedule and where appropriate, the score has been modified

Appendix 1: Map of Assessed Settlements and Areas of Green Belt Search



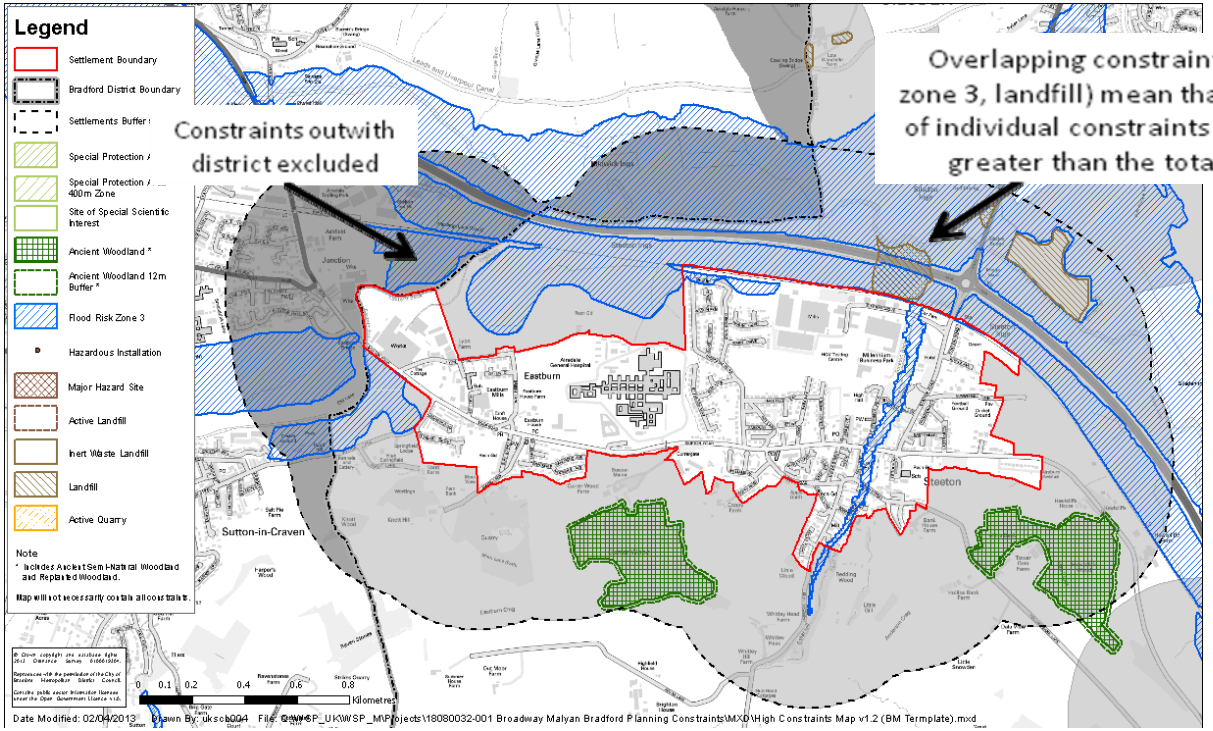
Appendix 2: Sieve Mapping Area Calculations Methodology Case Study Example

Total Settlement Area and 500 metre zone



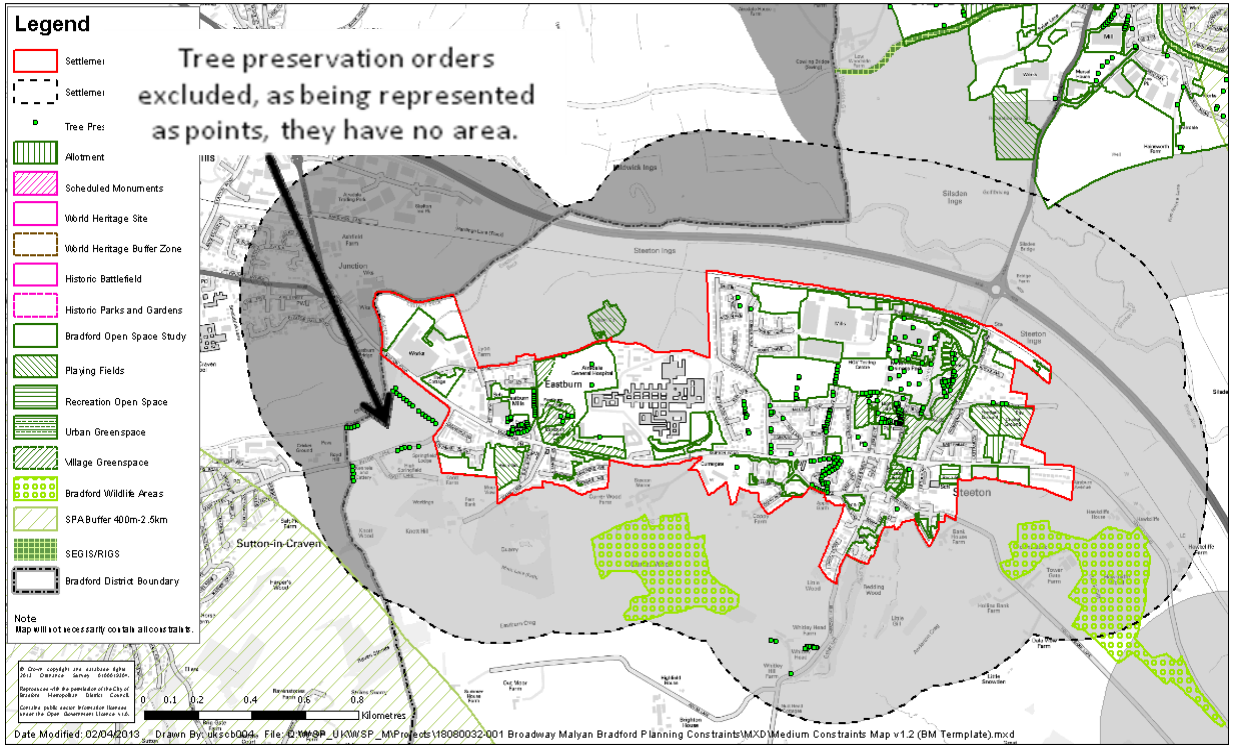
	Total Area	**Within District** (Light grey area)	**Outwith District** (Dark grey area)
Total Settlement Area	145.85 ha	n/a	n/a
Total area of 500m zone	432.23 ha	326.43 ha	105.80 ha

High Constraints



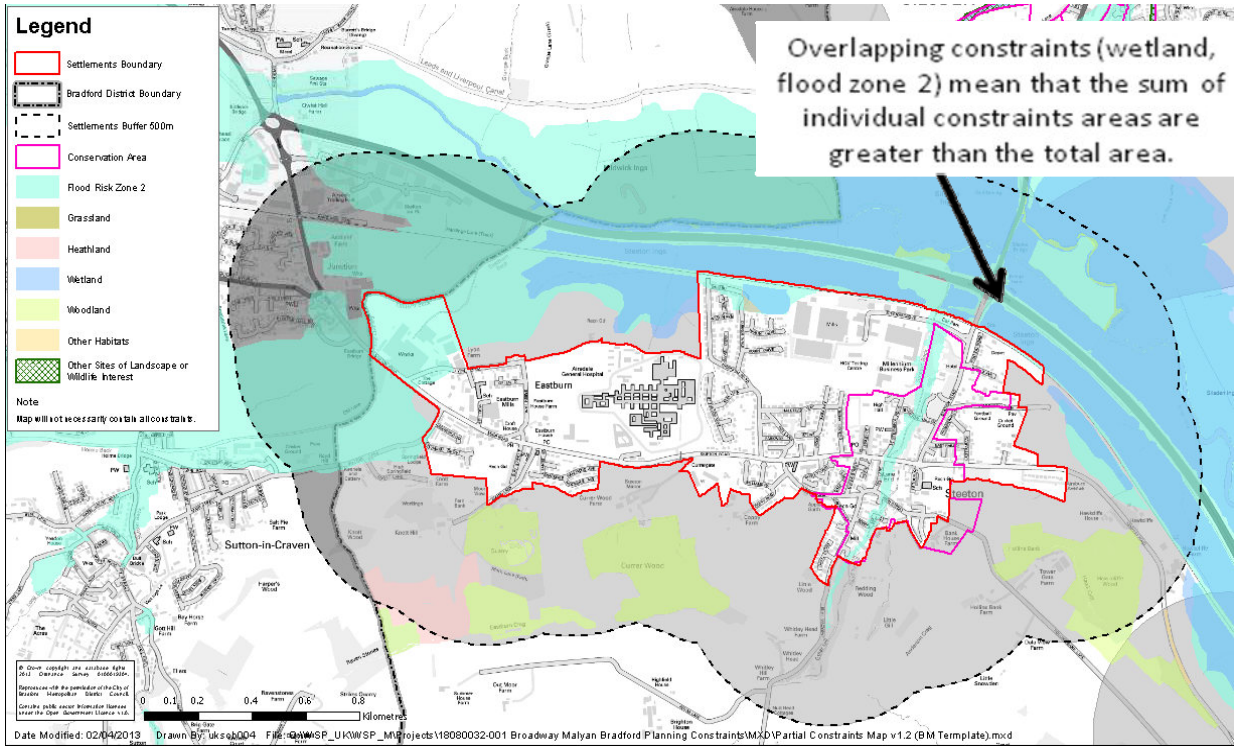
Settlement	Total area of High Constraints (500m zone)	Active landfill	Active Quarries	Ancient Woodland 12m Buffer	Flood Risk Zone 3	Inert Waste Landfill	Landfill	Major Hazard Site	SPA	SPA (400m Buffer)	SSSI
Steeton	132.71	0.00	0.00	27.85	99.30	0.00	8.68	0.00	0.00	0.00	0.00

Medium Constraints



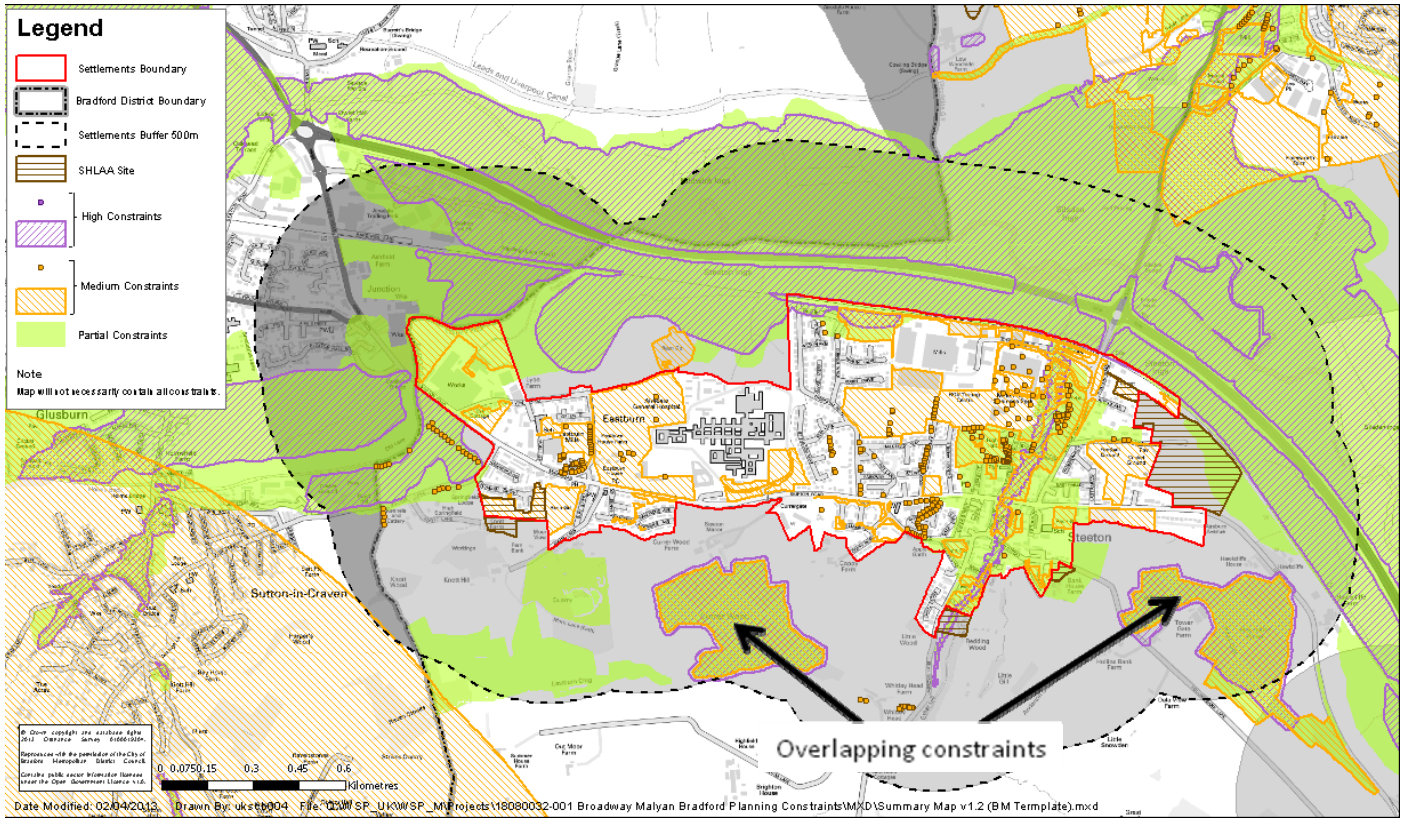
Settlement	Total area of Medium Constraints (500m zone)	Allotments	Bradford wildlife areas	Historic Battlefield	Historic parks and gardens	Playing fields	Recreation Open space	Scheduled Monuments	SEGIS/ RIGS	SPA 400m-2.5km Zone	Urban Greenspace	Village Greenspace	World heritage buffer zone	World heritage site
Steeton	25.10	0.00	23.93	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Partial Constraints



Settlement	Total area of Partial Constraints (500m zone)	Conservation Area	Flood Risk Zone 2	Grassland	Heathland	Other Sites of Landscape or Wildlife Interest	Other habitats	Wetland	Woodland
Steeton	174.22	2.38	0.00	0.00	6.00	0.00	0.00	85.66	35.39

Summary Map



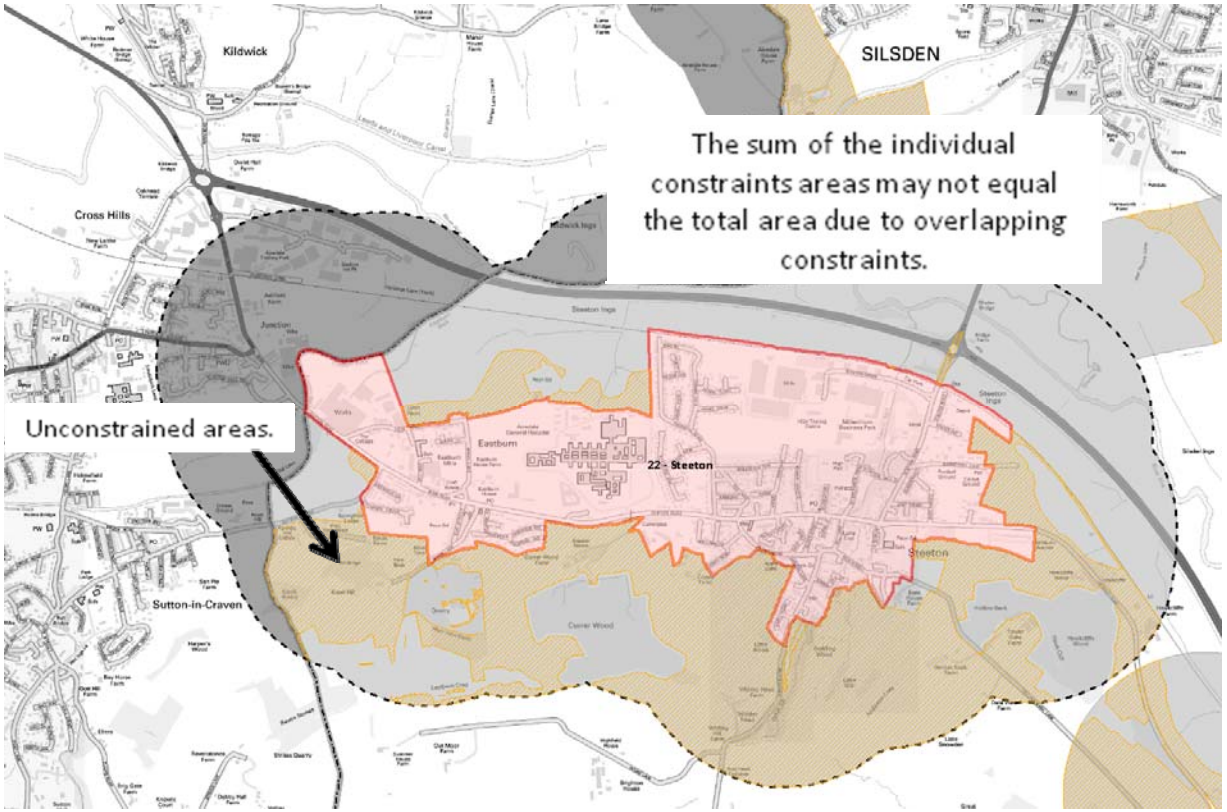
Collective high constraint policy designations: Area shaded purple

Collective medium constraint policy designations: Area shaded orange

Collective partial constraint policy designations: Area shaded green

Unconstrained land: area shaded grey

Constraints Summary and Unconstrained Area



Settlement	Total area of 500m zone (within district)	High	Medium	Partial	Unconstrained
Steeton	326.43 ha	132.71 ha	25.10 ha	174.22 ha	146.48 ha

Appendix 3: Green Belt Testing Methodology

To inform the sustainability testing score for the contribution the land makes to the performance of the Green Belt the following approach has been used:

PURPOSE: To check unrestricted sprawl of large built-up areas

Criteria	Criteria Definition	Category
What role does the land play in preventing ribbon development?	Limited Contribution – There are limited opportunities for ribbon development	GREEN
	Contributes – The land prevents some ribbon development	AMBER
	Significant Contribution – The land plays an important role in preventing ribbon development	RED

PURPOSE: To prevent neighbouring towns from merging into one another

Criteria	Criteria Definition	Category
What role does the land play in preventing settlements from merging and narrowing the gap between them?	Limited Contribution - The land does not perform a separation function between settlements.	GREEN
	Contributes – The land helps to maintain the gap between settlements	AMBER
	Significant- Removal of the land of land from the Green Belt would significantly close the existing gap between settlements to a point where the gap is eliminated or virtually eliminated. A reduction in the gap would compromise the openness of the Green Belt.	RED

PURPOSE: To assist in safeguarding the countryside from encroachment

Criteria	Criteria Definition	Category
Does the land safeguard the countryside from encroachment and are there clear strong and robust boundaries to contain development and prevent encroachment in the long term?	Limited Contribution – There is already significant encroachment within the land area and there are clear and robust durable boundaries to prevent further encroachment beyond the land area in the longer term.	GREEN
	Contributes – There is evidence of some encroachment within the land area and there are clear and robust boundaries to prevent further encroachment beyond the land area in the longer term.	AMBER
	Significant – The land prevents the encroachment of development into the open countryside. There are weak boundaries to prevent longer term encroachment.	RED

PURPOSE: To preserve the setting and special character of historic towns

Criteria	Criteria Definition	Category
Does the land have an impact on the special character of the settlement?	Limited Contribution - No key landmarks / assets or features in the historic core are visible.	GREEN
	Contribution - Partial visibility of key landmarks / assets or features into and/or out of the historic core.	AMBER
	Significant Contribution - Clear sight of key landmarks / assets or features into and /or out of the historic core.	RED

Overall outcome

GREEN – Land makes a Limited Contribution to Green Belt purposes
AMBER - Area makes a Contribution to Green Belt purposes
RED – Area makes a Significant Contribution to Green Belt purposes

As all of the land analysed lies outside the existing settlement boundary the Green Belt purpose of assisting urban regeneration, by encouraging the recycling of derelict and other urban land has been omitted from this testing.

Appendix 4: Landscape Score Methodology

SHLAA Site Landscape Testing

From public view points a visual landscape assessment of each SHLAA site was undertaken by Broadway Malyan between January and April 2013. These assessments provided a landscape sensitivity score and landscape value score that can be combined to provide an overall landscape capacity score. A summary of the scoring process is set out below:

Landscape Sensitivity

SHLAA	Inherent Landscape Qualities (intactness and condition) Low High	Contribution to distinctive settlement setting	Inconsistency with existing settlement form / pattern	Contribution to rurality of surrounding landscape	Contribution to separation between settlements	Sensitivity 1 - 5 Negligible 6 - 10 Slight 11 - 15 Moderate 16 - 20 Substantial 21 - 25 Major					Final Assessment Landscape Sensitivity
						5	10	15	20	25	
Notes											

Landscape Value

SHLAA	Landscape Designation Low High	Other Designation, (nature conservation, heritage, amenity, including flood zone)	Contribution to setting of 'outstanding assets'	Special cultural / historic associations	Perceptual aspects, (e.g. scenic beauty, tranquillity, wildness)	Sensitivity 1 - 5 Negligible 6 - 10 Slight 11 - 15 Moderate 16 - 20 Substantial 21 - 25 Major					Final Assessment Landscape Sensitivity
						5	10	15	20	25	
Notes											

Landscape Capacity Score						
		Landscape Value				
Landscape Sensitivity		**Major**	**Substantial**	**Moderate**	**Slight**	**Negligible**
	Major	Negligible 0	Negligible 0	Low 1	Low 1	Medium 2
	Substantial	Negligible 0	Low 1	Low 1	Medium 2	Medium 2
	Moderate	Low 1	Low 1	Medium 2	Medium 2	High 3
	Slight	Low 1	Medium 2	Medium 2	High 3	Very High 4
	Negligible	Medium 2	Medium 2	High 3	Very High 4	Very High 4

Strategic Parcels Landscape Testing

As the strategic parcels relate to significant areas of land surrounding each settlement it is not possible to undertake a robust visual landscape assessment. On that basis the adopted Bradford Landscape Character Supplementary Planning Document has been used as a consistent basis on which to assess the parcels. The scoring process used is set out below.

Landscape Condition	**Good**	Strengthen 2	Strengthen and Conserve 0	Conserve 0
	Declining	Strengthen and Enhance 4	Conserve and Enhance 2	Conserve and Restore 0
	Poor	Creation 4	Restore and Enhance 4	Restore 2
		Weak	**Moderate**	**Strong**
		Landscape Character		