

**Horsham District Council, Mid Sussex District Council & Crawley Borough Council**

## **New Market Town Study**

**Final Report: August 2010**



LD&A DESIGN



**GL HEARN**  
Property Consultants

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## **1. INTRODUCTION**

- 1.1 This Study examines the feasibility of bringing forward a New Market Town (NMT) within the A23 Corridor within West Sussex. It has been commissioned jointly by Crawley Borough Council (CBC), Horsham District Council (HDC) and Mid Sussex District Council (MSDC).
- 1.2 The Study has been undertaken by a multi-disciplinary consultancy team comprising GL Hearn (lead), LDA Design and WSP. Within the team, GL Hearn have provided strategic planning and development advice, LDA Design have provided high-level masterplanning inputs, whilst WSP have led advice on physical infrastructure requirements, including transport and utilities.

### **CONTEXT**

- 1.3 Crawley Borough Council, Horsham District Council and Mid Sussex District Council are all in the process of preparing their Local Development Framework (LDF) Core Strategies. The three authorities are working together to consider how best to meet the sub-region's development needs to 2026 and beyond.
- 1.4 Crawley Borough Council and Horsham District Council both adopted LDF Core Strategies in 2008. These consider development needs in the period to 2018. Both authorities are however progressing early reviews of these, in order to provide a framework for addressing development needs in the longer-term to 2026 and beyond. The existing Core Strategies both recognise the need for an early review.
- 1.5 Horsham District Council intends to publish its Core Strategy Review Preferred Strategy Document in summer 2011, while Crawley Borough Council is aiming to do so in early 2011.
- 1.6 Mid Sussex District Council adopted its Local Plan in 2004. This considers the development needs of the District to 2006, and is now out of date. At the time of writing the preparation of Mid Sussex's Core Strategy has been halted. The Council are making progress on a locally-generated housing needs assessment. Following the

preparation of this, work on the planning policy framework will commence.

- 1.7 The three authorities are working together at a sub-regional level to address strategic planning issues. They have jointly undertaken or commissioned a number of studies to examine development requirements or potential. These include a Strategic Housing Market Assessment, a joint Economic Appraisal and Employment Land Review, and the At Crawley Study 2009. The South East Plan, which has now been revoked, set out that the majority of future development within the Gatwick Sub-Region should be in the form of major developments at or adjoining Crawley and the other main towns within the north/south and east/west transport corridors. The At Crawley Study 2009 explored the potential for strategic development at Crawley.
- 1.8 The three authorities have separately progressed Strategic Land Availability Assessments (SHLAAs) which examine potential locations for new housing development, including within existing urban areas. These Studies confirm that there is likely to be a need for strategic development within the sub-region, in the form of urban extensions to existing towns or for instance a new market town.
- 1.9 The three authorities are each active participants in the Gatwick Diamond Initiative, a business-led private/public sector partnership which aims to maximise the economic performance of the sub-region. The sub-region includes the three local authorities within West Sussex, together with Mole Valley District Council, Reigate and Banstead Borough Council and Tandridge District Council in Surrey. It responds to the designation of the Gatwick area as a 'Diamond for Growth and Investment' within the South East Regional Economic Strategy, published in October 2006.
- 1.10 These six local authorities are working together to prepare an Integrated Spatial and Economic Strategy for the Gatwick Diamond. This aims to support sustainable growth within the sub-region and to coordinate strategic planning, through a bottom-up approach, across local authority boundaries.

- 1.11 The new Coalition Government has confirmed its intention to abolish the Regional Spatial Strategies, which in this case is the South East Plan. Against this context, the Integrated Spatial and Economic Strategy may provide a (non-statutory) means of coordinating strategic planning across the sub-region.
- 1.12 A key part of joint working, either at the Diamond level or between the three Northern West Sussex local authorities, is ongoing consideration of the provision of housing in terms of numbers and location principles, which includes issues relating to future settlement patterns; as well as the provision of new business floorspace, in terms of the amount and location, which includes the potential for a new business/ innovation district or districts.
- 1.13 This feasibility study examining the potential for a New Market Town forms one element of this wider programme of work. It can inform other joint working, such as in preparing the Integrated Economic and Spatial Strategy at the sub-regional level, and the three respective authorities LDF Core Strategies.
- 1.14 The three Councils have no preconceived idea as to whether a New Market Town should or should not be brought forward within the sub-region. It is being considered alongside other options, which include the potential for development at Crawley and other major settlements within the sub-region.
- 1.15 The purpose of the Study is thus effectively to undertake a robust feasibility exercise which first and foremost examines the potential for a New Market Town. It addresses a number of interrelated questions:
- Where a new settlement might be located with good or potentially good transport links to adjacent settlements;
  - What form it should take, including: what scale it might be; the mix of uses; and whether it should be a single settlement or more polycentric in concept;
  - What infrastructure would be required for it to be delivered; and how this can be achieved;
- How the form and scale of development and infrastructure requirements relate to one another in terms of feasibility/ viability concerns.
- 1.16 The approach adopted in the Study has been not to get side-tracked by issues of number counting or housing requirements. These issues will be addressed elsewhere. The Study instead focuses on exploring the potential of a New Market Town to addressing long-term housing need and demand arising from all three authorities.
- 1.17 In embarking on the Study, the client and consultancy team recognised that to progress a New Market Town, it would be important to build buy in and support to the concept – at a corporate and political level – and to consider cross-authority governance structures. These factors could be as important as the technical considerations in assessing the potential feasibility of a New Market Town, and thus the second element of the Study involved initial consideration of these issues.
- 1.18 The technical component of the work has assessed the suitability and availability of land to deliver a New Market Town, within and immediately beyond an ‘area of search’ defined by the three Councils. It has considered potential alternative options for the location and structure of the town. It has also assessed the deliverability of it, considering infrastructure requirements, including transport, highways and utilities infrastructure. This report thus provides a robust site selection and options assessment, and careful consideration of the feasibility and deliverability of a New Market Town, responding to the requirements of PPS12.
- 1.19 GL Hearn has developed a good understanding of the housing market and economic dynamics within the sub-region and infrastructure requirements from its involvement in previous joint studies for the three local authorities. These include the Strategic Housing Market Assessment, the At Crawley Study 2009 and the Gatwick Sub-Region Economic Appraisal & Employment Land Review. These have informed this Study.

## **OBJECTIVES**

- 1.20 The Councils' fundamental requirement is that the Study developed further their understanding of the suitability, availability and deliverability of a potential new market town concept and possible location in the Study Area in or adjoining the A23 Corridor, particularly in terms of transport, highway, infrastructure and viability constraints and opportunities.
- 1.21 The key objectives established in the Councils' study brief are as follows:
- Assessment of all potential 'new settlement' locations in and adjoining the A23 corridor, within the broad area of search defined;
  - Assessment of potential 'new settlement' structures, such as single or polycentric model; and related locations based on a potential size of settlement of 10,000 dwellings<sup>1</sup>, employment provision and associated uses, including on the basis of multiple development locations which could together form a 'new settlement;'
  - Identification of potential development constraints and opportunities for the identified location(s), including in regard to: masterplanning; environmental constraints; transport and highway constraints; utility constraints and requirements; and other development constraints;
  - Advice regarding what approaches and mechanisms could be employed to address any significant delivery constraints identified, in order to bring forward development in the period to 2031 (if feasible);
  - Commentary regarding development delivery for each of the options for new settlement structures and location, covering delivery constraints, opportunities and indicative phasing;

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<sup>1</sup> although the location, deliverability and viability should determine the critical mass of development in each location

- Assessment of the suitability of the new settlement location(s) to accommodate sub-regional or strategic employment development, either solely, or in conjunction with strategic residential development.

- 1.22 The Study provides an assessment of potential 'showstoppers' to delivery of a New Market Town and considers the impacts and constraints associated with it, to inform spatial planning choices.
- 1.23 The Study has also involved investigation of potential governance structures for taking forward the proposal, including advice on potential arrangements for joint authority planning and decision-making.

## **REPORT STRUCTURE**

- 1.24 This report is presented to the client team initially as a draft for comment.
- 1.25 This report is structured as follows:
- Section 2: Study Context;
  - Section 3: Landscape & Environmental Constraints;
  - Section 4: Transport & Highways Constraints;
  - Section 5: Utilities Infrastructure Constraints;
  - Section 6: Settlement Role & Function;
  - Section 7: Emerging Vision & Principles for a New Market Town;
  - Section 8: Options for Location and Structure;
  - Section 9: Preferred New Settlement Option;
  - Section 10: Addressing Deliverability Issues;
  - Section 11: Governance and Next Steps.



## 2. STUDY CONTEXT

### PLANNING POLICY CONTEXT

2.1 When preparation of this Study commenced, the statutory development plans comprised the South East Plan (the Regional Spatial Strategy (RSS)) together with the Local Development Frameworks of the three respective local authorities.

2.2 However, during the course of preparation of the Study, the new Coalition Government has (in July 2010) revoked the Regional Spatial Strategies and returned spatial planning responsibilities, including responsibilities for determining housing requirements, to local authorities.

#### *The South East Plan*

2.3 While the South East Plan has now been revoked, it provides a useful context in highlighting some of the key strategic planning issues in the sub-region.

2.4 The South East Plan set out a strategy for the Gatwick Sub-Region of maximising the potential for sustainable economic growth whilst maintaining and enhancing its character, distinctiveness, sense of place and important features.

2.5 It made provision for high value-added economic growth, in accordance with smart growth principles, together with provision of 36,000 homes (net) over the plan period to 2026. Of this housing requirement, 33,500 was to be delivered within Crawley and those parts of Horsham and Mid Sussex Districts which fall within the Gatwick Sub-Region; with 50% of the total requirement to be delivered in Mid Sussex.

2.6 The plan set out that the majority of future development should be in the form of major developments at or adjoining Crawley and the other main towns within north/south and east/west transport corridors.

2.7 It identified a number of potential strategic development locations within the sub-region. These include the North East Sector and westward expansion of Crawley; westward expansion of Horsham; south-east and south-west expansion of Haywards Heath; and west and south-west expansion of East Grinstead.

#### *The Future of Strategic Planning*

2.8 A key election pledge of both the Conservative and Liberal Democrat Parties was, if elected, to abolish the Regional Spatial Strategies and the housing targets contained within them. The new Government enacted this in July 2010, returning decision-making powers on planning and housing to local authorities. It is now for the three local authorities to consider what level of new housing should be provided for and in what locations.

2.9 The three local authorities are each considering what level of housing development they should plan for to meet local needs.

2.10 To inform the development of the three authorities respective LDF Core Strategies (or reviews), the three Councils have collaborated in undertaking a number of evidence-based studies, including this Study. The three authorities are also working together, with other local authorities within the Gatwick Diamond, to prepare an Integrated Spatial and Economic Strategy.

2.11 The approach adopted in this Study has been not to get side tracked by issues of number counting and future housing requirements. We assume that these issues will be addressed elsewhere. This Study focuses on exploring the potential of a New Market Town to contribute to addressing long-term housing need and demand arising from all three authorities. It aims to contribute to consideration by each of the three local authorities, through a 'bottom-up approach,' to how it might meet long-term future development needs.

#### *LDF Status & Timescales*

2.12 Crawley Borough Council and Horsham District Council both have existing Core Strategies which were adopted in 2008. These make



provision for development needs to 2018, informed by targets for housing and employment development contained within the West Sussex Structure Plan. Both Core Strategies recognise the need for an 'early review' to take account of long-term development needs.

- 2.13 Horsham and Crawley's adopted Core Strategies make provision for strategic development West of Crawley. The two Councils have worked together to bring forward a Joint Area Action Plan for this, which was adopted in July 2009 and allocates land West of Bewbush for a new neighbourhood of 2,500 dwellings.
- 2.14 Horsham's Core Strategy makes provision for strategic development West of Horsham for 2,000 dwellings. Crawley's Core Strategy makes provision for strategic development in the North East Sector, for 2,700 dwellings.
- 2.15 Both Councils are now undertaking reviews of their Core Strategies to consider longer-term development needs, to 2026 in Crawley and to 2031 in Horsham District.
- 2.16 Crawley Borough Council awaits the Secretary of State's decision regarding whether to allow the appeal for the development of the North East Sector. It is anticipated that consultation on a Preferred Strategy will take place in early 2011.
- 2.17 Horsham District Council intends to undertake consultation on a Preferred Strategy in Summer 2011.
- 2.18 The progress of Mid Sussex's Core Strategy has been delayed for a variety of issues, not least difficulties in delivery of strategic infrastructure concern over wider community involvement. At the time of writing, the preparation of Mid Sussex's Core Strategy has been halted in its current form. The Council is making progress on a local housing needs assessment. Following this, work on the planning policy framework will recommence.
- 2.19 A number of potential strategic development sites are currently being considered by the three local authorities. These include development

north of Horsham, east of Billingshurst, west of Southwater, and west of Ifield (within Horsham District<sup>2</sup>); east of Crawley and north of Burgess Hill (within Mid Sussex District). Smaller scale development has been considered at Haywards Heath and East Grinstead<sup>3</sup>. The potential for a New Market Town Needs to be considered and assessed alongside these.

#### **OTHER STUDIES**

- 2.20 This Study has been informed by a number of other studies which GL Hearn has undertaken or led, dealing with sub-regional strategic planning. These comprise:
- Northern West Sussex Strategic Housing Market Assessment (GVA Grimley with GL Hearn);
  - Northern West Sussex Economic Appraisal & Employment Land Review, Parts I and II (GL Hearn and Regeneris Consulting);
  - At Crawley Study 2009 (GL Hearn with Parsons Brinkerhoff and AECOM);
  - Horsham District Locally-Generated Needs Study (GL Hearn and JG Consulting).
- 2.21 In the development of this Study the project team has also reviewed and drawn on the Gatwick Diamond Water Cycle Study, Gatwick Diamond DaSTS Scoping Study<sup>4</sup>, and the Horsham Infrastructure Study 2010.

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<sup>2</sup> See Horsham Core Strategy Review: Shortlist of Sites

<sup>3</sup> Based on discussions with MSDC Officers

<sup>4</sup> The DaSTS Study responds to the Department for Transport's Agenda for Delivering a Sustainable Transport System. It explores the way in which the transport network can be modified, adapted or improved.

**IDENTIFICATION OF THE AREA OF SEARCH**

- 2.22 The Area of Search for a New Market Town has been identified by the three authorities based on an understanding of strategic constraints to development within the sub-region (comprising their three local authority areas) and the existing settlement pattern.
- 2.23 The delivery of a new settlement within the northern part of the sub-region is constrained by the High Weald Area of Outstanding Natural Beauty which stretches from Horsham and the A281 west through the sub-region. Its southern boundary lies to the north of Bolney and the A272. To the south of the sub-region lies the South Downs National Park.
- 2.24 Within the area between the AONB and the National Park, the Area of Search has been defined with regard to the location of existing settlements and the existing transport infrastructure.



### 3. LANDSCAPE AND ENVIRONMENTAL CONSTRAINTS

#### OVERVIEW OF APPROACH

- 3.1 The Councils' Brief to Consultants identified a broad area of search for a new settlement. This area lies to the west of the A23, stretching from the Bolney Junction south to Albourne and east along the A272 to Cowfold. It forms a triangle shape bounded by these three settlements at the respective corners.
- 3.2 The first stage of assessment requires analysis of landscape and environmental constraints to assess and identify potentially suitable land for future development. This is land which offers a suitable location and would contribute to the creation of sustainable communities.
- 3.3 This initial 'sieving exercise' is used to identify areas which could accommodate new development and inform identification of potential options for the location and structure of the New Market Town.
- 3.4 The suitability of land is influenced by a number of factors including:
- policy restrictions, including environmental designations;
  - physical problems, e.g. access, ground conditions, or flood risk;
  - environmental conditions, which might reduce its attractiveness as a place to live/ work; and
  - potential impacts, such as on landscape features and conservation.
- 3.5 GL Hearn has worked previously with the three authorities to undertake the At Crawley Study 2009. As part of this Study, a review of key objectives within the three authorities current/ emerging LDF Core Strategies and the Sustainability Appraisals of these was undertaken. This was used to develop a sustainability matrix against which to assess the potential for strategic development 'At Crawley,' This identifies core indicators relevant to examining the potential for

strategic development. The approach adopted herein is consistent with this.

- 3.6 The approach recognises that there are a range of indicators commonly used in assessing the relative merits of potential development sites which are not relevant when considering development of this scale. It is assumed for instance that in designing a New Market Town that the town would include retail, employment and leisure floorspace; as well as social infrastructure, such as schools and healthcare. Therefore current access to these facilities is not a relevant factor in determining the relative merits of different potential locations.
- 3.7 The review of relevant documents undertaken identified the following core sustainability objectives.

Figure 3.1: Core Sustainability Objectives

- **Housing:** access to good quality affordable housing that meets local need;
- **Community:** maintaining vitality and viability, and affords access to local services;
- **Health:** improves health and wellbeing and reduces health inequalities;
- **Employment:** maintains, supports and promotes a diverse employment base, and contributes to economic competitiveness;
- **Water:** reduces risk of flooding, and where possible maintains and enhances water quality levels;
- **Transport:** ensures good access to local amenities, reduces road congestion and promotes a choice of modes;
- **Resources:** efficiency in use of resources, including water, energy and materials. Make efficient use of land;
- **Air Quality:** maintains and where possible enhances air quality;
- **Climate:** reduces greenhouse gas emissions, including by encouraging provision and use of renewable energy;
- **Ecology & Landscape:** conserves and enhances biodiversity, as well as landscape and townscape character;
- **Cultural Environment:** conserves and enhances the historic and cultural environment, including important green spaces;
- **Waste:** contributes towards sustainable waste management.

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3.8 In common with the At Crawley Study we have used a two tier approach; identifying 'Tier 1' constraints which would be likely to severely limit the potential to achieve planning approval for development in these areas within a viable timescale because of national planning policy. These comprise:

- Areas of Outstanding Natural Beauty (AONB);
- Sites of Special Scientific Interest (SSSI);
- Special Protection Areas (SPA);
- Special Areas of Conservation (SAC);
- Flood Zones 2 & 3 (less than 1 in 1000 year probability).

3.9 Tier 2 constraints reflect ecological, cultural and other factors which influence the relative sustainability and impact of potential alternative development locations. It may be possible to mitigate the impact of development on these factors or to avoid harm to them through masterplanning. Tier 2 constraints comprise:

- Sites of Nature Conservation Importance (SNCI);
- Ancient Woodland<sup>5</sup>;
- Local Nature Reserves;
- Conservation Areas;
- Scheduled Ancient Monuments (SAMs);
- Listed Buildings;
- Historic Parks and Gardens;
- Grades 1, 2 or 3a Agricultural Land.

3.10 There are no SSSIs or Local Nature Reserves within or close to the area of search.

3.11 There is a high degree of protection afforded in law to Scheduled Ancient Monuments (SAMs), and in national planning policy to listed buildings and the setting of them. There are no SAMs within the Area

of Search although Ewhurst Manor in Shermanbury to the west of the Area of Search is a SAM. It is envisaged that the potential impact of development on listed buildings and their setting can be addressed and mitigated through subsequent masterplanning. This is reflected in the Tier 2 status of these factors.

3.12 The third level of assessment undertaken has involved assessing landscape and visual impact, drawing on Horsham and Mid Sussex District's landscape character assessments together with a visual inspection and high-level assessment of the area of search. This work was undertaken by LDA Design.

3.13 The approach adopted to assessing environmental, heritage and landscape constraints represents an initial high-level assessment. Both the Consultants and client teams recognise that further detailed assessment will be required should the proposal for a New Market Town be progressed. This will include assessment of non-designated environmental and heritage assets.

#### 3.14 ENVIRONMENTAL CONSTRAINTS MAPPING

3.15 GL Hearn has mapped Tier 1 and Tier 2 constraints.

##### *Tier 1 Constraints*

3.16 The key Tier 1 constraint within the Area of Search is the floodplain of the River Adur and its tributaries.

3.17 The Area of Search falls outside of the High Weald Area of Outstanding Natural Beauty, which stretches from Horsham and the A281 west through the Gatwick Diamond sub-region. The southern boundary of the AONB lies to the north of Bolney and the A272.

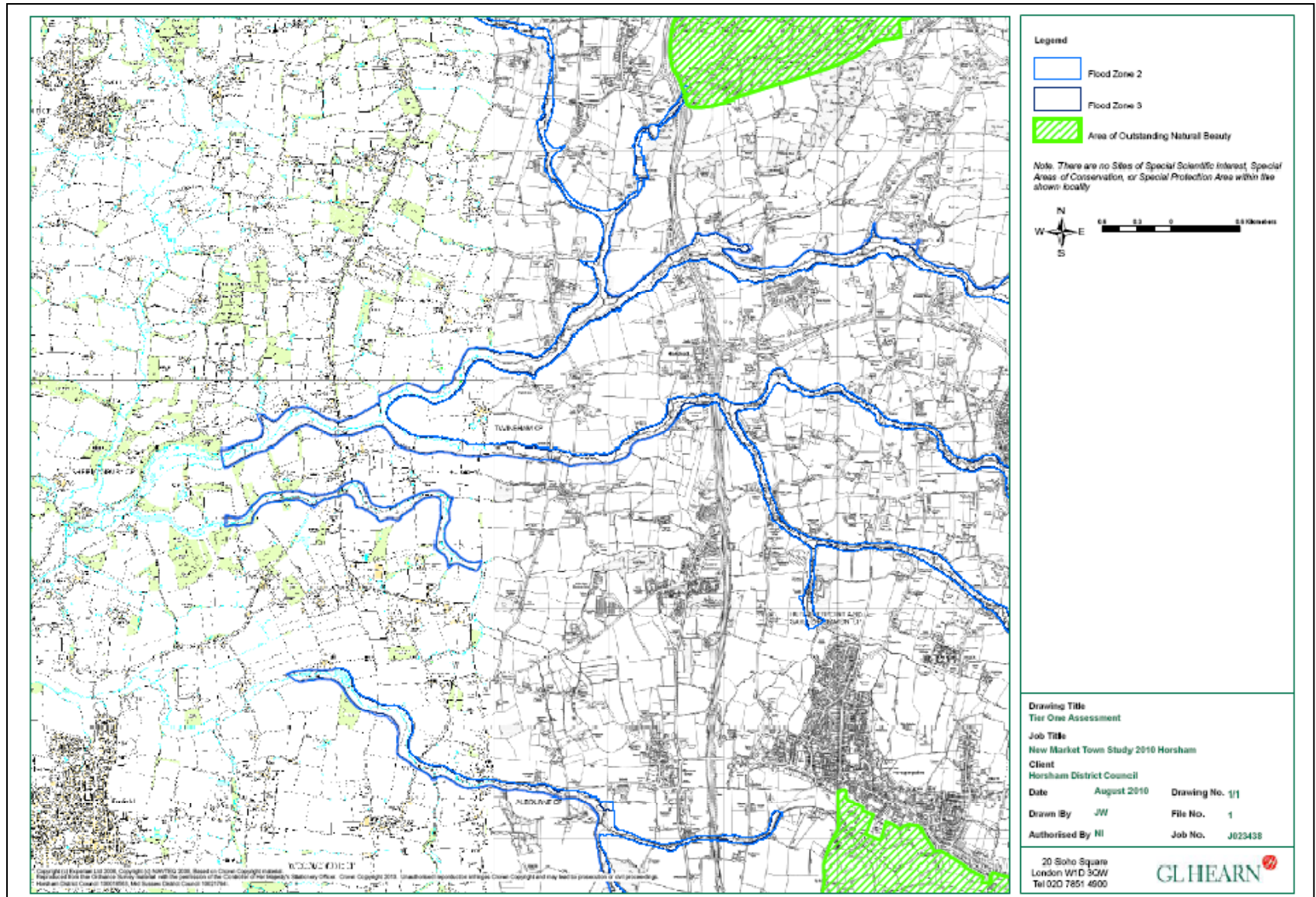
3.18 Special Protection Areas (SPA) and Special Areas of Conservation (SAC) are strictly protected sites for rare and vulnerable birds, and for key habitats and species respectively. They are protected in accordance with the EC Birds Directive and EC Habitats Directive.

3.19 No parts of the Area of Search are classified as Special Areas of Protection or Special Areas of Conservation.

<sup>5</sup> As recorded by Natural England in May 2010

- 3.20 The River Adur runs from Ricebridge on the A23 to the north of the Hickstead Interchange gently south-west through the Area of Search to Wineham and on to the A281 to the south of Shermanbury.
- 3.21 There are a number of tributaries which run through or close to the Area of Search. Herrings Stream runs from Hickstead Bridge on the A23 west through the Area of Search, joining the River Adur to the north of Wyndham Farm. There is a further brook running west from Sawyers Common to Shermanbury. Further south, Cutlers Brook runs from the South of Albourne gently north west to join the Adur at Betley Bridge south of Partridge Green.

Figure 3.1: Tier 1 Environmental Constraints



- 3.22 As Figure 3.1 indicates there is a floodplain associated with the River Adur and its tributaries which cannot be regarded as developable.
- 3.23 Increased downstream runoff from urban development within the Adur catchment could also represent a constraint to development. This could increase the risk and impact of flooding in Upper Beeding in the south of Horsham District. Our assessment identifies however that this could be mitigated by provision of flood alleviation measures within the New Market Town, such as balancing ponds of Sustainable Urban Drainage Systems (SUDS).
- Tier 2 Constraints**
- 3.24 Tier 2 ecological designations include Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland. These are mapped in Figure 3.2.
- 3.25 Within the Area of Search there are areas of Ancient Woodland, which is the key Tier 2 constraint to development. In the north of the Area of Search this includes Roughgrass Wood and Pond Wood, to the south of the Bolney Junction, Pond Wood south west of Crosspoint, Purvey's Hill and Pit, and Toll Copse; as well as Nye Copse and Priosbush to the east of Wineham Lane. Further west Ancient Woodland includes woodland north of Bankfield Grange and Tainfield Wood to the east of this.
- 3.26 In the central part of the Area of Search, Ancient Woodland includes woodland to the south of Bob Lane at North Lodge and south of Mercers Cottage together with Tansy Wood in Hickstead.
- 3.27 To the south of the area, Ancient Woodland includes Spinning Wood and Paddock Wood off Wineham Lane, Woodhouse Wood further south; Blackstone Gate Wood and woodland to the east of Blackstone Lane on the B2116 Henfield Road. Further west it includes woodland to the north of Valley Farm, together with Sayers Common Wood and Coombe Wood south of Sayers Common.
- 3.28 The areas of Ancient Woodland shown on Figure 3.2 incorporate those identified in the Review of the Ancient Woodland Inventory for Mid Sussex District (High Weald AONB Unit, Feb 2007).
- 3.29 There are no Local Nature Reserves within the Study Area nor Sites of Nature Conservation Importance. The nearest SNCI is to the east of the A23 at Pond Lye, north-east of Burgess Hill.
- 3.30 Tier 2 cultural designations include Historic Parks and Gardens, Scheduled Ancient Monuments, Listed Buildings and Conservation Areas.
- 3.31 The only historic park and garden within the Area of Search is Oakdene Park on the A272 near Cowfold. Beyond this, the nearest are Chestham Park and Ewhurst Manor in Shermanbury to the east of the A281. Ewhurst Manor is also a Scheduled Ancient Monument.
- 3.32 There are numerous listed buildings which lie within the Area of Search, as indicated in Figure 3.3. These are focused in existing settlements, including Hickstead and Cowfold, and along the roads which traverse the area including Wineham Lane. Any development within the Area would have to take account of and minimise impact on the setting of listed buildings. Further detailed assessment will be required to inform any subsequent masterplanning.
- 3.33 The Agricultural Land Classification (ALC) System classifies land into five grades, with Grade 3 subdivided into 3a and 3b. The best and most versatile land is defined as Grades 1 (Excellent), 2 (Very Good) and 3a (Good) and is protected by national policy guidance. As Figure 3.4 indicates, agricultural land within the Area of Search is predominantly Grade 3.
- 3.34 Development of land within the Area of Search would likely incur loss of moderate/ good quality agricultural land (Grade 3). Further investigation will be required to determine whether land is Grade 3a or Grade 3b.
- 3.35 There are areas of land to the south of the Area of Search, including around Albourne, which are Grade 2.



Figure 3.2: Tier 2 Ecological Designations

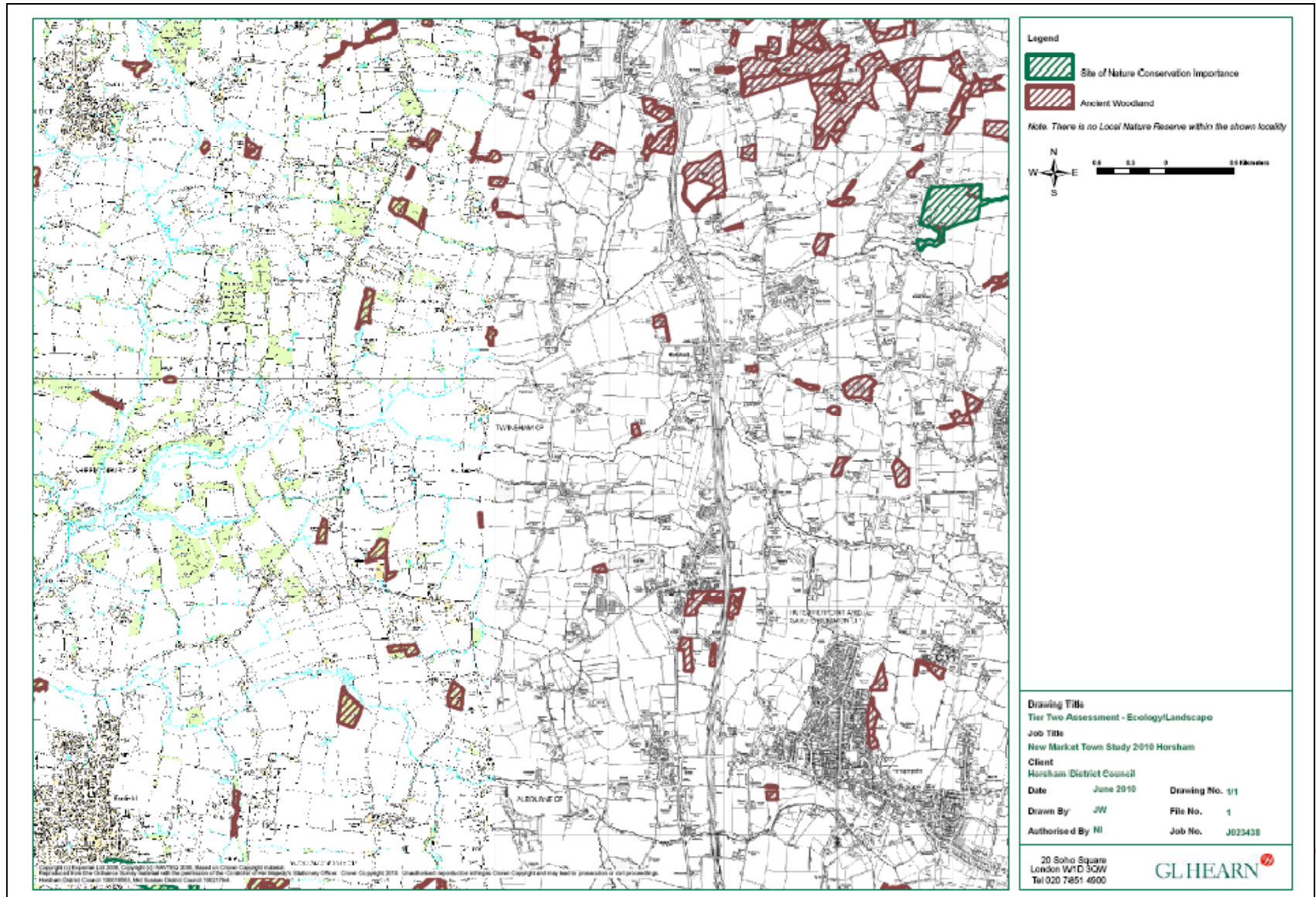


Figure 3.3: Tier 2 Cultural Designations

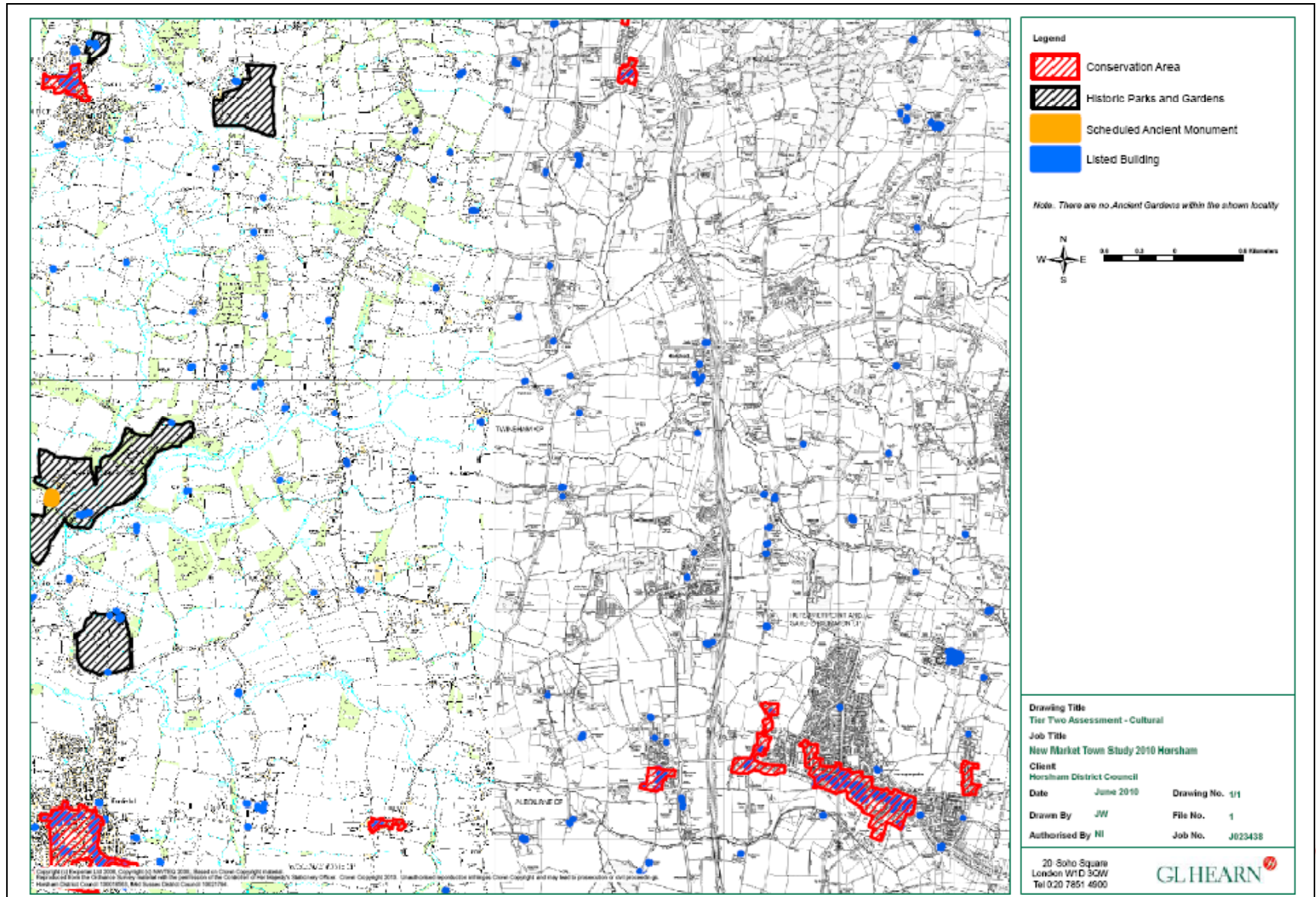
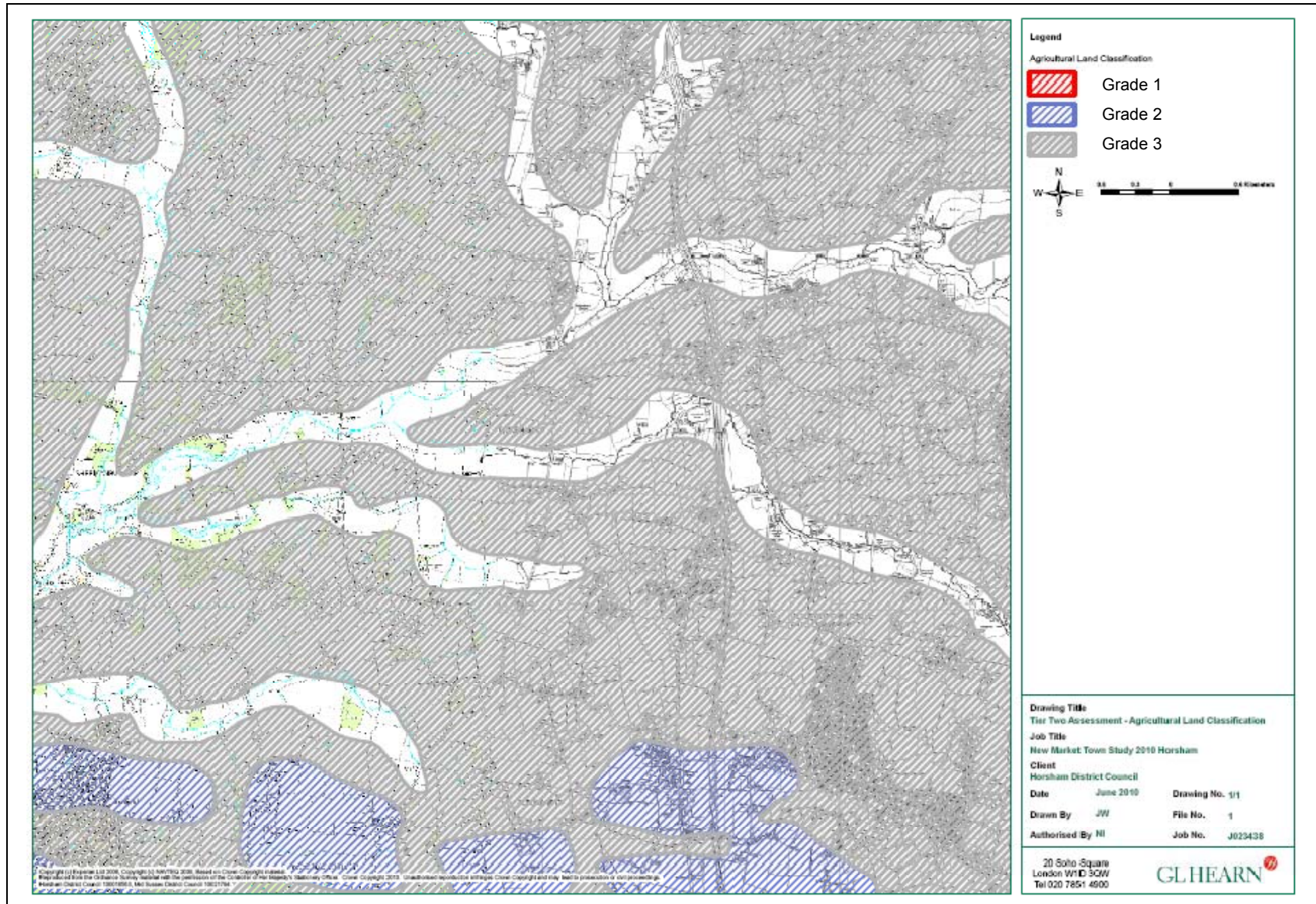


Figure 3.4: Tier 2 Agricultural Land Classifications



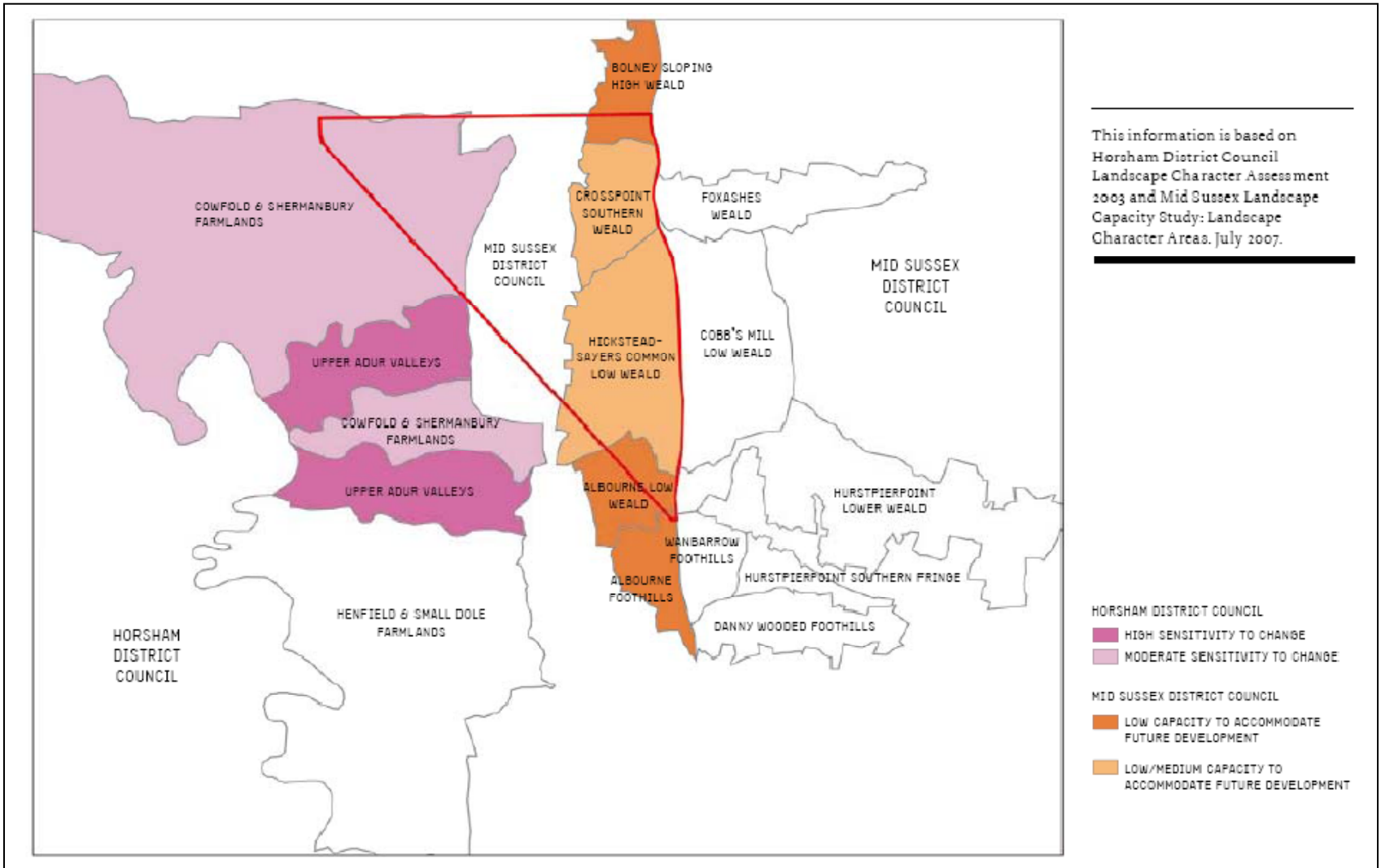
### LANDSCAPE CHARACTER

- 3.36 All landscapes are important and contribute to a healthy and sustainable natural environment and the West Sussex landscapes are a highly valued resource, widely recognised for their diversity, scenic beauty, productivity, recreational uses and their wildlife importance. The West Sussex landscape forms a key ingredient to the quality of life in the region. In looking at the potential location for a new market town we have considered these important landscapes in three ways:
- in terms of an environmental constraint, by seeking to avoid damage to the most valued landscapes;
  - by considering the contribution these landscapes could make to the character and identity of the new town; and
  - lastly, the creation of new landscapes as part of the new market town and their contribution to the broader landscape resource of this part of West Sussex.
- 3.37 From the outset, the identification of the Area of Search looked to avoid the two nationally important designated landscapes in the area. To the north lies the High Weald Area of Outstanding Natural Beauty comprising rolling hills of sandstones and clays, lying between the North and South Downs. This area is characterised by a complex pattern of hills, valleys and ridges with a typically small scale patchwork of fields, woodland and remote villages. In great contrast, to the south of the study area lies the South Downs, now part of the South Downs National Park and comprising the dramatic north-facing chalk downland scarp that forms a continuous ridge along the skyline.
- 3.38 The study area is located midway between the North Weald and the South Downs. Although this area has no formal landscape designation it is nevertheless, an attractive landscape that typifies the generally high landscape quality of West Sussex. In Natural England's National Landscape Character Map it is located within a large character area defined as the Low Weald. This landscape is typically described as:
- Broad, low lying and gently undulating clay vales underline a small-scale intimate landscape enclosed by an intricate mix of small woodlands, a patchwork of fields, and hedgerows.
  - Topography and soils vary locally in relation to higher drier outcrops of limestone or sandstone, which are commonly sites of settlements.
  - Low Weald generally includes an abundance of ponds and small stream valleys often with wet woodlands of alder and willow.
  - Tall hedgerows with numerous mature trees link copses, shaws and remnant woodlands which combine to give the Low Weald a well-wooded character. Field trees, usually of oak but now declining.
  - Grassland predominates on the heavy clay soils while lighter soils on higher ground support arable cropping in a more open landscape.
  - Rural in character with dispersed farmsteads, small settlements often include mainly timber and brick-built traditional buildings where not now dominated by recent urban development.
  - Historic settlement pattern was dictated by a preference for higher drier outcrops of limestone or sandstone with moated manor houses being a characteristic feature.
- 3.39 LDA Design and GL Hearn have reviewed the Horsham District Landscape Character Assessment (Chris Blandford Associates, 2003) and Landscape Character Assessment for Mid Sussex (Hankinson Duckett Associates, 2007). These studies identify a number of character areas, which are shown in Figure 3.5.
- 3.40 Horsham District's assessment provides a very comprehensive baseline analysis and assessment of landscape character for the western part of the study area. Mid Sussex District Council has completed a landscape capacity study which does not extend far enough west to complete the picture. However, we would summarise the broad conclusions as set out below.
- 3.41 To the west of the study area there are two landscape character areas identified in the Horsham Landscape Character Assessment (see figure 3.a Landscape Character Areas) and these are:

- Cowfold and Shermanbury Farmlands: and
  - Upper Adur Valleys.
- 3.42 Horsham's Landscape Character Assessment indicates that for the Cowfold and Shermanbury Farmlands the overall sensitivity is moderate and that intervisibility is moderate to high, that means there are reasonably unobstructed views within and across this landscape. In the Upper Adur Valley landscape character area there is a high sensitivity to change due to their unspoilt quality and the high intervisibility.
- 3.43 The middle part of the study area within Mid Sussex District has not been assessed however a landscape capacity study undertaken by the District concluded that two large character areas; the Hickstead Sayers Common Low Weald and the Crosspoint Southern Weald both located in the study area had low to medium landscape capacity. A landscape character area at the northern end of the study area, the Bolney Sloping High Weald has a high sensitivity and a low landscape capacity.
- 3.44 Due to the original requirements of the Mid Sussex Landscape Study, there is not a detailed picture of the landscape resource. We have referred back to the previous 2005 Landscape Character Assessment undertaken by the Council itself. This identifies two character areas within the Area of Search: Hickstead Low Weald, and the Upper Adur Valley.
- 3.45 It states that the Hickstead Low Weald comprises lowland mixed arable and pastoral landscape with a strong hedgerow pattern. It is gently undulating comprising low ridges and clay vales drained by the upper Adur streams. Key settlements include Hickstead and Sayers Common, with Hickstead Place together with Christ Church in Sayers Common contributing to local distinctiveness. It has a high level of perceived naturalness and a rural quality west of the A23.
- 3.46 The Upper Adur Valley comprises smaller pastures in the valley bottoms with mixed arable and pastoral farming, with medium to large-sized fields on the valley sides. It has a network of hedgerows. Its character is essentially the same as the Low Weald. The assessment identifies the importance of retaining the unique identity of the valley including its floor and current drainage pattern as an important landscape and wildlife corridor.
- 3.47 The existing landscape capacity assessments have not specifically assessed the capacity of the landscape to absorb a new settlement, but do provide useful information on landscape characteristics. Our assessment has thus drawn on the various studies, as well our own high-level assessment of landscape character and quality (undertaken by LDA Design). This has been informed by site visits within the area of search, as well as to surrounding landscape features such as the main towns in the sub-region and the South Downs.
- 3.48 The general conclusion we would draw from a combination of our own observations and backed up by the assessment work is as follows:
- Baseline landscape quality across the whole of the study area and its immediate context is very high, as it is across the whole sub-region and that new development outside any of the urban areas will diminish the landscape resource in some way but it does avoid damage to the most sensitive and the most highly valued landscape resources.
  - The differences in landscape quality and landscape character across the study area are fairly fine-grained and subtle and on their own would not be very strong factors in determining the final location for the new market town.
  - There are generally bigger fields and flatter areas to the south of the study area defined by the Adur Valleys and the area west of Hickstead and although they have higher sensitivity due to their intervisibility they also look to be suitable areas for accommodating development on this scale.
  - One of the key aims should be to make the New Market Town as compact as possible and to protect the landscape setting of the villages that characterise this area including larger settlements like Cowfold and Henfield and the smaller scattered villages and hamlets in the area such as Twineham Green, Wineham, High Cross.
  - The historic landscape pattern of north-south lanes marked by individual mature hedgerow Oaks is very much part of the

character of this landscape and the new Market Town must use this and other key landscape features as basis for developing its new identity.

**Figure 3.5: Landscape Character Areas**



This information is based on Horsham District Council Landscape Character Assessment 2003 and Mid Sussex Landscape Capacity Study: Landscape Character Areas, July 2007.

Figure 3.6: Surrounding Character



Figure 3.7: Local Character





**KEY VIEWS**

- 3.49 Although the location of the Area of Search avoids the most sensitive landscapes, one of the key considerations will be longer distance views of a new Market town particularly from the South Downs. As well as being a highly popular tourist and leisure destination it affords splendid panoramic views looking north right across the study area to the North Weald and beyond. We looked at two key viewpoints either side of the A23, Devil's Dyke and Jack and Jill Windmills, both points very popular with walkers and sightseers. These are illustrated in Figures 3.8 and 3.9.
- 3.50 From these viewpoints it is evident that even large settlements such as Haywards Heath and Burgess Hill are mostly absorbed by the extensive and expansive Low Weald landscape. The degree of woodland cover and the gently rolling landscape creates a mosaic within which there are tiles or parts that are clearly urban but in the most it is green and rural in character. Settlements such as Henfield are difficult to pick out due to the landscape cover and our initial conclusion is that a compact New Market Town could be absorbed into this expansive mosaic of landscape without having a significant visual impact on those using and enjoying the South Downs. This clearly would need much greater modelling and study at the next stage but it is our initial view that the landscape and visual impact of a development of this scale would be manageable.

**POWER LINES**

- 3.51 A further key physical constraint within the Area of Search is the presence of overhead power lines. Within the Area of Search there is a major sub-station, the Bolney Sub-Station off Wineham Lane.
- 3.52 National Grid's electricity transmission system is made up of 400kV, 275kV and 132kV power lines. Bolney is a sub-station on the main National Grid 400kV line serving Southern England which runs from Dungeness to Portsmouth and Southampton and then further West.
- 3.53 The Bolney Sub-Station lies in the middle of the Area of Search. The 400kV line runs west from the A23 to the sub-station and then north-east towards Cowfold. It is likely to be prohibitively expensive to

relocate or underground the 400kV and thus this can be regarded as a fixed constraint.

- 3.54 A number of other overhead power lines run through the site, including three 132kV lines and two 33kV lines. These are managed by EDF Energy. It would be possible to relocate or underground these at a cost. Further detail is provided in the assessment of Utilities Infrastructure Constraints.

**SUMMARY**

- 3.55 Through this section we have identified a number of issues which will affect the spatial location and masterplanning of a New Market Town.
- 3.56 A critical issue relate to the impact of the power lines on the development potential of different parts of the Area of Search. We consider in the next section the potential to relocate or underground the power lines. This can be regarded as a potential 'showstopper.'
- 3.57 The main Tier 1 constraint is the River Adur floodplain, which development will need to avoid. There is however the potential for the River to form a green corridor through the settlement. The potential downstream impacts of increased runoff will need to be addressed, potentially through use of balancing ponds and SUDS. These can be used to mitigate impact.
- 3.58 Key Tier 2 constraints would impact upon the spatial configuration and more detailed masterplanning of a new settlement. These include areas of ancient woodland, where coverage is stronger in the northern part of the Study Area; as well as numerous listed buildings, whereby masterplanning would need to consider the impact of development on the setting of these.
- 3.59 Delivery of a new settlement within the Area of Search would result in the loss of Grade 3 agricultural land and would have a high impact on the landscape in an area which is currently predominantly rural with limited urban development. It would also be visible from the South Downs National Park but could be absorbed into the mosaic of landscape without having a significant visual impact on those using and enjoying the South Downs. These factors do not represent

absolute constraints, but need to be considered in the balance of factors in assessing the relative suitability and sustainability of various potential development options.

- 3.60 Differences in landscape character and quality are fairly fine grained and subtle and on their own would not be strong factors in determining the final location of a New Market Town. However a key aim should be to make the town as compact as possible and to protect the landscape setting of the existing villages in the area.
- 3.61 These constraints, together with the location of power lines, have informed the identification of potential locational options considered in Section 8.
- 3.62 Further detailed investigation of environmental, heritage and landscape assets would be required should the proposal for a New Market Town be progressed. This should draw a range of available resources, including the Historic Environment Record maintained by West Sussex County Council and its wider environment and heritage expertise.

Figure 3.8: Panorama 1 from South Downs (Jack & Jill Windmills)

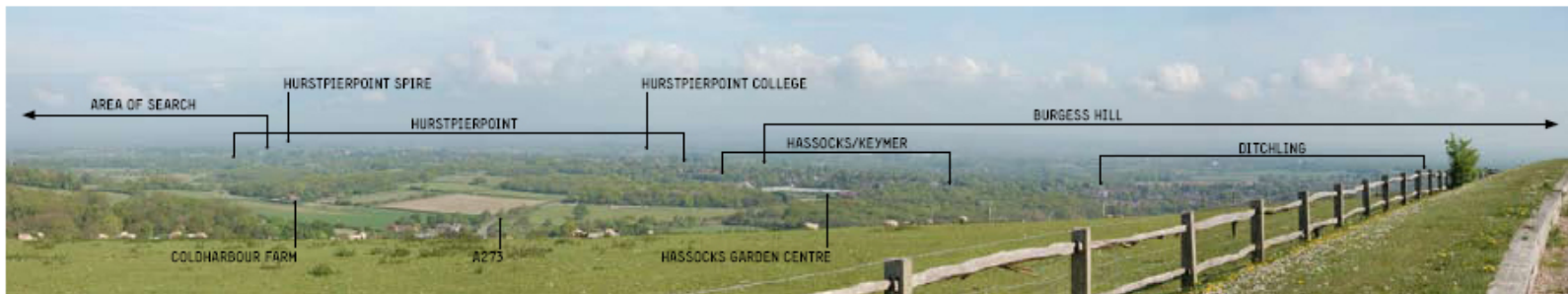
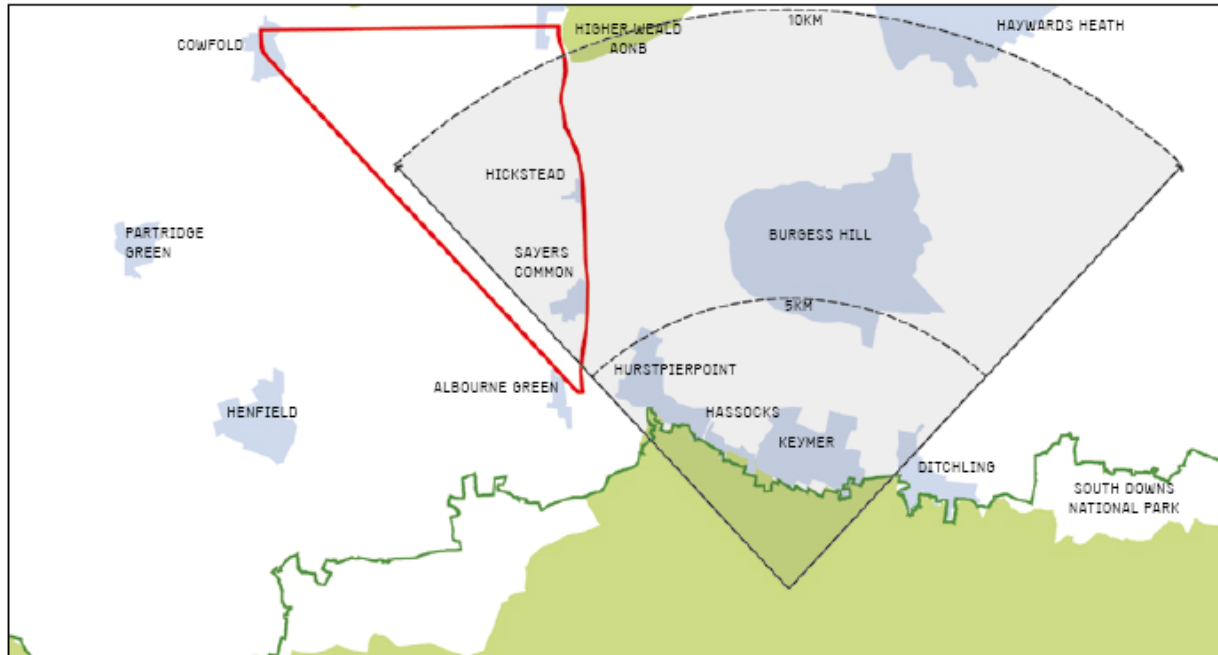
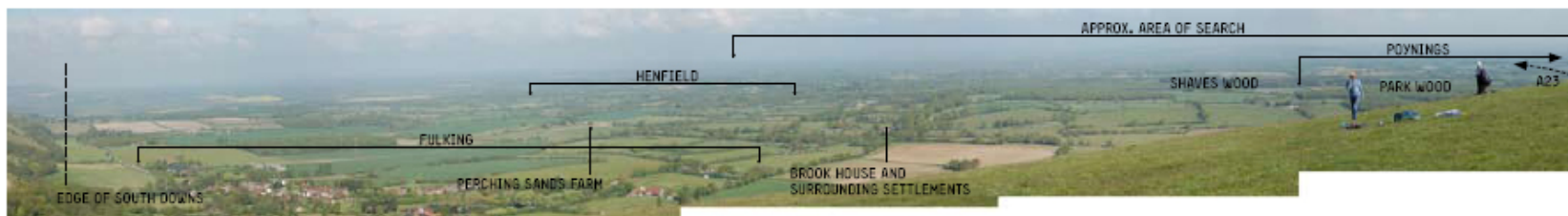
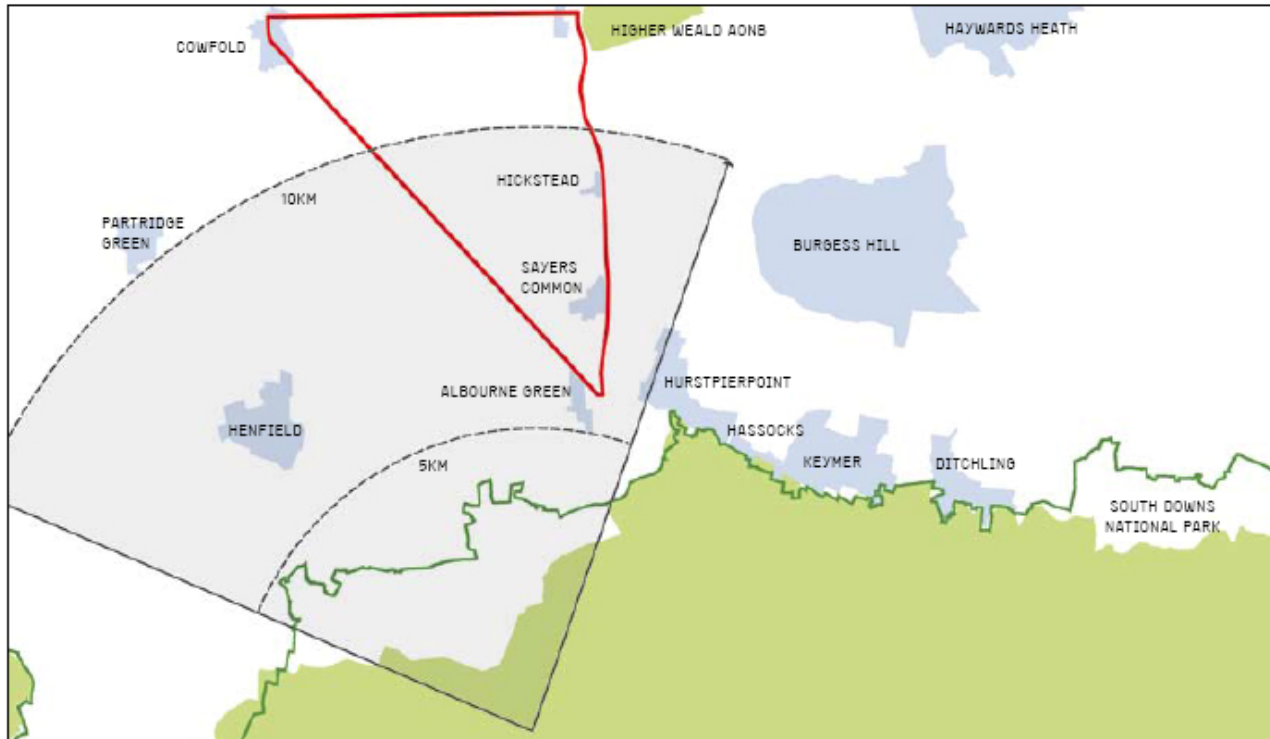


Figure 3.9: Panorama 2 from South Downs (Jack & Jill Windmills)





## 4. TRANSPORT & HIGHWAYS CONSTRAINTS

### OVERVIEW OF APPROACH

- 4.1 This Chapter considers the following key elements:
- The capacity of the Transport Network;
  - Demand for Travel to and from the development;
  - Options for Vehicular Access;
  - An outline Public Transport Service Strategy;
  - Demand Management and Mitigation Measures; and
  - A high level review of development traffic impact, concentrating on the A23
- 4.2 West Sussex County Council (WSCC) published the draft Local Transport Plan (LTP3) for consultation in July 2010 with adoption expected in April 2011. This was published after the drafting of this Report.
- 4.3 WSP have taken reasonable endeavours to engage WSCC in the study but were directed to the WSCC pre-application protocol. WSCC have however provided comments on a draft of this report which have been considered.
- 4.4 Forecast travel demand without development will result in modest levels of congestion and delay across the transport network. The effects of which will lead to various levels of:
- trip diversion (adopting alternative routes, some of which may be less suited to high volumes of traffic),
  - peak spreading (travelling at different times),
  - mode shift (adopting alternative forms of travel), and

- trip suppression (combining trips with other purposes or simply not travelling)

4.5 As a principle it is generally accepted that LTP3 will not provide sufficient funding to redress the rate of network traffic growth and thus the level of congestion and delay will progressively increase. To mitigate the effects of development it is assumed that the scale of infrastructure improvements necessary will need to demonstrate conditions that are no worse (nil-detriment) should development not occur.

4.6 It is understood that as part of the strategic growth in Burgess Hill that improvements to the A2300 corridor could be supported by development in the area. Thereafter no formal transport improvements have been identified, save those forming part of the regional transport strategy (RTS) or Route Utilisation Strategy (RUS) for the rail network.

### TRANSPORT NETWORK CAPACITY

#### Rail Network

4.7 The RUS identifies planned improvements to rail infrastructure and services to support economic growth in the region to 2019, some of which have already taken place by increasing the number of stops on the Gatwick Express, extending the service to Brighton at peak times, and extending train and station platform lengths.

4.8 In the locality there are a number of key mainline railway stations that are likely to attract travel demand, listed relative to passenger numbers (per year, 2007/8) at adjacent settlements:

- Haywards Heath – 3.8M
- Horsham – 2.4M
- Crawley – 1.9M
- Burgess Hill – 1.5M
- Hassocks – 991,000

- Wivelsfield – 463,000

4.9 Regional trends suggest that passenger growth has typically increased by 1.5-2.5% per annum with higher levels of growth in some areas. Based on scheduled improvements the RUS assumes passenger growth will increase around 10-12% during the Regional Transport Strategy period, after which other improvements may be required.

### Strategic Road Network (SRN)

4.10 The A23 is the main north-south corridor in central West Sussex. It forms part of the SRN and is part of the trunk road network, managed by the Highways Agency (HA). Typically the corridor includes dual two and three lane carriageways. In summary from north to south these are:

- Dual 3-lane carriageway, north of Handcross to the M23
- Dual 2-lane carriageway, Handcross (B2100) to Warninglid (B2115)
- Dual 3-lane carriageway, Warninglid (B2115) to Hickstead (A2300)
- Dual 2-lane carriageway, Hickstead to A273 Pyecombe
- Dual 3-lane carriageway, A273 Pyecombe to A27

4.11 The study area for the proposed settlement aligns with 2-3 existing junctions on the A23, which include:

- A23/A272 Bolney Junction – Dumb-bell grade separated interchange with some compact grade separated loops.
- A23/A2300 Hickstead Junction – Dumb-bell grade separated interchange with Grade separated junction
- A23/B2118 Sayers Common Junction – North facing slip roads

4.12 The A23 was recently (Spring 2010) the subject of a Public Inquiry associated with potential improvements to the A23 between Handcross and Warninglid, responding to the strategic improvement needs for regional housing delivery. These works would reduce direct access to the A23 providing accommodation roads parallel to the SRN, widening the trunk road to dual 3-lanes for this section.

4.13 From the traffic data supplied for the Inquiry along with available (Trunk Road) TRADS data it has been possible to assemble some traffic information on the A23 corridor to inform a transport strategy for the proposed development. All baseline traffic flows have been established from 2010 TRADS data which is in line with those obtained from the Inquiry evidence. Forecast traffic flows are identified based on a Do Minimum (no widening) and Do Something (widening) scenarios as outlined in the Inquiry evidence and an assessment of capacity has been undertaken.

4.14 Traffic data from April 2010 has been obtained from the Highways Agency's Traffic Information Database (TRADS) for several locations along the A23:

- M23 J11 (within junction)
- A23 south of M23
- A23 south of Slaugham
- A23 within A272 junction
- A23 within A2300 junction
- A23 south of B2117
- A23 north of A27

4.15 In addition, data gaps have been supplemented with estimated or furnished traffic data to provide traffic flow data for the A23 corridor for a base year of 2010. Figures identified in italics report flows that are not based on actual raw traffic data.

4.16 To consider conditions in future years, a suite of reports was presented at the Inquiry, based on traffic modelling of possible future scenarios:

- Do Minimum – Modelling the effects of minor improvements to the A23 corridor including resurfacing and reconstruction. No widening or capacity increase is included. For the purposes of the traffic model the ‘Do Minimum’ model is equivalent to a ‘Do Nothing’ situation.
- Do Something – Modelling the effects of the proposed A23 widening works.

4.17 In each case a design year of 2028 was used, adopting forecast traffic growth based on TEMPRO growth factors for West Sussex. No committed development was considered in the model following a review of the South East Plan. Therefore the impact of the proposed new settlement has been considered separately.

4.18 A summary of the traffic flows from the inquiry is presented in Table 4.1. Demand for the trunk network is considered to be the same in both scenarios however the effect of road infrastructure improvements induces additional variable travel demand and accounts for the increase in traffic flows in the Do Something scenario.

**Table 4.1 – Base Year and Do Something Forecast A23 AADT Flows**

| Location              | Direction | Do Minimum |        |        | Do Something |        |        |
|-----------------------|-----------|------------|--------|--------|--------------|--------|--------|
|                       |           | 2006       | 2013   | 2028   | 2006         | 2013   | 2028   |
| A23 north of Slaugham | NB        | 33,985     | 37,189 | 43,464 | 33,985       | 38,324 | 45,520 |
|                       | SB        | 34,770     | 38,058 | 43,383 | 34,770       | 38,514 | 46,825 |
| A23 south of Slaugham | NB        | 34,019     | 37,308 | 43,713 | 34,019       | 38,676 | 46,178 |
|                       | SB        | 34,534     | 37,823 | 43,155 | 34,534       | 38,633 | 47,146 |

4.19 Using factors from the TRADS data at the A23 south of Slaugham an estimate of the traffic flows for AM peak has been made. These identify for this section of the A23 that 8.7% and 5.8% of the daily flow is experienced in the AM peak hour for the northbound and southbound flows respectively. The AM peak hour flows are provided in Table 4.2.

**Table 4.2 – Base Year and Do Something Forecast A23 AM Peak Flows**

| Location              | Direction | Do Minimum |       |       | Do Something |       |       |
|-----------------------|-----------|------------|-------|-------|--------------|-------|-------|
|                       |           | 2006       | 2013  | 2028  | 2006         | 2013  | 2028  |
| A23 north of Slaugham | NB        | 2,957      | 3,236 | 3,782 | 2,957        | 3,335 | 3,961 |
|                       | SB        | 2,022      | 2,213 | 2,522 | 2,022        | 2,239 | 2,723 |
| A23 south of Slaugham | NB        | 2,960      | 3,246 | 3,804 | 2,960        | 3,365 | 4,018 |
|                       | SB        | 2,008      | 2,199 | 2,509 | 2,008        | 2,246 | 2,741 |

4.20 Annualised growth rates have been identified from those established in the Inquiry evidence transport model as shown in Table 4.3

**Table 4.3 – Annualised traffic growth**

|             | Do Minimum  |             | Do Something |             |
|-------------|-------------|-------------|--------------|-------------|
|             | 2006 – 2013 | 2013 - 2028 | 2006 - 2013  | 2013 - 2028 |
| Growth rate | 1.36%       | 1.05%       | 1.78%        | 1.35%       |

4.21 Using the annualised growth rates in Table 4.3 growth rates from 2010-2031, the suggested development design year, have been established as 1.231 for the Do Minimum scenario and 1.296 for the Do Something scenario.



- 4.22 As part of the recent coalition Government spending cuts, the HA made a public announcement relating to the A23 widening:
- "...progress with the scheme had been deferred as part of reductions in the Department's 2010/11 budget, announced by the Treasury on 24 May. It is not known how long the deferment will be but it is anticipated that this will be considered as part of the Autumn Spending Review."
- 4.23 The Regional Transport Strategy (RTS) identified strategic transport improvements in conjunction with the (then) emerging South East Plan. Since then priorities have been identified based on priority to support regional and economic development, based on value for money criteria. Prior to the recent Treasury announcement the works were ranked high and given a good (4) value for money indicator. Whilst the works are deferred it is anticipated that the works will remain within the RTS for the period to 2017 on the basis of economic growth and housing delivery in the area. As the works are expected to take around 20 months to complete, for the purposes of this assessment we have assumed the works would be complete in 2017, starting near the end of 2015. This delay will affect the future year traffic forecasts, incorporating a modest period of 'Do-Nothing' with subsequent improvements.
- 4.24 The growth rates have been applied to the 2010 baseline traffic flows. The Do Something growth rate is only applied to the A23 for the stretch being widened.
- Primary Road Network**
- 4.25 As part of the scope of works identified for the project WSP identified the requirement for the instructing authorities to provide available traffic data at no cost to inform the study. We have been directed to liaise with WSCC regarding available data and reasonable endeavours have been made to obtain/acquire information to support this Study.
- 4.26 In liaising with WSCC we have received limited feedback and identified that consultants are nearing the completion of a strategic County model update, which is expected to provide information for the PRN. Once complete, it is anticipated that the new settlement could be examined using the County model to inform local constraints and the need for local infrastructure improvements, based on forecast travel demand generated within this Study.
- 4.27 The PRN includes all local roads attributed an A and B class designation. These are the routes that are most likely to accommodate development traffic flows. Subject to the precise means of access, these are likely to include:
- A264, Horsham Road
  - A272, Cowfold Road & Bolney Road
  - A273, Clayton Hill
  - A281, West Road
  - A2300 Job's Lane
  - B2110, Horsham Road
  - B2114, Brighton Road
  - B2115, Cuckfield Lane & Slough Green Lane
  - B2117, Brighton Road
  - B2118, Mill Lane
- 4.28 For the purposes of this study we have assumed that the PRN will not be materially improved, preserving single carriageway roads within or adjacent the study area. However, we have assumed that, where necessary junctions will be improved to effectively manage forecast traffic flows based on modest levels of mode shift, peak spreading and trip diversion.

- 4.29 Based on the scale of development at the New Market Town it is likely that further consultation will be necessary to formulate a transport strategy for the sub-region developed in partnership with WSCC and the HA. The County Council has indicated its willingness to work together with the Districts and the HA on further strategic level assessment work, including transport modelling.
- 4.30 For the purposes of this assessment we have assumed that the link capacity of the PRN will not materially alter, thus single carriageways are likely to provide capacity for 1350-1850 vehicles per hour, depending on the characteristics of the road. Where junction improvements are necessary it is assumed that the authorities are willing to exercise their Compulsory Purchase Order (CPO) powers to facilitate development and the delivery of transport network improvements on third party land as may be necessary.

### DEMAND FOR TRAVEL

- 4.31 It is anticipated that the proposed development will provide a full complement of community uses to provide a self sustained community, with a truly mixed use settlement. For the purposes of assessing travel demand it has been assumed that the development will include, inter-alia:
- Circa 10,000 dwellings;
  - Nursery/pre-school(s);
  - Primary schools and one or two secondary school (with 6th form);
  - Community leisure facilities, including civic hub and library;
  - Sports facilities, including health & fitness club(s), swimming pool and open spaces (some of which may be shared with the secondary school);
  - Health centre facilities, dentists and pharmacies;
  - Town (retail) centre, including convenience, comparison retail as well as mixed A3-A5 food retail; and

- Mixed employment space generating some 10,000 jobs<sup>6</sup>

- 4.32 To inform the settlement masterplan and the need for transport infrastructure it is necessary to understand the scale of travel demand. Behind the density standards originally set out in Planning Policy Statement (PPS) 3 in 2006 was research undertaken by the Urban Taskforce intended to inform more sustainable lifestyles. Whilst the primary driver for incorporating a housing density was to make best use of land, it also supported more walkable communities with better access to public transport and therefore became adopted as policy<sup>7</sup>.
- 4.33 Whilst the driver for a minimum density has changed, adopting modern housing densities will help deliver sustainable travel patterns. For a new settlement it will be possible in early phases of development to build on links to existing villages and hamlets to forge new communities. To successfully deliver a sustainable new Market Town it will be necessary to deliver a balance of community and commercial land uses to reduce the need to travel, especially by private car.

### Trip Internalisation

- 4.34 A key element of the new market town is self sufficiency as a new settlement. The containment of trips is a priority for the proposed settlement to reduce its transport impact. Building on research<sup>8</sup>, it is reasonable to retain a significant proportion of trips within the settlement to reduce the need to travel onto the wider transport network. In order to maximise containment the proposed settlement

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<sup>6</sup> This is the initial high level assumption for transport assessment based on eco-town standards. It has been identified independent to the high level economic assessment undertaken. The jobs target and mix will need to be defined and agreed for the purposes of further transport assessment should the proposal be progressed.

<sup>7</sup> National density standards have since been removed from the PPS

<sup>8</sup> Less Traffic Where People Live: How local transport schemes can help cut traffic, Transport 2000, 2003

would integrate various land uses and thereby reduce the need to use the external network.

- 4.35 To inform the calculation of the 'trip' generation of the settlement a reasoned estimation of internalisation for different journey purposes and modes has been identified based, as far as reasonably practicable, local data. These reflect trips that start or end at the residential dwelling within the settlement. In many cases a 'trip' will begin from a different origin and therefore form part of a trip chain, visiting more than one land use before returning home.
- 4.36 The assumptions made on internalisation and modal split are high-level and will need to be considered in more detail through further study should the proposal for a New Market Town be progressed.
- 4.37 The basis of estimating trip purposes has therefore been derived from TEMPRO where it is possible to adopt the National Travel Survey (NTS) reflecting local planning data bespoke to a local evidence base. In combination with other data sources it is considered that the use of average local data provides robust and credible evidence for a mixed community. Should it be necessary to consider variations of population and local demographics these can be considered as a sensitivity tests as part of the Core Strategy.

**Purpose of Journey – Work**

- 4.38 Journey to work census data for the settlements of Burgess Hill and Haywards Heath has been analysed to provide an indication of the level of internalisation that can be achieved by similar settlements. Burgess Hill and Haywards Heath are also located in Mid Sussex and share similar characteristics to the proposed development which proposes 10,000 households and jobs, as summarised in Table 4.4.

**Table 4.4 – Settlement Characteristics**

| Settlement                    | Population | All Household | Average persons per household | Jobs*  |
|-------------------------------|------------|---------------|-------------------------------|--------|
| Burgess Hill                  | 28,803     | 11,545        | 2.49                          | 11,952 |
| Haywards Heath                | 29,358     | 12,613        | 2.33                          | 13,077 |
| Proposed settlement estimates | 24,000     | 10,000        | 2.4                           | 10,000 |

Source: 2001 Census. Note: Jobs based on works trips with a destination in settlement

- 4.39 Burgess Hill and Haywards Heath provide a good comparison to the proposed settlement in terms of population, jobs and location. Table 4.5 sets out the level of internalisation, for journeys to work, experienced in the settlements and on average.

**Table 4.5 – Trip Internalisation**

| Settlement     | Total trips to work (excluding WfH) | Internal trips to work (excluding WfH) | Internalisation |
|----------------|-------------------------------------|--|-----------------|
| Burgess Hill   | 13,891                              | 4,847                                  | 34.9%           |
| Haywards Heath | 13,218                              | 5,131                                  | 38.8%           |
| Total/Average  | 27,109                              | 9,978                                  | 36.8%           |

Source: Journey to work statistics, 2001 Census (WfH – Work From Home)

- 4.40 Based on local data it would be reasonable to expect that 35% to 40% of all trips originating within the proposed community will have an employment trip end within the settlement before one considers the merits of modern housing densities and community travel plans.
- 4.41 There is a degree of uncertainty as to when or whether internalisation in a new settlement will reach levels comparable with those in more established settlements such as Burgess Hill or Haywards Heath. This is an area for future more detailed study, and the impacts of this could

be considered through sensitivity tests. Our initial assumptions take account of the employment-led approach proposed (as described in Section 5).

#### **Purpose of Journey – Education**

- 4.42 The settlement would include facilities for all education levels including a secondary school with sixth form and primary schools. It is intended that the demand and supply for education would be synchronized. It is however likely that a small amount of trip leakage may occur due to special needs education, faith schools, public schools or parental preference. Typically this represents a very small proportion of students where some are boarders. For the purposes of this assessment it is assumed that 95% of education trips will be contained within the proposed settlement.

#### **Purpose of Journey – Shopping**

- 4.43 The proposed development will include a town centre with various shopping and retail facilities that would particularly cater for everyday convenience shopping. Based on evidence from the Cambourne after-study<sup>9</sup> and other retail research it can be assumed that the vast majority of primary convenience (food) retail trips will be contained within the settlement.
- 4.44 It is accepted that many comparison trips will occur beyond the settlement, with of external trips being made to Burgess Hill where the planned town centre regeneration is expected to increase the retail offer within the sub-region, as well as to higher order centres such as Crawley and Brighton. Whilst incidental comparison retail will be provided within the New Market Town, the vast majority of comparison retail trips occur outside of the peak period and at weekends therefore the effects of such trips have not been examined in detail.

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<sup>9</sup> Platt, S. (2007) *Lessons from Cambourne*, Cambridge Architectural Research Ltd for Inspire East.

- 4.45 This report examines the critical AM peak period during which the vast majority of retail trips form part of a trip chain, typically with a convenience purpose. For the purposes of assessment we have therefore assumed the majority (80%) of shopping trips would be contained within the settlement.

#### **Purpose of Journey – Leisure / Visits**

- 4.46 Research associated with the Wokingham Core Strategy identified frequent leisure trip purposes, the vast majority of which include walking, cycling, visits to the park, gym, swimming, and cinema (other than food and drink). Through the comprehensive provision of public open space and community facilities it is assumed that the majority (80%) of leisure trips will be contained within the proposed settlement area.

#### **Purpose of Journey – Personal Business**

- 4.47 Within the NTS Personal Business includes a range of trip purposes, such as visits to Council offices, public services, or other professional advice such as visiting a solicitor or estate agent. Through the provision of a town centre it is reasonable to assume that 80% of all personal business trips will be within the settlement.

#### **Purpose of Journey – Other**

- 4.48 The NTS provides a remaining trip purpose defined as 'other' which includes visiting friends, days out and holidays. The majority of trips that include destinations beyond the settlement are likely to occur at off-peak times therefore, in the absence of other data, we have assumed that 80% of these trips will be internal.
- 4.49 Having established the number of trips generated as trip origins from the proposed development it will be possible to establish the number of trips by each of mode transport, relative to each trip purpose.

#### **Mode of Journey – Walking**

- 4.50 As a new settlement there will be limited opportunities for pedestrian trips beyond the settlement. A small number of trips may occur to

Bolney or Hickstead but for the purposes of this assessment it is assumed that all (100%) pedestrian trips will be within the settlement.

**Mode of Journey – Cycling**

4.51 Cycle trips include journeys up to 5 miles which includes a number of villages and parts of Burgess Hill. Given the distances to adjacent settlements and the level and quality of infrastructure it is assumed that 90% of cycle trips will be within the settlement.

**Mode of Journey – Car driver and passenger**

4.52 For most settlement areas it is normal to achieve a 7-11% car passenger mode share without the provision of dedicated car sharing database(s). This natural trend occurs from the natural propensity for non-car owners to find reasonable travel choices.

4.53 In a sub-region where there are three existing settlements (Burgess Hill, Haywards Heath and Horsham) within modest travel distances and a new community being formed it is reasonable to assume that most car sharing will occur beyond the settlement, thus we have assumed 15% of car sharing will be within the proposed settlement.

**Mode of Journey – Bus**

4.54 The research that contributed to Planning Policy Guidance 13: Transport (PPG13) assumed a realistic maximum mode share of 65-70% as car drivers, seeking to reduce this further with effective land use policies and successful travel plans.

4.55 As a modern development all land uses will provide car parking at or below (less than) a maximum parking standard. As a new central business district associated parking management is likely to include restricted parking provision and management controls. The resultant effect will be that the potential for bus use will be materially better than other similar settlements.

4.56 The vast majority of bus services within the settlement will form part of a network of inter-urban services with routes including at least one other settlement. This pattern of services will combine local and sub-regional public transport demand with modest service frequencies.

4.57 Recognising however that a greater proportion of short-range trips will be undertaken on foot or bicycle, it is assumed that 25% of internal trips will be undertaken by bus.

**Mode of Journey – Rail**

4.58 The proposed development does not benefit from direct access to an existing railway line therefore the potential to introduce fixed rail services is most unlikely to be financially viable. There is therefore no reasonable likelihood of internal rail travel (0% internal).

**Internalisation Summary**

4.59 Where practical this assessment has relied upon locally derived data, supported by evidence used for a range of major settlements and eco-towns. It should be noted that the levels of internalisation and internal split outlined in Tables 4.6 and 4.7 is subject to estimation and would require a more detailed assessment if the planning of the new settlement proceeds.

**Table 4.6 – Internalisation by journey purpose**

| Purpose of Journey | Proportions |          |
|--------------------|-------------|----------|
|                    | Internal    | External |
| Work               | 40%         | 60%      |
| Shopping           | 80%         | 20%      |
| Leisure/Visits     | 80%         | 20%      |
| Personal Business  | 80%         | 20%      |
| Education          | 95%         | 5%       |
| Others             | 80%         | 20%      |

**Table 4.7 – Internalisation by mode**

| Mode of Journey | Proportions |          |
|-----------------|-------------|----------|
|                 | Internal    | External |
| Walk            | 100%        | 0%       |
| Cycle           | 90%         | 10%      |
| Car Driver      | 15%         | 85%      |
| Car Passenger   | 15%         | 85%      |
| Bus             | 25%         | 75%      |
| Rail            | 0%          | 100%     |

### **Trip Generation**

- 4.60 A trip generation has been identified for the site based on the development of 10,000 households and the provision of some 10,000 jobs.
- 4.61 In order to establish the trip generation by trip mode and trip purpose, data from the National Travel Survey (NTS) and TEMPRO has been utilised. Levels of internalisation for each trip purpose and mode have been included within the trip generation.

### **Residential Trip Generation (Trip Origin)**

- 4.62 Using NTS data and TEMPRO planning data, peak hour person trip rates are derived for the proposed development as being 0.813 for the AM peak (0800-0900) and 0.611 for the PM peak (1700-1800) per dwelling. A breakdown of trip purpose and time of day is also provided indicating the journey purpose proportions and person trip generation during the peak hours, reported in Table 4.8. As the NTS/TEMPRO data represents all dwellings it is reasonable to assume that the 10,000 dwellings includes a proportion of (C2) retirement homes.

**Table 4.8 – Peak hour journey purpose proportions and person trip generation**

| Purpose of Journey | Proportions    |             | Person Trip Generation |              |
|--------------------|----------------|-------------|------------------------|--------------|
|                    | AM Peak        | PM Peak     | AM Peak                | PM Peak      |
| Work               | 35%            | 39%         | 2,867                  | 2,368        |
| Shopping           | 4%             | 12%         | 311                    | 720          |
| Leisure/Visits     | 4%             | 23%         | 350                    | 1,386        |
| Personal Business  | 13%            | 19%         | 1,083                  | 1,178        |
| Education          | 41%            | 4%          | 3,362                  | 255          |
| Others             | 2%             | 3%          | 155                    | 198          |
| <b>Total</b>       | <b>100.00%</b> | <b>100%</b> | <b>8,127</b>           | <b>6,105</b> |

Source: Proportions from NTS Table 7.12, 2008. Note: Person trip generation based on 10,000 dwellings

4.63 Data from TEMPRO has been used to forecast the AM & PM peak hour proportion of trips by mode for each purpose based on the Mid Sussex area, represented in Tables 4.9 and 4.10 below. As the information is derived from local sources this will take account of the scale of travel demand outside of the peak hours, which may not be represented in other data sources.

**Table 4.9 – Journey Purpose by Mode – AM peak**

| Purpose / Mode    | Walking | Cycling | Car Driver | Car Passenger | Bus | Rail | Total |
|-------------------|---------|---------|------------|---------------|-----|------|-------|
| Work              | 8%      | 2%      | 69%        | 13%           | 4%  | 3%   | 100%  |
| Shopping          | 33%     | 2%      | 39%        | 21%           | 5%  | 0%   | 100%  |
| Leisure / Visits  | 31%     | 1%      | 42%        | 22%           | 3%  | 0%   | 100%  |
| Personal Business | 32%     | 2%      | 41%        | 21%           | 4%  | 0%   | 100%  |
| Education         | 37%     | 2%      | 18%        | 30%           | 12% | 1%   | 100%  |
| Other             | 8%      | 2%      | 69%        | 13%           | 4%  | 3%   | 100%  |

Source: TEMPRO – Mid Sussex area

**Table 4.10 – Journey Purpose by Mode – PM peak**

| Purpose / Mode    | Walking | Cycling | Car Driver | Car Passenger | Bus | Rail | Total |
|-------------------|---------|---------|------------|---------------|-----|------|-------|
| Work              | 11%     | 3%      | 66%        | 16%           | 3%  | 1%   | 100%  |
| Shopping          | 28%     | 2%      | 41%        | 27%           | 2%  | 0%   | 100%  |
| Leisure / Visits  | 26%     | 2%      | 44%        | 27%           | 2%  | 0%   | 100%  |
| Personal Business | 27%     | 2%      | 42%        | 27%           | 2%  | 0%   | 100%  |
| Education         | 9%      | 1%      | 58%        | 26%           | 3%  | 2%   | 100%  |
| Other             | 11%     | 3%      | 66%        | 16%           | 3%  | 1%   | 100%  |

Source: TEMPRO – Mid Sussex area

4.64 Internalisation has been applied to the proportions in Tables 4.11 and 4.12 in order to establish a total, an internal and an external person trip generation for the proposed development by mode and journey purpose.

4.65 The following residential trip generation and trip rates for the site have been established.

**Table 4.11 – AM peak**

| AM Peak                  | Walking | Cycling | Car Driver | Car Pass. | Bus   | Rail  | Total |
|--------------------------|---------|---------|------------|-----------|-------|-------|-------|
| Internal trip generation | 3885    | 268     | 925        | 503       | 278   | 0     | 5859  |
| External trip generation | 0       | 7       | 1614       | 449       | 115   | 83    | 2268  |
| Total trip generation    | 3885    | 275     | 2539       | 952       | 393   | 83    | 8127  |
| Internal trip rates      | 0.389   | 0.027   | 0.093      | 0.050     | 0.028 | 0.000 | 0.586 |
| External trip rates      | 0.000   | 0.001   | 0.161      | 0.045     | 0.012 | 0.008 | 0.227 |
| Total trip rates         | 0.389   | 0.027   | 0.254      | 0.095     | 0.039 | 0.008 | 0.813 |

**Table 4.12 – PM peak**

| PM Peak                  | Walking | Cycling | Car Driver | Car Pass. | Bus   | Rail  | Total |
|--------------------------|---------|---------|------------|-----------|-------|-------|-------|
| Internal trip generation | 2342    | 228     | 925        | 414       | 67    | 0     | 3975  |
| External trip generation | 0       | 8       | 1517       | 526       | 59    | 20    | 2130  |
| Total trip generation    | 2342    | 236     | 2442       | 940       | 125   | 20    | 6105  |
| Internal trip rates      | 0.234   | 0.023   | 0.093      | 0.041     | 0.007 | 0.000 | 0.398 |
| External trip rates      | 0.000   | 0.001   | 0.152      | 0.053     | 0.006 | 0.002 | 0.213 |
| Total trip rates         | 0.234   | 0.024   | 0.244      | 0.094     | 0.013 | 0.002 | 0.611 |

4.66 A total of 1614 and 1517 external car driver trips are expected in the AM and PM peaks respectively. Rail trips, discussed below, would require a connector mode and 50% of trips have been assumed to be made by car driver. This corresponds to 42 trips in the AM peak and 10 trips in the PM peak. Therefore 1655 and 1527 external car driver trips are estimated to be generated by the proposed development for the peak hours.

4.67 The forecast traffic levels have been compared against TRICS data for mixed private/non-private residential development in the Southeast as these are considered to represent a balanced community with modest affordable housing provision. Taking account of the modest scale of the sites available within TRICS, the absence of even a small proportion of sheltered accommodation (C2), and the limited provision of Travel Plans; the overall travel demands are considered broadly consistent.



4.68 Studies in the East of England have identified that it is common that parking constraint at railway stations results in some suppressed rail demand and parking beyond station facilities, either on street or in town centre car parks. This research revealed that rail passengers responded in a range of ways:

- Walk & Cycle – circa 34%
- Adopting kiss & ride trips (K&R, being dropped-off/picked-up by family/friends) – circa 12%
- Using bus services – circa 17%
- Drive and park at or near the station – circa 37%

4.69 Assuming that not all K&R trips will be primary trips, diverting a car driver from another destination, we have assumed that approximately 50% of rail trips are made by car, either by car driver or drop off. The remaining trips are assumed to occur by public transport or bicycle.

4.70 As the existing station car parks are typically at or close to capacity there is increased onus on ensuring that bus services to these stations provide the primary travel mode of transport. It would be reasonable however for car travel to remain an appreciable part of railway station trips, thus improvements to parking provision may be reasonable at out-lying stations such as Wivelsfield or Christ's College.

#### Employment Trip Generation (Trip Destinations)

4.71 First principles are used to estimate employment trip generation. Detailed work would be necessary if a new settlement was to be progressed, including in defining the employment strategy and the relationship with other towns in the sub-region. The initial transport assessment assumes a total of 10,000 jobs would be provided in the New Market Town in accordance with eco-town principles. The employment provided by the site will include a wide variety of jobs. The proposed settlement is expected to provide around 10,000 jobs to serve the surrounding community. Around 37% of these jobs will be filled by residents within the surrounding community however the scale

of employment can reasonably be expected to attract some demand from surrounding towns and villages.

4.72 Clearly not all jobs will be worked each day and many of the trips will occur outside of the peak hours, particularly those associated with shift working patterns. A range of research projects for national and regional government consider various trends associated with employment land uses, reflecting trends observed in travel plan monitoring reports. In most cases the number of jobs are compared with floor areas as a means of validating the research with TRICS data. There is general recognition that the proportion of absenteeism varies to reflect sickness, annual leave and business meetings. The median appears to suggest around 86% of staff are on site at any time. To ensure robustness it is assumed that 90% of staff attend their usual place of business on a neutral day, taking modest account of staff sickness and holiday.

4.73 To estimate the number of jobs that would be undertaken around traditional working hour patterns data for employment industries for Haywards Heath and Burgess Hill, which are considered to be representative of the proposed site, has been obtained. This identifies that 63% of jobs are associated with shift working industries and 37% of jobs worked are traditional office working hours (0700-1000 – 1600-1900).

4.74 It is appreciated however that many of the jobs in shift industries are still based on the traditional working day pattern and it is assumed that 40% of shift industry trips are made at traditional working times. Therefore a total of 62% of jobs are identified as being traditional working hours. All other jobs are considered to be worked during typical working hours even if there may be elements of part-time and flexible working.

4.75 Based on the above 5589 employees would undertake trips each day during the peak periods (0700-1000 and 1600-1900). Not all of these trips will be undertaken during the AM and PM peak hours (0800-0900 and 1700-1800) due to peak hour spreading and employee choice. 60% of trips made during the AM peak period would be in the actual AM peak hour and 55% of trips in the PM peak period would be made in the PM peak hour.

4.76 Table 4.13 outlines the number of employment trips expected by the development and also splits these as internal and external trips. The number of internal trips is calculated as the number of residential trips made for the purpose of work.

**Table 4.13 – Employment Trip Generation**

|          | AM   | PM   |
|----------|------|------|
| Internal | 1147 | 947  |
| External | 2207 | 2127 |
| Total    | 3353 | 3074 |

**Other Generation (Trip Destinations)**

4.77 The land use budget is not intended to attract travel demand as a trip destination from other areas, the compliment of land uses is intended to support the new community offering housing growth to support planned employment growth in Crawley and retail growth in Burgess Hill.

4.78 The development will attract some travel demand from surrounding villages which currently travel to destinations in the sub-region. It has been assumed that these trips are already within the transport network and typically involve longer distance travel. The provision of the new settlement is therefore likely to contribute to a reduction in the number and length of motorised trips, contributing to modest improvements in sustainable travel.

**Trip Generation Summary**

4.79 The trip generation of the internal and external elements of the site are provided in Tables 4.14 and 4.15, together with a mode share that has been assumed for external employment generated trips. The mode share for internally generated trips is based on that identified in the residential trip generation.

**Table 4.14 – AM peak Internal/External Trip Generation**

| AM Peak                  | Walking | Cycling | Car Driver | Car Pass. | Bus | Rail | Total |
|--------------------------|---------|---------|------------|-----------|-----|------|-------|
| Internal mode share      | 35%     | 9%      | 44%        | 8%        | 4%  | 0%   | 100%  |
| External mode share      | 0%      | 1%      | 72%        | 16%       | 10% | 1%   | 100%  |
| Internal trip generation | 399     | 106     | 502        | 94        | 47  | 0    | 1147  |
| External trip generation | 0       | 22      | 1589       | 353       | 221 | 22   | 2207  |
| Total trip generation    | 399     | 128     | 2091       | 447       | 268 | 22   | 3353  |

**Table 4.15 – PM peak Internal/External Trip Generation**

| PM Peak                  | Walking | Cycling | Car Driver | Car Pass. | Bus | Rail | Total |
|--------------------------|---------|---------|------------|-----------|-----|------|-------|
| Internal mode share      | 41%     | 10%     | 37%        | 9%        | 3%  | 0%   | 100%  |
| External mode share      | 0%      | 1%      | 72%        | 16%       | 10% | 1%   | 100%  |
| Internal trip generation | 390     | 98      | 348        | 85        | 26  | 0    | 947   |
| External trip generation | 0       | 21      | 1531       | 340       | 213 | 21   | 2106  |
| Total trip generation    | 390     | 119     | 1879       | 425       | 239 | 21   | 3053  |

**Total Traffic Generation**

4.80 To summarise, the total envisaged vehicle generation of the proposed settlement is set out below. Residential trips are those which are typically outbound in the AM peak and inbound in the PM peak, and Employment Trips are typically inbound in the AM peak and outbound in the PM peak.

**Table 4.16 – External Vehicle Trip Generation**

|             | AM   | PM   |
|-------------|------|------|
| Residential | 1655 | 1527 |
| Employment  | 1589 | 1531 |
| Total       | 3203 | 3048 |

4.81 The compliment of land uses offers a broadly balanced travel demand, with no distinct tidal pattern however the distribution of trips is still likely to represent a slight bias to areas to the north.

**Trip Distribution**

4.82 It is considered that the proposed development would have similar travel patterns to Haywards Heath and Burgess Hill. Journey to work data from the 2001 Census provides origin and destination data for trips for the purpose of employment made by car. Separate distributions have been identified for residential trips (trip origin) and employment trips (trip destination). The distributions have been undertaken for the site based on data obtained for the following wards, which make up the settlements of Haywards Heath and Burgess Hill.

**Table 4.17 – Ward Journey to Work Data Sources**

| Burgess Hill wards |                 | Haywards Heath wards |                |
|--------------------|-----------------|----------------------|----------------|
| Reference          | Ward name       | Reference            | Ward name      |
| 45UGGL             | Burgess Hill Du | 45UGHC               | Haywards Heath |
| 45UGGM             | Burgess Hill Fr | 45UGHD               | Haywards Heath |
| 45UGGN             | Burgess Hill Le | 45UGHE               | Haywards Heath |
| 45UGGP             | Burgess Hill Me | 45UGHF               | Haywards Heath |
| 45UGGQ             | Burgess Hill St | 45UGHG               | Haywards Heath |
| 45UGGR             | Burgess Hill Vi | 45UGHK               | Lindfield      |

4.83 The trip distribution concerns external trips only, therefore trips with origins and destinations in Burgess Hill and trips with origins and destinations in Haywards Heath have been removed. A summary of the trip distributions is provided in Table 4.18.

**Table 4.18 – Trip Distributions**

| Destination      | Residential | Employment |
|------------------|-------------|------------|
| M23/M25 Junction | 12.9%       | 7.4%       |
| M23 Gatwick spur | 10.5%       | 1.0%       |
| M23 J10          | 12.9%       | 3.4%       |
| M23 J11          | 6.0%        | 4.0%       |
| B2110            | 1.9%        | 2.6%       |
| Staplefield Road | 0.4%        | 0.0%       |
| B2115            | 9.1%        | 5.2%       |
| A272 West        | 0.3%        | 8.8%       |
| A272 East        | 16.4%       | 20.1%      |
| A2300            | 4.1%        | 8.4%       |
| B2118            | 3.8%        | 8.3%       |
| A2117            | 0.0%        | 0.0%       |
| A281             | 0.0%        | 0.0%       |
| A273             | 1.6%        | 0.9%       |
| A23/A27 Junction | 14.6%       | 29.8%      |
| Total            | 100%        | 100%       |

4.84 As the majority of external trips are for the purpose of work the trip distribution for residential development has been applied to all trip purposes. Inbound and outbound splits have been assumed based on similar sized settlements for the two trip generating elements of the proposed settlement, represented in Table 4.19

**Table 4.19 – Directional Distribution**

| Trip Generator | AM peak |      | PM peak |      |
|----------------|---------|------|---------|------|
|                | IN      | OUT  | IN      | OUT  |
| Residential    | 0.25    | 0.75 | 0.70    | 0.30 |
| Employment     | 0.80    | 0.20 | 0.20    | 0.80 |

4.85 Table 4.20 reports total traffic generation established from inbound and outbound trips.

**Table 4.20 – Vehicle Two-Way Trip Generation**

|             | AM   |      |       | PM   |      |       |
|-------------|------|------|-------|------|------|-------|
|             | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |
| Residential | 414  | 1242 | 1655  | 1069 | 458  | 1527  |
| Employment  | 1271 | 318  | 1589  | 306  | 1225 | 1531  |
| Total       | 1675 | 1528 | 3203  | 1368 | 1680 | 3048  |

**ACCESS OPTIONS**

4.86 The development will generate in the order 1500 vehicles per hour (vph) in and out of the development, representing a requirement for at least 2-3 points of access. By adopting a few points of access it will be easier to monitor travel demand and more effectively apply demand management arrangements to control car travel if necessary whilst avoiding excessive through traffic.

4.87 Depending on the location of the development, its land uses and key points of access the development will distribute up to 900vph (each way) via the A23. For this scale of traffic increase it is likely that appreciable junction improvements will be necessary.

- 4.88 A substantial part of the development traffic will travel to/from the development site via the A23, thus the development must access at least one junction on the A23 (DfT circular 02/07 restricts the construction of new junctions on the SRN). The following potential improvements have been considered:
- A23/A272 Bolney Junction - the Bolney junction has been designed with a dual 2-lane carriageway between the A272 junctions beneath the A23. Potential improvements could include:
    - The introduction of a signal controlled cross-roads at the A272/The Street junction could serve the development
    - The introduction of a signal controlled T-junction at the A272/A23 (northbound) slip roads
    - Improvements to the A272/A23 (southbound) slip roads roundabout, including widening of the A272 Bolney Road
    - widening of the A272 Cowfold Road to provide a dual carriageway incorporating the above junction improvements
  - A23/A2300 Hickstead Junction – the Hickstead junction is likely to attract the vast majority of traffic from any possible future growth in Burgess Hill therefore the existing junction may be constrained. The existing eastern roundabout is constrained by modest properties served by Hickstead Lane. With limited prospect of improving the junction it may represent an appreciable constraint. Potential improvements could include:
    - The formation of a grade separated roundabout, including the construction of a new A23 overbridge approximately 50-80m north of the existing bridge
    - The construction of new north-facing slip roads, allied to the new (grade separated) roundabout
      - The new roundabout is likely to include the following arms:
        - A23 (north) on and off slip roads
        - A2300 including planned widening
        - A23 (south) on and off slip roads
        - Hickstead Lane (retained for existing private access and bus only traffic to/from the development)
        - Development access road
  - A23/B2118 Sayers Common Junction – the Sayers Common junction is currently limited to north-facing slip roads. Potential improvements could include:
    - A new junction on the B2118 adjacent Oakhurst, serving
      - The sited caravan park
      - The commercial property (currently served from the mini-roundabout)
      - the proposed development
    - Replacement of the existing mini-roundabout with a 4-arm signal controlled junction with limited turning movements, including:
      - The conversion of the existing B2118 (adjacent showground) north of the junction to northbound only
      - Mill Lane (east)
      - Northbound off-slip
      - B2118 (Sayers Common)

It is important to recognise however that the ability to deliver south-facing slip roads will exaggerate the capacity constraints of the A23 over-bridge. It may therefore prove pragmatic to limit development access to the south or explore the provision of a replacement junction south of Sayers Common, near Combe Wood.

### PUBLIC TRANSPORT STRATEGY

- 4.89 There are relatively limited existing public transport links within the area of study reflecting the low population density of the area. Public transport provision would need to be substantially improved.
- 4.90 The proposed development will represent an appreciable travel demand both within the settlement and across the wider transport network, requiring mitigation measures at a commensurate scale. Other similar developments in growth areas or allied to Eco-Towns have attracted some regional growth support, either in the form of regional infrastructure improvements or additional (pump-primed) funding.
- 4.91 Acknowledging the constraints of the A23 corridor in the medium-term a wider transport strategy will be necessary for this part of West Sussex. To help mitigate some of the affects on the A23 corridor the development should substantially fund Park & Ride (P&R) sites at or near:
- Junction 11, M23, Crawley; and
  - A23/A273 Pyecombe – serving Brighton and Burgess Hill (it is acknowledged that this P&R may duplicate facilities at Withdean, however these could supplement and possibly consolidate provision).
- 4.92 In conjunction with these P&R sites the development could provide a transport interchange with Park and Ride facility to assist with mode shift from car to bus/coach services.

- 4.93 This strategy would include a range of inter-urban bus services linking:
- Pycombe P&R – New Market Town – Crawley P&R<sup>10</sup>
  - Haywards Heath – New Market Town – Cowfold – Horsham
  - Burgess Hill – New Market Town – Cowfold – Horsham
- 4.94 Generally bus services are most successful for journeys of 2-5 miles, after which rail travel tends to provide a more viable alternative. The transport strategy for the settlement therefore seeks to exploit the settlement pattern in Mid Sussex, developing a new employment area centrally located between Horsham, Haywards Heath and Burgess Hill, making best use of links to Crawley and Brighton which remain areas of economic growth.
- 4.95 The detail of the public transport strategy, particularly service frequencies, will evolve as part of a more detailed public transport strategy. For the purposes of this assessment it is assumed that each interchange has the potential to capture around 9-11% of existing trips (typically 80-350 vph) on respective corridors based on research of other P&R sites across the Country.

### DEMAND MANAGEMENT AND MITIGATION

- 4.96 Typically, in the 2031 design year, forecast baseline traffic flows identify that the A23 will carry traffic flows in the order of 4,000-4,600 vehicles per hour in the peak hour for the dominant tidal direction.
- 4.97 The planned Highways Agency A23 Handcross to Warlinglid Widening Scheme has been deferred, and is to be considered as part of the Government's Autumn Spending Review. It is assumed that strategic improvements to the A23 will be delivered at appropriate design horizons. In the event that the A23 widening is deferred further interim measures will be explored with the Highways Agency including:

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<sup>10</sup> We have assumed inter-urban bus services at 12-20 minute frequency

- Additional demand management measures – escalating travel plan obligations and travel demand restraint
- Ramp metering – installation of slip road traffic lights where adjacent junctions do not or will not provide similar ‘gate’ controls
- Level of service management – such as ‘minute man’ (incident response vehicles)
- Introduction of traffic regulation orders on inclines over 6% (restricting peak period HGV over-taking, as experimental scheme on A34 West Ilsley)

4.98 In addition to the impact on the A23, the A272 currently carries heavy flows at peak times with congestion regularly occurring at Haywards Heath, Ansty, Bolney and Cowfold.

4.99 The increase in traffic on the A272 corridor is likely to attract a number of local improvements, including junction improvements in Ansty. It is likely however that major improvements will be required around Cowfold where existing volumes of traffic detract from the quality of the existing village. The greatest pressure is likely to be on routes between Horsham and Haywards Heath/Burgess Hill (A281/A272) therefore suitable levels of mitigation are likely to require the provision of a relief road to the northeast of the village. Whilst these could be funded by the development it may prove more pragmatic to support a modest urban extension to substantially fund such road infrastructure.

#### **DEVELOPMENT TRAFFIC IMPACT REVIEW**

4.100 Forecast traffic flows for the A23 and adjacent corridor have been calculated derived from baseline traffic data where available.

4.101 An assessment of capacity for each section of the A23 has been undertaken. Assuming a road link capacity of 1900 vehicles per lane per hour, capacity has been established for each section of the A23. Where flows are at 80% of capacity the flows are shown as light orange, at 90% as dark orange and above capacity are red.

4.102 Tables 4.21 and 4.22 show the capacity assessment for the Do Minimum and Do Something scenarios.

**Table 4.21 – A23 Development Impact (Do Minimum)**

| Location                  | Flow direction | Lanes | Capacity | Scenario  |           |                 | Scenario  |           |                 |
|---------------------------|----------------|-------|----------|-----------|-----------|-----------------|-----------|-----------|-----------------|
|                           |                |       |          | 2010 Base | 2031 Base | 2031 + Prop Dev | 2010 Base | 2031 Base | 2031 + Prop Dev |
| M23 J11 (within junction) | NB             | 3     | 5,700    | 2,326     | 2,862     | 3,428           | 40.8%     | 50.2%     | 60.1%           |
|                           | SB             | 3     | 5,700    | 1,543     | 1,899     | 2,510           | 27.1%     | 33.3%     | 44.0%           |
| A23 south of M23          | NB             | 3     | 5,700    | 3,485     | 4,289     | 4,949           | 61.1%     | 75.2%     | 86.8%           |
|                           | SB             | 3     | 5,700    | 2,075     | 2,554     | 3,267           | 36.4%     | 44.8%     | 57.3%           |
| A23 north of Slaugham     | NB             | 2     | 3,800    | 3,090     | 3,803     | 4,492           | 81.3%     | 100.1%    | 118.2%          |
|                           | SB             | 2     | 3,800    | 2,161     | 2,659     | 3,405           | 56.9%     | 70.0%     | 89.6%           |
| A23 south of Slaugham     | NB             | 2     | 3,800    | 3,090     | 3,803     | 4,498           | 81.3%     | 100.1%    | 118.4%          |
|                           | SB             | 2     | 3,800    | 2,161     | 2,659     | 3,411           | 56.9%     | 70.0%     | 89.8%           |
| A23 north of Jeremys Lane | NB             | 3     | 5,700    | 3,090     | 3,803     | 4,640           | 54.2%     | 66.7%     | 81.4%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,659     | 3,564           | 37.9%     | 46.7%     | 62.5%           |
| A23 south of Jeremys Lane | NB             | 3     | 5,700    | 3,090     | 3,803     | 4,640           | 54.2%     | 66.7%     | 81.4%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,659     | 3,564           | 37.9%     | 46.7%     | 62.5%           |
| A23 within A272 junction  | NB             | 3     | 5,700    | 2,816     | 3,465     | 3,884           | 49.4%     | 60.8%     | 68.1%           |
|                           | SB             | 3     | 5,700    | 1,937     | 2,384     | 2,836           | 34.0%     | 41.8%     | 49.8%           |
| A23 south of A272         | NB             | 3     | 5,700    | 2,957     | 3,639     | 4,226           | 51.9%     | 63.8%     | 74.1%           |
|                           | SB             | 3     | 5,700    | 2,034     | 2,503     | 3,111           | 35.7%     | 43.9%     | 54.6%           |
| A23 within                | NB             | 2     | 3,800    | 2,588     | 3,185     | 3,353           | 68.1%     | 83.8%     | 88.2%           |

| Location                    | Flow direction | Lanes | Capacity | Scenario  |           |                 | Scenario  |           |                 |
|-----------------------------|----------------|-------|----------|-----------|-----------|-----------------|-----------|-----------|-----------------|
|                             |                |       |          | 2010 Base | 2031 Base | 2031 + Prop Dev | 2010 Base | 2031 Base | 2031 + Prop Dev |
| A2300 junction              | SB             | 2     | 3,800    | 1,774     | 2,183     | 2,339           | 46.7%     | 57.4%     | 61.5%           |
| A23 south of A2300 junction | NB             | 2     | 3,800    | 2,661     | 3,274     | 3,611           | 70.0%     | 86.2%     | 95.0%           |
|                             | SB             | 2     | 3,800    | 1,913     | 2,354     | 2,666           | 50.3%     | 62.0%     | 70.1%           |
| A23 north of B2117          | NB             | 2     | 3,800    | 2,661     | 3,274     | 3,547           | 70.0%     | 86.2%     | 93.3%           |
|                             | SB             | 2     | 3,800    | 1,913     | 2,354     | 2,606           | 50.3%     | 62.0%     | 68.6%           |
| A23 south of B2117          | NB             | 2     | 3,800    | 2,733     | 3,363     | 3,636           | 71.9%     | 88.5%     | 95.7%           |
|                             | SB             | 2     | 3,800    | 2,052     | 2,525     | 2,778           | 54.0%     | 66.5%     | 73.1%           |
| A23 north of A27            | NB             | 3     | 5,700    | 4,116     | 5,065     | 5,312           | 72.2%     | 88.9%     | 93.2%           |
|                             | SB             | 3     | 5,700    | 2,614     | 3,217     | 3,445           | 45.9%     | 56.4%     | 60.4%           |

\* Baseline flows derived for these locations



**Table 4.22 – A23 Development Impact (Do Something)**

| Location                  | Flow direction | Lanes | Capacity | Scenario  |           |                 | Scenario  |           |                 |
|---------------------------|----------------|-------|----------|-----------|-----------|-----------------|-----------|-----------|-----------------|
|                           |                |       |          | 2010 Base | 2031 Base | 2031 + Prop Dev | 2010 Base | 2031 Base | 2031 + Prop Dev |
| M23 J11 (within junction) | NB             | 3     | 5,700    | 2,326     | 2,862     | 3,428           | 40.8%     | 50.2%     | 60.1%           |
|                           | SB             | 3     | 5,700    | 1,543     | 1,899     | 2,510           | 27.1%     | 33.3%     | 44.0%           |
| A23 south of M23          | NB             | 3     | 5,700    | 3,485     | 4,289     | 4,949           | 61.1%     | 75.2%     | 86.8%           |
|                           | SB             | 3     | 5,700    | 2,075     | 2,554     | 3,267           | 36.4%     | 44.8%     | 57.3%           |
| A23 north of Slaugham     | NB             | 3     | 5,700    | 3,090     | 4,003     | 4,492           | 54.2%     | 70.2%     | 78.8%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,800     | 3,405           | 37.9%     | 49.1%     | 59.7%           |
| A23 south of Slaugham     | NB             | 3     | 5,700    | 3,090     | 4,003     | 4,498           | 54.2%     | 70.2%     | 78.9%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,800     | 3,411           | 37.9%     | 49.1%     | 59.8%           |
| A23 north of Jeremys Lane | NB             | 3     | 5,700    | 3,090     | 4,003     | 4,640           | 54.2%     | 70.2%     | 81.4%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,800     | 3,564           | 37.9%     | 49.1%     | 62.5%           |
| A23 south of Jeremys Lane | NB             | 3     | 5,700    | 3,090     | 4,003     | 4,640           | 54.2%     | 70.2%     | 81.4%           |
|                           | SB             | 3     | 5,700    | 2,161     | 2,800     | 3,564           | 37.9%     | 49.1%     | 62.5%           |
| A23 within A272 junction  | NB             | 3     | 5,700    | 2,816     | 3,465     | 3,884           | 49.4%     | 60.8%     | 68.1%           |
|                           | SB             | 3     | 5,700    | 1,937     | 2,384     | 2,836           | 34.0%     | 41.8%     | 49.8%           |
| A23 south of A272         | NB             | 3     | 5,700    | 2,957     | 3,639     | 4,226           | 51.9%     | 63.8%     | 74.1%           |
|                           | SB             | 3     | 5,700    | 2,034     | 2,503     | 3,111           | 35.7%     | 43.9%     | 54.6%           |
| A23 within A2300 junction | NB             | 2     | 3,800    | 2,588     | 3,185     | 3,353           | 68.1%     | 83.8%     | 88.2%           |
|                           | SB             | 2     | 3,800    | 1,774     | 2,183     | 2,339           | 46.7%     | 57.4%     | 61.5%           |

| Location                    | Flow direction | Lanes | Capacity | Scenario  |           |                 | Scenario  |           |                 |
|-----------------------------|----------------|-------|----------|-----------|-----------|-----------------|-----------|-----------|-----------------|
|                             |                |       |          | 2010 Base | 2031 Base | 2031 + Prop Dev | 2010 Base | 2031 Base | 2031 + Prop Dev |
| A23 south of A2300 junction | NB             | 2     | 3,800    | 2,661     | 3,274     | 3,611           | 70.0%     | 86.2%     | 95.0%           |
|                             | SB             | 2     | 3,800    | 1,913     | 2,354     | 2,666           | 50.3%     | 62.0%     | 70.1%           |
| A23 north of B2117          | NB             | 2     | 3,800    | 2,661     | 3,274     | 3,547           | 70.0%     | 86.2%     | 93.3%           |
|                             | SB             | 2     | 3,800    | 1,913     | 2,354     | 2,606           | 50.3%     | 62.0%     | 68.6%           |
| A23 south of B2117          | NB             | 2     | 3,800    | 2,733     | 3,363     | 3,636           | 71.9%     | 88.5%     | 95.7%           |
|                             | SB             | 2     | 3,800    | 2,052     | 2,525     | 2,778           | 54.0%     | 66.5%     | 73.1%           |
| A23 north of A27            | NB             | 3     | 5,700    | 4,116     | 5,065     | 5,312           | 72.2%     | 88.9%     | 93.2%           |
|                             | SB             | 3     | 5,700    | 2,614     | 3,217     | 3,445           | 45.9%     | 56.4%     | 60.4%           |

\* Baseline flows derived for these locations

- 4.103 The capacity assessment identifies that for 2031 widening would be required on the A23 north and south of Slaugham to accommodate background demand. The development is expected to cause other sections of road to operate near capacity based on crude estimates of congestion reference flow (CRF).
- 4.104 Associated with possible future growth at Burgess Hill it is understood that MSDC/WSCC would be seeking improvements to the A2300 corridor. It is not yet clear if such improvements are required solely to accommodate development or as part of the cumulative impact of a range of network traffic growth and development. These developments will add to the pressure on the A23 corridor requiring the (previously planned) widening.

4.105 Similar affects may arise for other A23 junctions and thereby influence the potential requirement for A23 junction improvements. Taking account of current growth forecasts and development improvements this assessment considers possible junction improvements relative to the study area, recognising that the Design & Access strategy of the settlement will evolve through subsequent stages of the planning process.

### **SUMMARY – KEY ISSUES**

4.106 This section has examined demand for travel associated with delivery of a New Market Town of 10,000 homes within the Area of Search, and the capacity of the transport network to accommodate it. A key element of the proposals are for a substantial employment component to the development, both helping to support housing delivery and to support higher level of internalisation of trips. This is considered further in Section 6.

4.107 The initial transport assessment has identified that it is likely that widening to the A23 between Handcross and Warlinglid would be required to support the new development, together with appreciable junction improvements. These can be regarded as potential 'showstoppers.'

4.108 Without development the A23 will exceed link capacity around 2030. With development and some transport improvements similar network conditions are likely to arise around 2025-27. The combination of highway and transport improvements could preserve 'nil-detriment' conditions beyond which further demand management measures or strategic improvements to the A23 will be necessary.

4.109 Initial discussions with the Highways Agency have proven positive, with general support for the proposed spatial strategy under-pinned with a transport strategy addressing a number of issues on the A23 corridor. Should the planning authorities seek to promote the New Market Town bottom-up through their LDF and the Gatwick Diamond Economic and Spatial Strategy it will be necessary to satisfy the Highways Agency that an effective transport strategy can preserve the function of the SRN prior to the adoption of the Core Strategy.

4.110 While the need for widening of the A23 and junction improvements is a potential risk to the deliverability of a New Market Town at this location, the HA has developed a widening scheme for the Handross-Warlinglid section of the A23. The funding for this is currently uncertain, however it is envisaged that a New Market Town if brought forward could make a significant contribution to this scheme. This is discussed further in Sections 9 and 10.

4.111 Improvements would also be required to the A272 Corridor, including potentially the provision of a relief road to the north-east of Cowfold.

4.112 There is limited existing public transport provision within the Area of Search, reflecting the low population density. A detailed public transport strategy would be required to support sustainable travel from the development.

4.113 It is considered that the site provides a good spatial strategy to underpin the viability of existing bus services and provide a sufficient population and travel demand to increase bus services in the sub-region. Through the promotion of park & ride sites near Crawley and Brighton it will be possible to capture around 10% of trips on the A23 corridor or into existing settlements, increasing the potential for mode shift.

4.114 Key infrastructure requirements associated with delivery of a New Market Town are set out in Section 9, with indicative costings provided.

4.115 A transport strategy for the settlement should seek to maximise internalisation of trips and use of sustainable modes. The phased development of the settlement should commence near an existing settlement to exploit links with existing communities, establishing a primary school and local retail centre early in the development phasing.

4.116 The street network should be designed to provide time advantages for bus and cycle movement through the settlement.



## 5. UTILITIES INFRASTRUCTURE CONSTRAINTS

### OVERVIEW OF APPROACH

- 5.1 WSP has assessed local policy and sought information from key local utility providers in order to provide an understanding of the viability of development at this location with respect to environmental and infrastructure constraints presented.

### SURFACE WATER

- 5.2 The River Adur flows through the site predominantly in an east to west direction. There are small corridors of flood zones associated with this water course, but nothing out of the ordinary. Development should be positioned within Flood Zone 1, leaving Flood Zones 2 and 3 for the provision of public open spaces.
- 5.3 The western branch of the River Adur flows south west across the southern portion of the proposed development site. A further tributary meets the Adur south of Cowford. The Adur is highly 'flashy', responding quickly to rainfall events and having low summer flows. This is predominantly due to the impermeable Weald Clay, which underlies this area of the catchment and the vast majority of the proposed New Market Town site.
- 5.4 Surface water runoff from new development could increase the potential for downstream flooding. However it will be possible to mitigate this through flood attenuation measures and provision of Sustainable Urban Drainage Systems (SUDS).
- 5.5 Based on a total developed area of circa 300 ha and a calculated allowable 1 in 100 year rainfall event discharge rate of 13.45 l/s/ha, a total of 129,136m<sup>3</sup> of storage would be required in order to attenuate the 1 in 100 year plus climate change (30%) event (WinDes Quick Storage calculation). Assuming 1m<sup>2</sup> provides an average of 0.7m<sup>3</sup> of storage volume, a total area of circa 19 ha will be required for attenuation basins and other SUDS features on-site.

- 5.6 It is understood that there are pre-existing concerns in the local area relating to downstream flooding. The surface water strategy would not exacerbate any existing issues, and there may be potential to provide a net benefit in this regard through the introduction of additional mitigations, although this would be subject of a further study.

### WATER

- 5.7 The Gatwick Diamond Water Cycle Study confirms that many areas of the south east are currently under significant levels of water stress, a situation that is reflected in the respective Water Resource Management Plans (WRMP) of the water supply companies serving the site area. The Gatwick Water Cycle Study states that there is no additional water available from the Adur.
- 5.8 The Southern Water WRMP identifies a water supply/demand balance deficit in the Sussex North Water Resource Zone during the AMP5 period (2010-2015) and the South East Water WRMP demonstrates that leakage is a major cause for concern in this area.
- 5.9 Although the site falls within the existing Southern Water supply area, South East Water lies immediately adjacent. This may lead to competition from the two water companies if South East Water wish to supply the site.
- 5.10 Key points from the local water company WRMPs are as follows:
- Southern Water's WRMP - "Fundamental to the development of a water resources strategy is the "twin-track" approach. This comprises the parallel approach of: reducing demand through demand management; such as leakage reduction, appropriate metering policies and the promotion of water efficiency initiatives; and the associated development of new sources, inter-zonal transfers or inter-company bulk supplies, as required."
  - South East Water's WRMP - "Historically our water resources planning has followed a 'twin track' approach i.e. the Company's strategy has focused on both developing new sources of water, in combination with initiatives that have helped to reduce the demand on water."

- 5.11 The Environment Agency has advised that they would not permit any increases beyond existing abstraction licences and that the requirements of all future development would be need to be met within the headroom of existing licences. This means that future growth cannot rely on the development of new local resources and instead will have to rely on greater efficiency in water use and bulk transfer from neighbouring supply zones.
- 5.12 Both water companies remain confident that through a twin-track approach involving the bulk transfer of water supply from other areas of the region and the implementation of water efficiency and leakage reduction measures, sufficient water capacity is available to serve development identified in the South East Plan. As such it is not currently anticipated that water supply should act as a constraint to development of the New Market Town.
- 5.13 Southern Water is currently developing a new source from the River Arun in accordance with its Water Resources Management Plan, and the development now has planning permission. Combined with the Southern Water universal metering programme by 2015, they believe water resources will be adequate to meet the needs of this development. Trunk water distribution infrastructure can be delivered through the Ofwat Periodic Review process once development plans have certainty.
- 5.14 Similarly, South East Water have stated that they have undertaken an initial review and modelling exercise regarding the supply options for development at this location and believe they can put a strategy in place to meet the projected demands. The existing water distribution network local to the development would not be adequate to support the new demand and some work to reinforce the distribution network would be required. However, local resources are adequate to support the site.

## **WASTE WATER**

- 5.15 An environmental constraint has emerged in the area which may limit the future discharge of effluent from wastewater treatment works (WWTW) to watercourses in both Horsham and Mid Sussex Districts. Environment Agency policy requires that water quality in receiving waters is maintained and does not deteriorate as a result of increased effluent discharges. Where additional wastewater treatment processes can be installed to ensure the load of pollutants discharged does not increase with increased flow, treatment capacity can be provided to meet the demand from new development. However, where treatment processes are utilising the best available technology (BAT) it is not possible to install additional treatment plant to reduce pollutants to levels low enough to meet the environmental water quality standards set. Both Horsham WWTW and Goddards Green WWTW have processes installed that are operating at BAT.
- 5.16 The nearest WWTW is located at Goddard's Green north of Burgess Hill and is currently operating with limited headroom and does not have the capacity to accommodate the scale of development planned. Southern Water will increase capacity and effluent quality at this site by 2016, however this capacity is required to cater for planned growth around Burgess Hill. Environmental quality constraints in the receiving water may prevent its further expansion. Whether this WWTW could cater for the site in the future is dependent on the future discharge consent standards set by the Environment Agency. Further work will be required in order to assess whether this is the case, the EA and Southern Water will need to discuss this matter further.
- 5.17 WSP has investigated the possibility of catering for foul treatment onsite. This would require discharge consent to the River Adur where degradation to water quality would be likely. The ecological quality of the Adur through the Area of Search is already poor. Extensive treatment and reuse will however reduce the amount of discharge to the River Adur while minimising the impact on the river water quality.
- 5.18 With regards to the provision of a new WWTW to cater for the site and discharge to the Adur, the Environment Agency (EA) has advised that any requirement for new discharge consents are considered on a case by case basis. Water quality should be such that the infrastructure

would be adopted by the local water company. The EA has advised that the Southern Water and the EA be consulted at the earliest stages to ensure the best way forward is taken.

- 5.19 Southern Water has commented that Goddard's Green WTW will drain about 20,000 households by 2015 and is already required to meet a final effluent consent BOD of 5mg/l, which is at BAT. Increasing the flow by some 50% in order to cater for the potential new Market Town Area of Search is unlikely to be accepted by the Environment Agency without tightening the consent proportionally beyond this treatment constraint. Flows from the new development are therefore likely to need to go elsewhere. The next works downstream is at Wineham which currently serves only 35 properties. However, Southern Water believes that the site might be suitable for development of a larger works, subject to Environment Agency and planning consents. Alternatively the option of splitting the additional flows between existing works at Cowfold (600 hh), Wineham and Goddard's Green might be worth exploring with the EA. The critical issue for these options is the effluent quality standards the Environment Agency will require any future discharge to meet and whether or not it can be met with BAT. Once the environmental standards have been defined by the Environment Agency, Southern Water can explore the provision of treatment capacity further.
- 5.20 A Sequencing Batch Reactor (SBR) WWTW would typically be suitable for a site of this type, such as those supplied by Bio-Bubble in the UK. The SBR process allows high effluent standards to be maintained with varying influent flows and provide a low generation of odour and sludge. These types of WWTW can have a reduced "Cordon Sanitaire" zone, maximizing the amount of land available for development. Due to the quality of the limited amounts of sludge produced, the manufacturer is currently investigating whether the strict EU Directive quality criteria can be met for direct re-use as an agricultural fertiliser. However, any WWTW offered for adoption will need to be designed to Southern Water's standards, the approach agreed with Southern Water and the Environment Agency, and meet the requirements of any discharge consents. Any planned WWTW should be discussed with Southern Water and the Environment Agency as early as possible.

- 5.21 A typical SBR plant for a 25,000 PE (population equivalent) requires an area of just over 1 hectare.
- 5.22 Wastewater treatment works capacity should be considered a substantive constraint in the context of accommodating significant new development in Horsham and Mid Sussex Districts. In the context of a New Market Town, the constraint is not necessarily insurmountable and the additional detailed feasibility work should be progressed with stakeholders as an early priority.

## ENERGY

- 5.23 Within the site boundary sits Bolney Grid (owned by National Grid) but containing one of EDF Energy's largest substations in Sussex. This large electricity substation located north of Wineham within the site area.
- 5.24 A number of overhead cables cross the site via Bolney Grid. This includes one 400kv National Grid line which is bisected by Bolney Grid, six 132kv EDF lines spurring from Bolney Grid and two 33kv spurs. This overhead infrastructure will impact of the land available for development; however its presence will have a significant benefit with regards to energy supply costs typically associated with off-site connections etc.
- 5.25 EDF comment that 'virtually unlimited available energy' is not too far from the truth and that other existing primary network and substations could very easily be reinforced to meet the new demand particularly on the boundary with Burgess Hill (Goddards Green) and likewise Cowfold.
- 5.26 EDF advise that from their perspective, the development would pose significantly fewer problems than an alternative option involving urban extensions elsewhere in the area.
- 5.27 EDF are confident that 'EDF Energy Infrastructure Planning will be able to put together a 'Regional Strategy' to ensure that the area can enjoy a 21st century electricity infrastructure provision.'

- 5.28 The cost to underground existing overhead services are not confirmed but are estimated to be in the region of £1m to £1.5m per 300m span of 132kv line, requiring a 16m easement (about the width of a standards street between buildings). Undergrounding a 400kv line is understood to be prohibitively expensive, and perhaps £20m per span, also requiring a 30m wayleave corridor.
- 5.29 Due to the existing availability of energy on-site, development at this location would not be constrained by energy capacity. However, the location of existing overhead services and other plant would constrain development layout unless these are relocated.

### **GAS**

- 5.30 Gas infrastructure is located around the site but not in a position where it would be likely to have a major impact on development. An 18" Steel high pressure main crosses the site near Twineham Green. Development proposals would have to ensure that this main is protected and given an easement as required by the owner' typically 16m to 30m.
- 5.31 Due to the competitive nature of gas supply, it is not thought that gas infrastructure would form any sort of constraint on development at this location.

### **SUMMARY**

- 5.32 From initial investigations, there are constraints at the site related to existing utilities infrastructure. The most prominent is a 400kv national grid overhead power line which bisects the site which is unlikely to be feasible to underground. The undergrounding of lower voltage lines would introduce a cost to developing parts of the search area, but these costs are not of a scale to materially influence the viability of the development area. These factors have influenced the development of locational options which are explored in Section 8. Costs associated with undergrounding overhead power lines are explored further in Sections 9 and 10.
- 5.33 It will be necessary to invest in new utilities infrastructure including gas and electricity distribution networks, as well as waste supply and waste

water infrastructure. Utilities providers have not raised any specific constraints which suggest that new infrastructure cannot be provided to serve new development. However there are a range of potential issues which will require further investigation. These include for instance potential constraints on discharges into the River Adur.

- 5.34 At this time, it is not possible to provide detail regarding the existing available capacity and potential to accommodate start up areas of a scheme in the short-term. Utilities companies would require payment and time to carry out such studies. This should form part of a future study if proposals for development of a New Market Town are progressed. It is expected that by 2018, capacity improvements could have received funding and have been implemented in order to accommodate the scale of development which is proposed, but that before this time, there would be constraints on the scale of development which could be accommodated without additional capacity enhancement measures.

## 6. SETTLEMENT ROLE AND FUNCTION

### THE 21<sup>ST</sup> CENTURY NEW MARKET TOWN

6.1 As we consider the potential for a New Market Town in Northern West Sussex, it is useful to look back at past efforts to develop new towns and to consider what key principles informed their planning and design and to assess how successful these have been. This enables us to draw on past experiences, both good and bad, in considering the form and structure of a potential New Market Town, and its role and function.

#### Background to the New Towns – Lessons Learned

6.2 The idea of a new town as a way of solving political, social and practical problems of the day is nothing new. Winchelsea on the Sussex's south coast was rebuilt as a new town when the old town was lost to a storm in the 13th Century. Much more familiar to all of us is the wave of some 30 new towns built during the second half of the twentieth century, of which 20 were built in England. They were created under the 1946 New Towns Act commencing, in 1946 with Stevenage, Harlow and Basildon through to Milton Keynes in 1967. However, due to the economic situation post war and legal challenges, much of the development of the New Towns was carried out from 1952 onwards. In 1992, the Government ceased to classify New Towns as specific public policy areas.

6.3 At the end of WWII, approximately 500 000 homes were lost and an additional 500 000 homes damaged. This, in combination with the dire need to address the poor housing conditions and industrial pollution of the late Victorian period and Edwardian era led to the creation of entirely new towns in combination with the rebuilding of the existing bombed-out city centres, both using new designs specially adapted for the modern age.

6.4 This idea of new towns was in response to the concept that urban city living had become problematic – industry and housing had developed in an ad-hoc manner that damaged human health through pollution, and traffic congestion damaged the economic life of a city.

6.5 Developed with a vision for unifying town and country (developed from the Garden City movement), they were intended to produce healthier places to live, with extensive car free areas and traffic free routes. They promoted high rise buildings, designed to maximise light and air. Post war, there was a hunger for newness and change and there were high levels of public support for housing growth and an impressive scale of construction. The response was a drive for new forms of architecture and urban planning: new housing layouts, modernist tower blocks, zoning of industrial estates and housing estates and new highways infrastructure with ring roads and underpasses. The appeal of the New Towns included greenbelts, a finite size of town, zoned separation of industry and housing, modernist town centres and the idea of neighbourhood units.

6.6 They also promoted and delivered ideas that are relevant today: car free areas, neighbourhood heating and industrialised off site manufacture of building materials.

6.7 The New Towns were led by an employment rather than a housing need approach and they initially created strong communities with virtually no unemployment or outward commuting. However, in some cases the dominance of a single employer resulted in an imbalance in the demographics of a place, with the most successful New Towns the ones that attracted a range of employers resulting in a more balanced community.

6.8 The middle classes, who aspired to being home owners, never moved to the early new towns. This was because, after WWII, the economic situation meant that there were no mortgages available and therefore all housing was built for rental only. This again meant that the New Towns did not necessarily produce balanced communities and in some, this still remains an issue.

#### *Key Features*

- 6.9 Key features of the New Town approach were:
- Developed with a vision for unifying town and country (taken from the Garden City movement) which resulted in an abundance of green space in public places. Seen as successful in Harlow where



the town fitted into the landscape. In Milton Keynes the idea was to create “a city in a forest”.

- The idea was that the urban environment created crime and immorality which led to the view that a better environment would produce a better society.
- New towns were located to be far enough away from parent city to prevent commuting. (then 40km from London and 20km from other cities). To prevent commuting, each inhabitant was to have a job within the town.
- Towns would be self sufficient for employment and cultural provision, with their own venues for arts and entertainment.
- The intended populations were for 20 000 to 60 000 residents built in low density family housing, the majority for young families. The period of development was planned as 20 years for each town of 50 000 people / 20 000 homes.
- Zoned separation of housing estates and industrial estates.
- Housing was organised around the concept of neighbourhood units, each self contained around schools and local shops, with its own identity. These districts were reinforced by green spaces, and green boulevards.
- Vehicle and pedestrian movement segregated into separate networks allowed people to move uninterrupted, but resulted in poor surveillance for pedestrians.
- Cheap land values meant that some areas were built to extremely low densities – (4 dph in Harlow). Low densities have inhibited good provision of local services and public transport.
- Town centres were designed so that cars should be able to drive to, but not through the centres, resulting in significant infrastructure separating the town centres from the rest of the towns. In combination, this meant that the pedestrian-focused town centres could be developed as single block scale structures, inflexible to change. (These issues are less pronounced in town centres that

were built on existing settlements – such as Hemel Hempstead and Crawley, than on largely green field developments such as Harlow, and Milton Keynes.)

- Later new towns of 1960s were designed for “full motorisation”. They were designed to accommodate public transport although it was assumed that most people would use private cars. Milton Keynes roads were originally planned for 35mph, but a later decision changed these into highways designed to 70mph speeds.
- In Milton Keynes, Harlow and parts of Peterborough it is possible to drive through the town without really being aware that there are buildings on either side. The centre of Milton Keynes has the feeling of the outer suburbs of a place – with wide green routes and cycle paths.

#### *Key Problems*

- 6.10 Many of the current problems with New Towns - empty, windswept and economically depressed precincts and car free housing estates are the result of the failure at the outset, to appreciate how quickly society and technology change. The New Towns were designed with high ideals of modern living, but consideration of the fundamental ability of built form to change was never considered: typical historic towns comprise a complex overall structure made up of relatively simple individual buildings resulting in a rich urban form. It also means that individual elements (the buildings) can be easily replaced or refurbished without affecting the overall complex and interesting structure. By contrast, the overall urban form of New Towns was simplified, and the individual buildings (often built as large structures subdivided into individual units) became relatively complex, and therefore more difficult to modify or refurbish. The idea of mass production method for buildings was promoted at the expense of response to context and new ideas were delivered across the New Towns, regardless of local context. The design principles of the New Towns therefore went from being ahead of the times to being behind the times in a very short space of time.
- 6.11 Increased social mobility and car ownership has meant that many of the commercial centres have suffered because of increased competition due to the ease of travelling to, and accessing other

centres. They have also suffered as our expectations for entertainment and the role of shopping in society has changed dramatically since the mid C20th.

- 6.12 The design quality of the industrial estates and housing estates built on the edges of towns was often poor. However, this is not particular to New Towns only.
- 6.13 The reputations and perception of some of the New Towns has been influenced by pockets of extreme deprivation. In addition, large areas of poorly defined open space and a lack of maintenance to these areas has resulted in some areas appearing extremely rundown.
- 6.14 On the success side, New Towns are major centres of employment including light industry, distribution and high tech sectors. This is in part a result of the brief manufacturing boom of the 1960's which included the growth of cars, plastics and electronics with the physical space provided by the New Towns movement giving UK businesses room to expand and profit.
- 6.15 In addition, all towns can be considered to have ups and downs in their development, and compared to other places; new towns are young and still developing.

#### *Infrastructure*

- 6.16 The development of movement patterns in the New Towns started with the "walk to work" ideals and later moved to "full motorisation".
- 6.17 Brand new motorway networks were built around the same time as the New Towns meaning that new industries benefitted from fast access – there was a perception that good accessibility was key to the economic success of the UK.
- 6.18 One of the aims of the New Towns was to create traffic free town centres and housing areas. However the resultant ring roads, roundabouts and underpasses that were designed to achieve this objective has resulted in poor pedestrian circulation within the centres of towns, with pedestrians segregated from other movement corridors and this has affected the economic life and vitality of the town centres.

In some housing areas, the separation of parking areas from front doors has resulted in over generous, barren and stark open spaces with little specific role. The onus (and cost) of maintenance is often borne by local authorities.

- 6.19 The need to coordinate the funding and delivery of infrastructure remains a major issue today, but having privatised utilities is a major difference. Consultation to get all key agencies on board and the raising of private finance are all part of the modern planning system. Also community consultation is newer and part of the process. The co-ordinated inputs of government departments such as health, education, social services and transport remains problematic.

#### *Communities*

- 6.20 The nature of a place is inescapably linked to the nature of its population and where they work. People living in a town identify themselves with it and this creates a sense of pride in where they live. Creating a strong image and identity early on will help to promote the towns to future residents and to businesses. Arrivals officers were employed to help new residents settle in. This could form part of the future marketing and promotion of a new settlement.

#### **Eco-Towns: Bringing the New Town Model Up to Date**

- 6.21 Eco towns represent to some extent the latest model for new communities in the UK. The idea has evolved for eco-towns over the last 3 years as sustainable developments of at least 5,000 homes which meet stringent requirements for sustainability, affordable housing, low and zero carbon technologies and public transport. Their designation was intended both to address housing shortage and to pioneer and showcase zero carbon sustainability standards.
- 6.22 Although not directly comparable (the minimum size of Eco-towns is defined as 5000 homes), the development of the Eco-town model as set out in the Eco-towns supplement to "PPS1 Delivering Sustainable Development" provides useful guidance on the planning and designing of a new town to provide more sustainable ways of living. Key guidelines of relevance are:

- Locational Criteria: “Eco-towns should have the functional characteristics of a new settlement; that is to be of sufficient size and have the necessary services to establish their own character and identity and so have the critical mass necessary to be capable of self containment whilst delivering much higher standards of sustainability.” ET 2.1
  - Zero-Carbon Development: Eco-towns should be zero carbon, such that “over a year the net carbon dioxide emissions from all energy use within the buildings on the eco-town development as a whole are zero or below.” This excludes carbon emissions resulting from the construction process and emissions from transport. ET7.1
  - Climate Change Adaptation: “Eco-towns should deliver a high quality local environment and meet the standards on water, flooding, green infrastructure and biodiversity set out in this PPS, taking into account a changing climate for these, as well incorporating wider best practice on tackling overheating and impacts of a changing climate for the natural and built environment.” ET 8.2
  - Homes: Eco-towns should achieve mixed-tenure communities with “at least 30 per cent affordable housing (which includes social rented and intermediate housing).” Homes should achieve “carbon reductions (from space heating, ventilation, hot water and fixed lighting) of at least 70 per cent relative to current Building Regulations (Part L 2006)” and “have real time public transport information.” ET 9.1
  - Employment: “It is important to ensure that eco-towns are genuine mixed-use communities”... “as a minimum there should be access to one employment opportunity per new dwelling that is easily reached by walking, cycling and/or public transport.” ET 10.1
  - Transport: “The town should be designed so that access to it and through it gives priority to options such as walking, cycling, public transport and other sustainable options, thereby reducing residents’ reliance on private cars,”... “To achieve this, homes should be within ten minutes’ walk of (a) frequent public transport and (b) neighbourhood services.” (10 min walk is approximately 800 m.) ET 11.1
- A maximum walking distance of 800m from homes to the nearest school for children aged under 11, except where this is not a viable option due to natural water features or other physical landscape restrictions.” ET 11.5
- “Planning applications should include travel plans which demonstrate “at least 50 per cent of trips originating in eco-towns to be made by non car means, with the potential for this to increase over time to at least 60% per cent. ET11.2
- Local Services: Eco towns should provide facilities which contribute to the well-being, enjoyment and health of people. Provision of services should be proportionate to the size of development. This should include “leisure, health and social care, education, retail, arts and culture, library services, sport and play facilities and community and voluntary sector facilities.” ET 13.1
  - Green infrastructure: “Forty per cent of the eco-town’s total area should be allocated to green space, of which at least half should be public”...“Planning applications should demonstrate a range of types of green space, for example community forests, wetland areas and public parks. The space should be multifunctional, e.g. accessible for play and recreation, walking or cycling safely, and support wildlife, urban cooling and flood management.” ET 14.1
- “Particular attention should be given to land to allow the local production of food from community, allotment and/or commercial gardens.” ET 14.2
- Biodiversity: “Eco-towns should demonstrate a net gain in local biodiversity.” ET 16.1
  - Water Quality: Eco-towns “should contribute, where existing water quality leaves scope for further improvement, towards improving water quality in their localities.” (ET17.1). “Eco-towns in areas of serious water stress should aspire to water neutrality, i.e. achieving development without increasing overall water use across a wider

area and this is further explained in Annex B of this PPS.” (ET 17.5).

- Flood Risk Management: “The location, layout and construction of eco-towns should reduce and avoid flood risk wherever practicable. Eco-towns should not increase the risk of flooding elsewhere and should use opportunities to address and reduce existing flooding problems.” ET 18.1

There is a strong expectation that all of the built-up areas of an eco-town “will be fully within Flood Zone 1. Flood Zone 2 (medium risk) should, as far as possible, be used for open spaces and informal recreational areas that can serve as multi-functional spaces, for example, those used for flood storage. There should be no built-up development in Flood Zone 3, with the exception of water-compatible development and, where absolutely necessary, essential infrastructure as defined in Table D.2 of PPS25: Development and Flood Risk.” ET 18.2

- Transition: To support the transition process, planning applications should set out: “how developers will support the initial formation and growth of communities, through investment in community development and third-sector support, which enhance well-being and provide social structures through which issues can be addressed.” (ET 21. 1 ). Proposals should include “a governance transition plan from developer to community”.

- 6.23 Some of these targets and requirements represent good practice or relate to current standards, such as those addressing flood risk or affordable housing. Others are particularly challenging and seek specifically to push the boundaries of what can be achieved, including for instance requirements for transport modal split or zero carbon development. In some cases these represent significant costs to development, and the potential for them will depend upon viability issues.

### SCALE OF DEVELOPMENT

- 6.24 It is interesting to consider the issue of scale. There has been a continuing debate regarding the size of new towns. The New Towns

Committee in 1945 identified the optimum population of 1<sup>st</sup> generation New Towns as between 30,000 – 60,000 (with 60,000 – 80,000 within a 10 mile radius). The later new towns were planned on a scale much larger than this, influenced in part by changes in personal mobility. The debate has never really been concluded.

- 6.25 The most recent policy debate around eco-towns is however considering much more limited scales of development. Government has suggested over the last couple of years that the minimum size of eco-towns is 5,000 homes with say 11,000 population. This would likely be **linked settlements** which relate to an existing town. Wider research suggests a minimum of 10,000 homes (c. 22,000 population) for a standalone settlement.

- 6.26 Looking back over the history of new settlements over the last 50 years, many of the ‘New Towns’ were conceived as being self-sufficient or self-contained, in terms of places which provided jobs, services and cultural facilities to cater for their resident populations. Indeed many were employment-led, with supply-side measures to attract economic investment with availability of jobs attracting new residents.

- 6.27 There is a relationship between the size of a town and the level of travel to work ‘self containment’ (the proportion of residents who also work within a town) and in terms of travel to retail and leisure destinations. In broad terms the larger a town is, the more diverse employment base, range of jobs and retail, leisure and cultural facilities it can support.

- 6.28 At a local level it is instructive to consider the scale and success of some of the existing towns within the sub-region. Figure 6.1 indicates the current size of existing settlements within the sub-region.

- 6.29 Crawley is the largest town with a population of around 100,000. Horsham is the second largest at 47,000. However each of the Mid Sussex towns are notably smaller, with 22,000 – 28,000 population.

- 6.30 Crawley has grown over time to a size which supports a sub-regional town centre, with a significant comparison retail offer (albeit recognising the potential and prospect for improvement to this) as well

as a strong business base. It is a recognised commercial employment location.

6.31 In contrast, both Burgess Hill and Haywards Heath both have town centres with a more limited retail offer, particularly in terms of comparison retailing. They both suffer from leakage of retail spend and have lower levels of travel to work self-containment than the larger settlements in the sub-region. There is a risk that creating a third town of a similar size could simply perpetuate this picture. However this does not have to be the case.

6.32 Therefore, in planning for any new settlement it is **important to consider how it will fit into the existing hierarchy and network of settlements within an area**. In planning for a settlement of 10,000 homes, it is naïve to think it will be self-sufficient, able to provide services and employment for its own residents. Other towns of a similar size in the area do not achieve this, and it will not have sufficient critical mass itself to do so.

6.33 It is possible to consider the potential for a polycentric settlement model in the context of a new market town together with Burgess Hill and Haywards Heath. Using this as a conceptual framework, we consider in this section how a New Market Town could be developed so as to:

- Complement rather than compete with the existing residential, employment and retail service offering in Haywards Heath and Burgess Hill;
- Achieve a greater critical mass to support investments in existing town centres and business locations; and
- Provide social, cultural and (public) transport infrastructure to support a polycentric settlement model.

6.34 In this way it is possible to view the potential of a new Market Town as a conduit for regeneration. It can support the improvement of existing facilities and infrastructure; help to improve sub-regional economic performance; and support the regeneration of existing Town Centres.

6.35 The emphasis is on maximising **self-containment at two levels: one within the town; and two, within the network of centres**.

6.36 It is instructive first to consider the employment and retail offer in the existing nearby towns of Haywards Heath and Burgess Hill, together with travel to work patterns.

#### Haywards Heath

6.37 Haywards Heath has a population of 22,800 and has developed as the administrative centre for Mid Sussex. The town benefits from a strong rail service, which has supported both the residential and employment markets. It has an attractive town with a strong character. However the town suffers from congestion, and a proposed southern bypass has yet to be built.

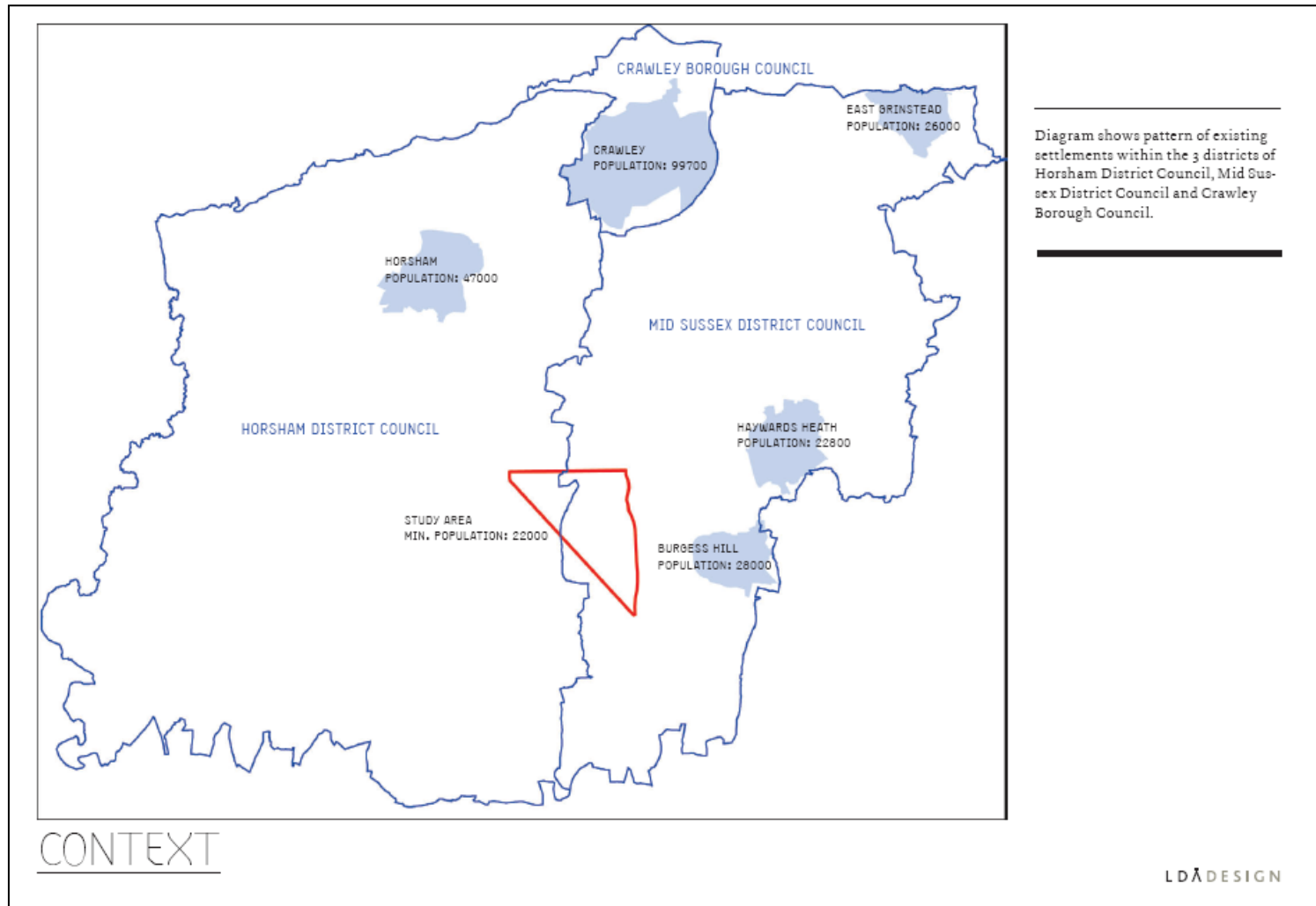
6.38 The town's employment offer is office-focused, with large floorplate office blocks focused around the Station and Perymount Road. There is some potential for office floorspace growth, albeit limited. There are a number of small industrial estates which serve primarily a local market.

6.39 The town's retail offer is focused along South Road. Both the scale of provision and offer are limited, linked somewhat to the size of the town.

6.40 The town is ranked 387<sup>th</sup> in Javelin Group's national ranking of town centres. Foodstore provision accounts for 71% of available convenience spend in the core catchment area. There is a Sainsbury's superstore close to the Station. However Haywards Heath accounts for only 36% of total available comparison goods expenditure in the centre's core catchment area. Many shoppers are travelling to alternative destinations, including Brighton and Crawley.

6.41 Haywards Heath is more self-contained than Burgess Hill. 38.8% of its resident population works in the town, 57% in total across Mid Sussex with commuting out mainly to London (15%) and Crawley (11%). It has 1.1 jobs per resident worker.

Figure 6.1: Existing Settlement Pattern



- 6.42 Key issues for Haywards Heath are therefore town centre regeneration – particularly improving the comparison retail offer – together with addressing congestion.

#### **Burgess Hill**

- 6.43 Burgess Hill is located further to south, with a population of 28,000. The town has witnessed various phases of growth over the 2<sup>nd</sup> half of the 21<sup>st</sup> century. It benefits from good infrastructure, particularly construction of the A273 which bypass the town on the western side, together with the A2300 which connects this to the M23 at Hickstead.
- 6.44 The town's employment offer is more industrial based, in contrast to Haywards Heath. It includes a large industrial estate, the Victoria Business Park; together with the smaller Sheddingdean Industrial Estate to the north of the town. The Victoria Estate is successful and includes a number of high value-added manufacturing activities, but parts of the estate are in need of upgrading. Office floorspace provision is limited.
- 6.45 The town centre is tired and in need of regeneration. There is an above average level of vacant units. It is ranked 344<sup>th</sup> in Javelin Group's national ranking of town centres. Foodstore provision includes a Waitrose store within the Town Centre and a larger Tesco store at Jane Murray Way on the south-east side of the Town. Foodstore provision in Burgess Hill accounts for 80% of total available convenience goods expenditure. However Burgess Hill retains just 41% of available comparison goods expenditure from its core catchment area.
- 6.46 Burgess Hill has a travel to work self-containment of just 34.9% with just 6,200 of its working population of 15,400 working within the town although 58% work in Mid Sussex. Out-commuting flows are primarily to other parts of Mid Sussex (18%), Crawley (11%), and London (9%). It has 0.86 jobs per resident worker indicating a deficiency of jobs compared to the size of its resident population.

#### **CURRENT TRAVEL TO WORK PATTERNS**

- 6.47 The Crawley Travel to Work Area extends broadly from the M25 to the South Downs and west to Petworth.
- 6.48 Northern West Sussex comprises Crawley Borough together with Horsham and Mid Sussex Districts. This is a strong sub-regional economy which supports net in-commuting of 9,000 people a day. This is testament to the sub-region's economic strength.
- 6.49 There is 73% self-containment of travel to work flows within the sub-region, based on 2001 Census data. Of those commuting out to work, 9% do so to London, 8% to Surrey, 3% to Coastal West Sussex and 3% to Brighton and Hove.
- 6.50 Employers within the sub-region similarly draw on a wider labour market. 69% of people working within the sub-region live within it, with 7% commuting from Surrey (mostly from the three local authorities in the Gatwick Diamond) with 5% each from West Sussex, Brighton and Hove and East Sussex, and 4% from London.
- 6.51 There is movement within the sub-region, between the three constituent local authorities. Crawley has a daily net inflow of 30,781 whilst Mid Sussex and Horsham have daily net out-flows of 10,759 and 9,857 respectively.
- 6.52 These flows are influenced by the distribution of employment across the sub-region. Crawley has the highest jobs density in the South East Region at 1.29 (workforce jobs/ working-age residents). In contrast the density in Horsham at 0.75 and Mid Sussex at 0.83 are both below the regional average of 0.86.
- 6.53 With more job opportunities, Crawley's self-containment of travel to work patterns (the level of residents who are also employed within the Borough) is 70%. This compares to 58% in Horsham and 54% in Mid Sussex.
- 6.54 Crawley is however not large enough in terms of its population to support employment within the town. The town's economic base

supports both its own residents and the wider sub-regional economy, drawing people who live across the sub-region:

- 17,900 people commute daily from other parts of West Sussex to work in Crawley. Of these 83% are from Horsham and Mid Sussex Districts, with 6,500 from Horsham District and 8,300 from Mid Sussex;
- 9,500 people commute from Surrey, again with the majority from adjacent Districts. 5,200 commute from Reigate and Banstead, 1,800 from Tandridge and 1,000 from Mole Valley;
- 5,400 people commute daily from Greater London. 4,400 people commute from Brighton and Hove, with a further 3,100 from East Sussex.

6.55 There are thus a significant number of people who commute from Horsham and Mid Sussex Districts to work in Crawley. 11% of Horsham District working residents and 13% of those in Mid Sussex commute to Crawley.

6.56 While out-commuting from Mid Sussex is highest to Crawley (13%), there are also notable flows to London (12%), Surrey (6%), Brighton and Hove (4%) and East Sussex (4%). The flow to London is of 7,500 residents and to Brighton 2,750.

6.57 For jobs in Mid Sussex, 65% are taken by people living within the District and 72% by people living within the sub-region. 3,800 people daily commute to work in the District from Brighton and Hove (7% of the workforce), 2,000 from Crawley (4%), 2,500 from Wealden (5%), 2,000 from Lewes (4%) and 1,700 from Horsham (3%).

6.58 Our analysis highlights that:

- 10,900 jobs would be needed in Horsham and Mid Sussex to match the South East jobs density in these Districts. This is before any provision is made for population growth; however
- Labour markets operate across local authority boundaries; and

- There is no undersupply of employment at the sub-regional level, with substantial in-commuting to an area this close to London testament to the sub-region's economic strength.

6.59 This said there could be an opportunity for new employment provision in a New Market Town to result in shorter distance flows, providing enhanced employment opportunities in the southern parts of Horsham and Mid Sussex Districts.

6.60 Based on 2001 Census data we calculate that the level of self-containment of Haywards Heath, Burgess Hill, Sayers Common and the surrounding rural catchments was 49% in 2001. This is relatively low and enhanced employment opportunities within this area could have sustainability benefits in promoting more local travel patterns.

6.61 This area has 45,000 jobs with a jobs density of 0.82 jobs per resident worker<sup>11</sup>. To bring this into balance would require provision of 9,500 jobs. However 12% of working residents within this area currently commute to Crawley (6,500) and 6% to Brighton and Hove.

6.62 Therefore enhancing employment provision without increasing housing provision might have an impact on restraining labour supply across the sub-region, and within Crawley.

6.63 Considering these more localised patterns, we are of the view that the catchment self-containment should be increased to 0.9. This would mean provision of 4,100 jobs to meet the existing deficiency plus jobs for new residents. This would be in addition to the estimated 10,000 jobs to support population growth.

## ECONOMIC ROLE

6.64 Employment provision within a new settlement would likely include a balance of employment across sectors. This would include employment on traditional B-class floorspace, within A-Class town

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<sup>11</sup> Resident population 54,117; working population 44,599



centre uses, in hotels and leisure, and within education, healthcare and other uses.

- 6.65 In our view, the employment component if brought forward, should complement rather than compete with existing employment centres within the sub-region, but should be of a scale to address the existing jobs deficiency in the catchment area and support planned population/housing growth.
- 6.66 This issue will require further investigation, including assessing the relative economic sectors which could be attracted to a new market town, taking account of potential market demand and addressing displacement issues in regard to existing employment locations.
- 6.67 Based upon our work on the Employment Land Review, we are of the view that there is a deficiency in provision of high quality 'campus' business park space within the sub-region. This could potentially be addressed through delivery of a New Market Town, subject to cross-authority sub-regional agreement potentially through the Gatwick Diamond Economic and Spatial Strategy
- 6.68 We envisage that further office provision, including for small and medium-sized enterprises, would be brought forward as part of mixed use development in a new town centre.
- 6.69 A B1 focus to the employment mix would also complement the existing offer in Burgess Hill which is focused on industrial and warehouse floorspace. We anticipate that there would be demand for B8 floorspace, reflecting the motorway access which a New Market Town might afford. This would need to be carefully managed.
- 6.70 An appropriate level of B1c/ B2 manufacturing floorspace should be provided to deliver a balanced employment offer, whilst seeking to limit the impact of new development on existing employment locations, particularly at Manor Royal Crawley and the Victoria Business Park Burgess Hill. Investment in these estates should be phased in advance of delivery of significant new floorspace at a New Market Town.
- 6.71 As we have identified, delivery of many of the New Towns was 'employment led' whereby investment by new businesses helped to

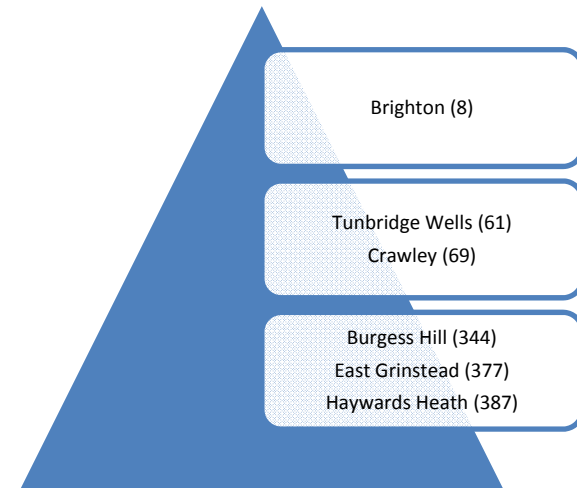
drive and support housing demand. In some senses however the relationship is a two-way one. Regardless, we consider that a significant employment component should be a core principle of the New Market Town if taken forward.

- 6.72 Our calculations suggest that **c. 40ha of employment land provision would be required to provide employment for the Market Town's population (10,000 jobs) and to contribute to addressing the existing jobs deficiency (4,000 jobs)**. This is a high level calculation which assumes 1/3 of jobs are provided for on employment land, with a 30 sq.m per employee density and a plot ratio of 0.32.

**RETAIL ROLE**

- 6.73 Figure 6.2 below outlines the current hierarchy of centres within the sub-region and surrounding areas. Brighton is the highest ranking centre, followed by Tunbridge Wells and Crawley. The Mid Sussex towns are positioned significantly lower and at a similar level.

**Figure 6.2: Retail Hierarchy, 2007**



- 6.74 As we have identified, the New Market Town would not be dissimilar in size to the existing towns of Burgess Hill and Haywards Heath. However we do not consider that it would be sustainable to create or plan for a third town centre of a similar size. This would simply mirror the problems in the two existing towns which are insufficient in scale with insufficient critical mass to support a good range of comparison retailing.
- 6.75 Delivery of a New Market Town of 10,000 homes would result in significant growth in expenditure. In our view this should be taken as **an opportunity to re-consider the retail hierarchy within the sub-region and particularly within the catchment area of what would be three towns.**
- 6.76 We consider that the role of one of the towns should be enhanced to provide a higher order role/ function. There is greater physical capacity to achieve this in Burgess Hill, as the Burgess Hill Masterplan indicates.
- 6.77 We have undertaken some basic modelling of retail capacity to identify potential levels of retail floorspace within the New Market Town. We assume delivery of 10,000 homes. Growth in expenditure head has been calculated in line with the Mid Sussex Retail Study 2009 Update (GVA Grimley, Nov 2009).
- 6.78 10,000 homes generates convenience spend of £46.7 million. Assuming a 50% retention of convenience spend within the town initially, this would support an anchor food store of 2,300 sq.m net sales area (3,300 sq.m gross). This is smaller than existing main foodstores at Haywards Heath (Sainsbury's 3,682 sq.m) and Burgess Hill (Tesco 3,563 sq.m). However there is a relationship between spend retention and store size, which might support delivery of a larger foodstore. Further detailed analysis would be required. The foodstore would be a key anchor within the Town Centre.
- 6.79 In terms of comparison retailing, Mid Sussex's Retail Study identified that Burgess Hill accounts for only 41% of total available comparison goods expenditure in the centre's core catchment area and 16.5% district-wide. Haywards Heath retains 36% of spend within its core catchment area, and 13% district wide. Both towns experience significant spend leakage to larger centres such as Brighton and Crawley.
- 6.80 Based on maintaining existing market shares and November 2009 housing growth assumptions, GVA Grimley's Retail Study Update indicates floorspace capacity for 11,250 sq.m (+102%) in Burgess Hill and 8,736 sq.m (+ 67%) in Haywards Heath.
- 6.81 Our calculations show that 10,000 homes generates £185.5 million of comparison goods expenditure. Based on existing sales densities this would support c 41,400 sq.m of additional comparison floorspace, and a total of around 52,000 sq.m floorspace taking account of service and quasi-retail floorspace (gross). The question is how is this capacity distributed between the town and other centres.
- 6.82 We are of the view that the Councils could put in place a clear strategy to develop the comparison retail offer in Burgess Hill, increasing its relative position in the retail hierarchy. The scale of development within the catchment would provide a clear opportunity to achieve this.
- 6.83 In terms of the relative provision of floorspace within the New Market Town and additional floorspace within Burgess Hill, this would need to balance sustainability of the new settlement with regeneration of existing centres. It is however more sustainable to promote local convenience shopping trips, than additional long-distance trips to Crawley and Brighton.
- 6.84 The local authorities will need to work together to define a retail strategy for the New Market Town, Burgess Hill and Haywards Heath, and potentially with Brighton and Hove City Council. This should seek to ensure that new development at Burgess Hill or within the Market Town does not prejudice the success of existing development proposals at Crawley Town Centre North or within Brighton or unduly impact on vitality and viability of Haywards Heath Town Centre. We note that a revised, and reduced scheme for the former is now being progressed. It may be possible to achieve this through phasing.
- 6.85 The Town Centre within the New Market Town if progressed should contain a mix of retail, leisure, service, employment and residential

uses. We estimate that a land area of 12ha would be required, potentially with scope for subsequent expansion.

### **RESIDENTIAL DEVELOPMENT**

- 6.86 GL Hearn has developed an understanding of the sub-regional housing market from our previous involvement in preparing a Strategic Housing Market Assessment (SHMA) for Northern West Sussex, and more recently in assessing Locally-Generated Housing Needs in Horsham District specifically. Our findings draw on these previous studies.
- 6.87 We would expect the majority of demand for housing within a New Market Town to be derived from within Northern West Sussex as the functional housing market. However this housing market is influenced by surrounding areas, and some residents would likely move to the New Market Town from Brighton and Hove, particularly to access larger family housing (reflecting the existing housing mix in Brighton and Hove), with some movement also from other parts of West and East Sussex.
- 6.88 The SHMA identified that about 5% of moves to homes in Northern West Sussex were from Greater London. Given a continuing supply/demand imbalance within the capital, it is likely that some households will move from the capital however this may be limited by the lower access of the site to the rail network.
- 6.89 The impact of development at Shoreham Harbour would also need to be considered. Currently work is being commissioned to assess the scale and phasing of development. We anticipate however that this would primarily be higher density flatted development, mitigating its impact as the driver of migration out of Brighton and Hove is access to larger family housing.
- 6.90 The demand profile and absorption rates for new housing will be influenced by other development schemes being progressed within the sub-region. It is therefore not possible to be that specific as to the potential delivery rates at this stage.

- 6.91 Looking at past completions in the sub-region in the pre-recession period (1991-2007), for individual five year periods the SHMA identified that housing completions ranged from c. 1250 – 1780 homes per annum.
- 6.92 Delivery rates will be influenced by delivery mechanisms and the tenure mix as well as development elsewhere within the sub-region. The early phases of new town development in Crawley for instance included a significant public sector housebuilding programme. Funding for affordable housing development will therefore be important. This could be limited in the short-term by the current budget deficit, although the impact of this over the 20 year build out period is expected to be less significant.
- 6.93 If delivery of development elsewhere in the sub-region is subdued, this would also contribute to driving delivery at this location. In contrast, should development at the New Market Town be brought forward alongside major extensions to existing nearby settlements such as Burgess Hill, this would dampen delivery rates.
- 6.94 There is a strong benefit from driving delivery rates in order to achieve the critical mass sooner to support local facilities and social infrastructure. This will be important in creating an attractive and vibrant place, and setting the tone for the town. It is envisaged that delivery of at least 500 homes per annum would be necessary to achieve this.
- 6.95 The total build-out period for 10,000 homes at this rate would be 20 years. Clearly however delivery rates will vary year-on-year depending on market conditions, and with an evidence build up and tail off of delivery rates within the overall development programme.
- 6.96 The preparation of a detailed delivery strategy will be critical to achieving this rate of delivery of new housing at a single location. This would need to address funding for affordable housing provision, to investigate and encourage institutional investment in the private rented sector, as well as the marketing of private and shared ownership housing. The development and implementation of a robust Delivery Strategy addressing these factors will be critical to achieving a 20 year

build out period and ultimately to creation of a vibrant and successful new community.

- 6.97 As we have commented, many of the previous UK New Towns delivered over the last 50 years have been 'employment led.' Delivery of new business floorspace and wider employment opportunities will remain an important driver of housing demand and help to support and push delivery rates. A strategy for attracting economic investment and supporting enterprise development would therefore also be an important component of an overarching Delivery Strategy.
- 6.98 Despite the economic downturn and the continued vulnerability of the housing market, we see the long-term fundamentals which underpin housing demand within the sub-region as strong. These relate to a structural imbalance between supply and demand within the region, long-term demographic trends, economic potential, and the sub-region's accessibility and strong quality of life offer.
- 6.99 The area's current demographic make-up indicates an above average proportion of middle aged families with children, and less young adults than average. Moving forward we expect a significant proportion of population growth to be of a growing proportion of people aged over 60. However while it will be necessary to provide specialist housing for older persons within the New Market Town, many older residents will remain in the current communities often in their current houses.
- 6.100 Younger households, with people aged between 20-39, are likely to be attracted to the New Market Town by the availability of employment. The employment offer across the three settlements, and within the New Market Town specifically, will influence the nature of demand for homes.
- 6.101 We would expect the housing mix to provide a range of house types, but with a bias towards family housing and 2 and 3 bedroom properties. Further work will be necessary to define specifically the demographic mix, which may vary depending on market conditions through the delivery period of the development and development viability.

6.102 We note that our Horsham District Locally Generated Needs Study provided an indication of housing mix based on future demographic trends. It indicated, based on achieving 40% affordable housing provision, provision of 20% 1-bed properties, 30% 2-bed properties, 39% three-bed, and 11% 4+ bed. Tenure mix should be informed by a long-term assessment of needs and development viability. We would expect c. 70-80% of provision to be houses.

6.103 Given market volatility and the feasibility stage of this assessment, it is not appropriate to advice on pricing. However it will be important for the initial phases of development to set the tone for the town. Place-making investment and timely infrastructure delivery will be important to achieving value uplift over time, and to driving delivery rates. The economic strength and potential of the sub-region, its location and quality of life offer we feel underpins the long-term potential for housing growth.

#### **Housing Densities**

6.104 In determining the land required to accommodate the new market town, assumptions must be made on average net densities. Any new development, whether it is located in a new market town, an urban extension or within an existing urban area, must make the most efficient use of land it can and should aim to form a compact place. Many of the original new towns were constructed at very low densities and little was done to discourage the use of the private car, even on short journeys. Keeping development compact helps in a number of ways:

- It keeps amenities and uses close to each other and encourages the development of walkable neighbourhoods;
- It can provide a range of different housing types and different tenures;
- It creates a better catchment for public transport;
- It provides a more efficient network for energy transmission, water supply and waste collection;
- It improves natural surveillance and improves opportunities for social contact;

- It reduces costs of land acquisition ;
  - By remaining compact, development takes up less countryside.
- 6.105 It would be wrong to allow discussions on housing density alone to determine the character of the new market town and average housing densities should properly emerge from further work to define the character of the new market town and how it will meet the range of objectives set out above. In the early Garden City movement, Raymond Unwin argued for residential densities of 12 dwellings to the acre (29 dwellings to the hectare) and this was a reaction to the overcrowded and insanitary conditions of the industrialised cities of the time. This would be regarded as too low now to encourage greater public transport use and densities of around 50dph are commonly regarded as the minimum required to support sustainable communities. Regard must be taken though, of the rural nature of the setting for the new market town and the importance that landscape, (a mixture of newly-created landscapes and the landscapes already there), will play in determining its character. For this reason we have set the average housing density at 45dph. This density is sufficient to support local amenities and services within a walking catchment and efficient public transport services. A range of housing types can be delivered (with a majority of family housing) through good design and layouts within this.
- SUMMARY**
- 6.106 Drawing on the lessons from earlier development of new towns, it is clear that a development of 10,000 homes will not create a self-sufficient community. There is a recognised relationship between settlement size and self-containment both in terms of employment and retail/ service trips. The size of settlement proposed means that we can expect something of the order of perhaps 35 – 45% self-containment of travel to work trips and perhaps 30 – 40% comparison retail spend retention. This is a function of critical mass in terms of the employment and comparison retail offer.
- 6.107 In our view it is appropriate to consider and plan on the basis of a polycentric model whereby a New Market Town could be viewed collectively with Burgess Hill and Haywards Heath. New development within the New Market Town would:
- Complement rather than compete with existing residential, employment and retail service offerings in Haywards Heath and Burgess Hill;
  - Achieve a greater critical mass to support improvements to existing town centres and business locations;
  - Provide social, cultural and public transport facilities to support a polycentric settlement model.
- 6.108 In this way concerns regarding impact can be robustly addressed, and it is possible to view the potential delivery of a new Market Town as a conduit for regeneration – to support the improvement of existing facilities and infrastructure; to improving the employment offer; and to supporting Town Centre regeneration.
- 6.109 Our analysis suggests that provision of significant employment development – potentially of 40ha – could help to address the current deficiency of employment development within the southern part of the sub-region. This could reduce current net out-commuting but not to the extent that it might constrain potential labour supply in surrounding areas, such as Crawley.
- 6.110 We see the delivery of a New Market Town as very much *employment led*, with new employment space brought forward alongside new housing with each supporting demand for the other.
- 6.111 In retail terms however, we consider that the scale of the town centre within the New Market Town should be controlled; and brought forward alongside a strategy to substantially improve the town centre offer, particularly for comparison retailing, in Burgess Hill. Burgess Hill would be elevated to a higher order centre to serve the three towns.
- 6.112 The three towns collectively would achieve a strong and diverse employment base and network of services and facilities to provide for their combined population. Critical mass would be achieved across the three; supporting sustainable movement via the public transport strategy.

- 6.113 These factors have informed the emerging principles and vision which is set out in Section 7, and the potential locational options which are explored in Section 8.
- 6.114 It will be important to deliver a range of house types, with a focus on family housing. However to support good public transport, local services and efficient use of land a density of 45 dwellings per hectare will be necessary.



## 7. EMERGING VISION & PRINCIPLES

7.1 Our assessment of the location, infrastructure constraints and sub-regional dynamics together with evaluation of the successes and failures of past new towns provides a good basis for beginning to think through some of the key principles which would guide the design of a New Market Town.

### EMERGING VISION

7.2 If there is one very strong lesson from the New Towns movement of the latter half of the 20th Century it is that the imposition of a vision expressed through the architecture of the time or through infrastructure based upon the motor car for example was so inflexible and unable to adapt to change that it eventually strangled the development of many of these New Towns and led to places that became unpopular and unloved. This is not a reason for avoiding a vision but it is clear that any vision for a New Market Town really must spring from the underlying and enduring qualities of the place and emerge and develop in time through engagement with local communities.

7.3 In this initial feasibility work we have highlighted a number of local characteristics and special qualities that we believe can provide the basis for developing the vision.

7.4 At one level, a vision for a 21<sup>st</sup> Century New Market Town could describe the characteristics of the town: the type of place which partners seek to create. We have considered what some of the components of this might be.

7.5 Firstly, it should be a **thriving place** with retail, cultural and leisure facilities which support its population and enable local access to services. It should have a good range of housing and associated balanced population structure.

7.6 It should also be a **sustainable place** meeting modern standards of energy and resource efficiency, minimising journey distances and promoting travel by sustainable modes.

7.7 The town must also be a **quality place** integrating best practice in urban design from the structure of the town down to design of individual buildings and streets. The relationship between land use, green infrastructure, services and the transport network will be critical to achieving quality of place and sustainable lifestyles.

7.8 These however represent somewhat generic principles which while important are not that place-specific. There are some key features of the local area which stand out and provide a basis for a vision:

#### *Drawing inspiration from the very special landscape setting in the Adur valley between the North and South Downs*

7.9 We have in Section 3 described the quality of the Sussex landscape and its diversity and richness from the Low Weald landscapes of the study area and its immediate surroundings to the High Weald and the South Downs escarpment north and south of the study area. The historic landscape pattern and the irregular grid of lanes and hedgerows running north south and east west provide a rich backcloth for the form of the New Market Town. Urban form should reflect the gentle rippling, underlying landscape – gentle ridges and broad shallow valleys running east west, and the powerful presence of the South Downs on the southern skyline.

#### *Its Englishness*

7.10 The special timeless qualities of the villages and the countryside seem quintessentially English, and this is reinforced by the show jumping, wine growing, the village green, the cricket match, the farmsteads, the Oak trees, pasture, and the meadows in the area. All these activities and features create a very enticing picture for life in the New Market Town. The green infrastructure should capture these qualities, built around the Hickstead arena and could include rides, gallops, cross country courses, dressage arenas, and polo fields. Orchards and vineyards should also feature widely.

#### *The High Density Farmstead Model*

7.11 The idea that the town centre built around a new workspace model might follow a pattern of agricultural buildings, barns, clusters and



farmsteads, with reduced parking and public transport hub. Workspace and mixed use buildings would also make extensive use of south-facing roofs with photovoltaics and solar heating. Excess heat would be directed into district heating for residential areas and water space and green space would provide cooling in the summer.

**Exchange at every Level**

- 7.12 A new “market” town should also be a new market model built around the idea of exchange at every level, from technology, knowledge and skills, heat and power, waste and recycling as well as the traditional uses such as local food.

**Three Towns Network**

- 7.13 It will be critically important that a New Market Town integrates with the existing settlement pattern within the sub-region. It should form part of a **three towns network** with a complimentary employment, retail and service offer, and with a good public transport network connecting the three.
- 7.14 The town should **support regeneration** particularly by providing further critical mass of population and expenditure to underpin sustainable town centre regeneration in Burgess Hill and Haywards Heath particularly, as well as in higher order centres such as Crawley. It should support the development of Burgess Hill as a higher order centre.
- 7.15 It should also support economic regeneration by bolstering the range and quality of employment opportunities in the south of the sub-region, and reducing out-commuting.



**Figure 7.1: Key Components of Emerging Vision**



**GENERAL DEVELOPMENT PRINCIPLES**

7.16 From this emerging vision it is possible to identify a number of key principles which can be used to guide further work and masterplanning. These are:

1. The new settlement should contribute positively to meeting housing need and maximising the potential of the sub-regional economy;
2. The new settlement should contribute to investment in existing towns – particularly within town centres – rather than diverting investment away;

3. The new settlement should support delivery of strategic infrastructure with benefits beyond its own boundaries, rather than exacerbate capacity issues;
4. The new settlement should set new standards in design quality and sustainability – it should showcase best practice;
5. The new settlement should reflect and integrate with the special landscape setting of the area;
6. The new settlement should be quintessentially English, with activities and design which relate to the surrounding qualities of the villages and countryside;
7. The settlement should be built around the ideas of exchange at every level: from technology, knowledge and skills, heat and power, waste and recycling and food;
8. The employment, retail and transport strategies together should support short-distance commuting and use of sustainable modes;
9. Timely delivery of infrastructure and investment in place making should create a high quality identity.

7.17 Achieving this will require the careful development of complimentary and coordinated strategies for housing, employment and retail development across the three towns. It will require investment to deliver a high quality public transport network to offer genuine travel choice. It will require careful masterplanning and design guidelines (or codes) to be developed.

7.18 The early phases of development will set the tone for the new settlement. These key principles and early place making investment will be critical to establishing the identity of the place, and supporting value uplift (such as in residential and commercial values) over time.

**SUSTAINABLE TRANSPORT PRINCIPLES**

7.19 There are a specific set of principles which should guide the design of development to support sustainable transport.

- 7.20 The New Market town should adopt modern design principles, employing a range of development densities to exploit the potential for walking and cycling to key land uses. Community land uses should be provided in an efficient manner, located based on willingness to walk. Realistic targets for the development brief might be to:
- Maximise the proportion of homes within 500m walk of a primary school
  - Maximise the proportion of homes within 1km walk of a secondary school
  - Maximise the proportion of homes within 500m walk of a local centre providing retail and community facilities
  - Maximise the proportion of homes within 400m of a bus stop with a service frequency of at least 15-20 minutes
  - Maximise the proportion of homes within 2km of the town centre which should be located adjacent the primary transport interchange
- 7.21 The urban morphology should afford maximum priority to bus services whilst preserving a safe highway environment delivering high quality public realm and sense of place. The internal street network is therefore likely to include a network of streets, linked with a series of bus gates, to exploit bus journey times through the settlement.
- 7.22 Bus gates and cycleways should exclude general traffic from using the most expedient routes through the settlement. The remaining network of streets should achieve a pattern of permeable routes that deliver naturally traffic calmed streets based on the manual for streets hierarchy of street functions.
- 7.23 Considering the balance of arrangements a more detailed development brief for the proposed settlement can explore the relationship of settlement pattern and internal transport network and how this will connect to the wider transport network.
- 7.24 To deliver a settlement which optimises the potential for trip internalisation and for short 'every-day' trips to be made by foot, an initial strategy has emerged which would be based around providing some 5 local centres, each serving dwellings within a 400m radius of the centre.
- 7.25 To optimise access to the town centre and the surrounding towns, Local Centres would be served by bus routes which, where possible, would form part of direct interurban links including express links to Burgess Hill, Crawley and Horsham. These routes would, where possible, connect to strategic Park and Ride services.
- 7.26 Consolidating (interurban/Park & Ride and Local) bus services would serve to maximise the viability of bus services in the longer term. Each development option delivers this optimisation to different degrees, and for most options, there would also be a requirement for some local services to provide all areas of the new town with a full complement of connections to the Town Centre and transport interchange.

## 8. OPTIONS FOR LOCATION & STRUCTURE

8.1 In this section we have sought to take forward the vision and principles by developing a number of potential options for the location and structure of the prospective New Market Town. These are informed by the assessment of environmental constraints, landscape character and the transport and utilities infrastructure assessments.

### OUTLINE OF POTENTIAL OPTIONS

8.2 We initially explored five potential settlement options comprising:

- A. Compact settlement close to A23 and A2300 Link Road
- B. A derivative of this with a more north/ south orientation;
- C. A derivative of A but closer to the A272 Corridor;
- D. Linear settlement extending west from A2300 junction; and
- E. A series of linked villages.

8.3 Our initial assessment identified that a compact settlement performed strongest. It supported good transport efficiency and flexibility, a compact form (minimising land take), and access to services.

8.4 A linear or polycentric form was identified as potentially less efficient and flexible in transport terms, making it more difficult to sustain a good quality bus service (or in the case of a linear form dissipating traffic). The polycentric model was identified as not very flexible for future expansion, and this could result in the coalescence of villages.

8.5 Four derivatives of a compact settlement option were then developed, taking account of the relative constraints and infrastructure issues within the Area of Search.

8.6 The 4 location options are based on the same land use areas and therefore illustrate the same settlement extent. Each of the settlement options is based on a compact, town model with a single town centre supported by a number of smaller, local / neighbourhood. All the options have been located in response to the environmental constraints and in response to accessibility to the existing strategic and local road network and public transport access options.

8.7 The direction of future growth for all options, beyond the settlement areas for 10,000 homes can be broadly defined by existing edges. North of the A272, the topography and landscape pattern starts to become more undulating and finer grain, and forms a transitional edge to the AONB; development should therefore be limited by the A272 to the north. To the west, Wineham Lane / Kent Street form a natural edge to westerly growth, allowing the landscape settings of Cowfold and Henfield to be protected. Natural growth to south would be defined by the B2116 from Albourne Green to High Cross to allow the landscape of the Albourne foothills to be protected. Growth to the east would be limited by the A23.

### Location Option 1: Hickstead / Sayers Common

8.8 Option 1 illustrates a new settlement located close to the A23, in a predominantly north-south form. It is positioned to allow a new town centre to be developed centrally to the overall development at a key point where a local transport route (Bolney Chapel Road) crosses the floodplain, allowing this crossing point to form the basis for the town centre character. The new settlement would also link to the existing settlements at Hickstead and Sayers Common.

8.9 Future expansion beyond the area of settlement currently defined could extend to the west, north and south, although expansion to the west and north would be affected by the existing pylons. However only the 400kV lines are 'major' utilities constraints. Expansion to the south would be more limited than expansion to the west and north.

Figure 8.1: Location Option 1 – Hickstead/ Sayers Common

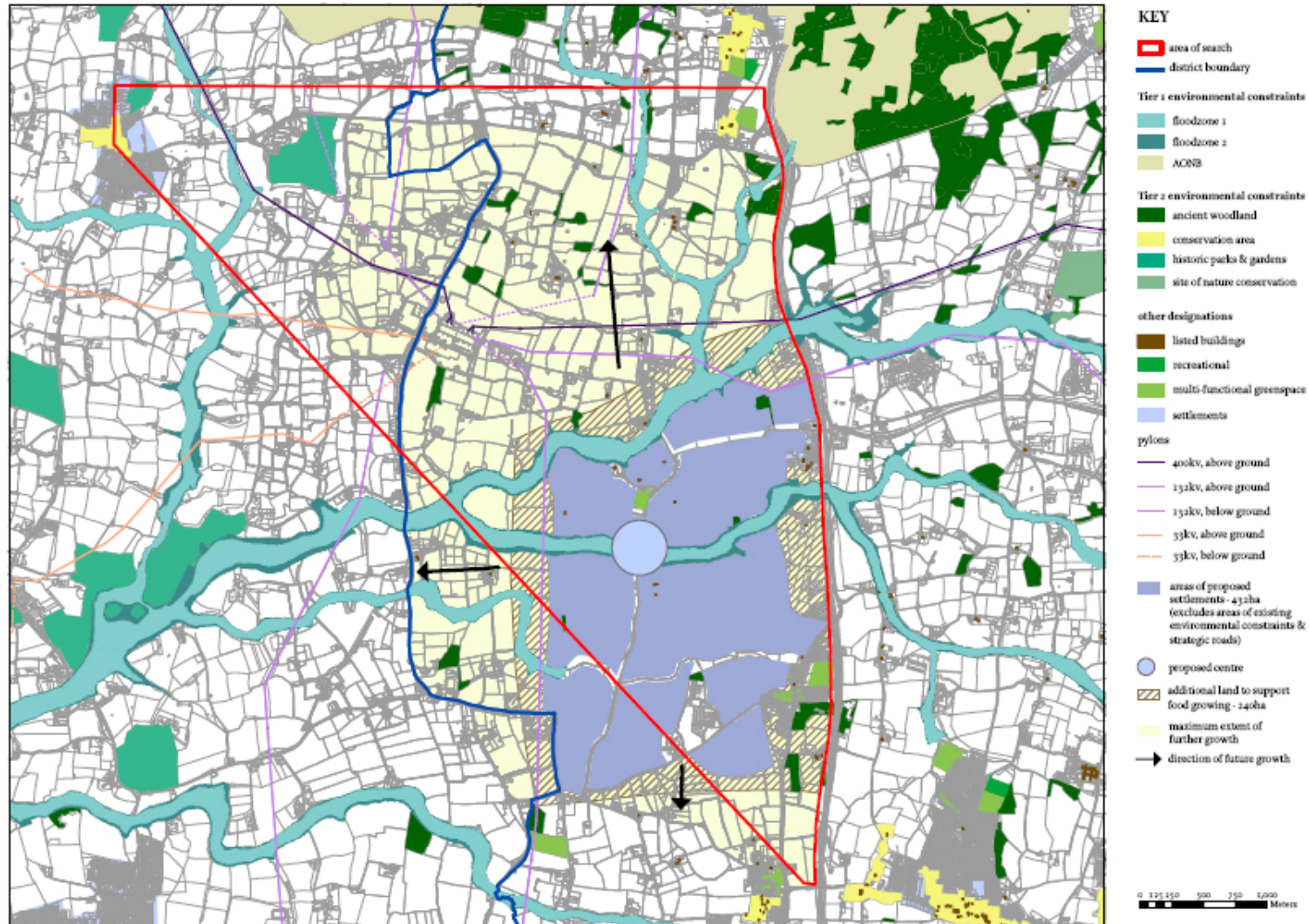


Figure 8.2: Location Option 2 – Hickstead/ Wineham

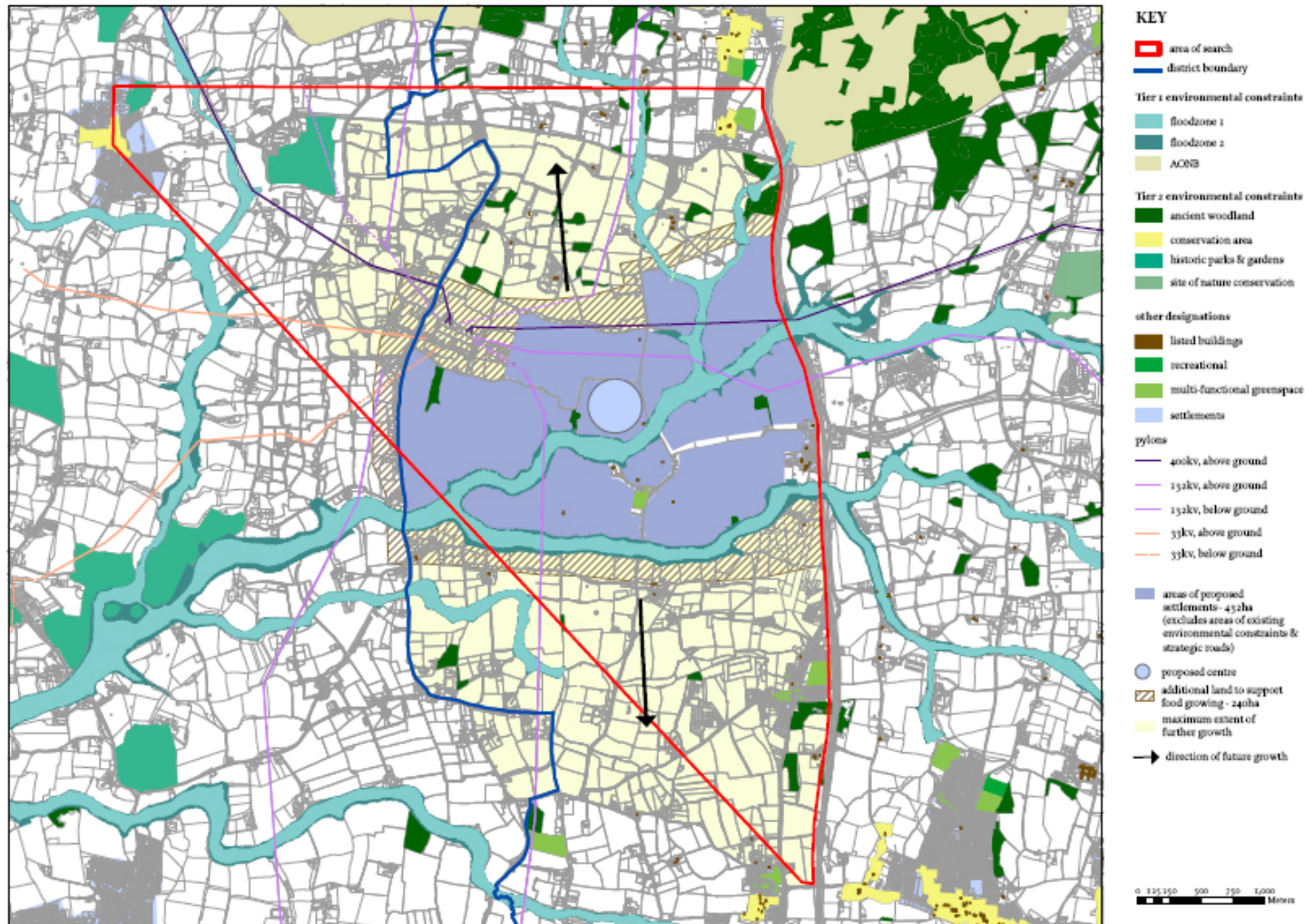


Figure 8.3: Location Option 3 – Hickstead

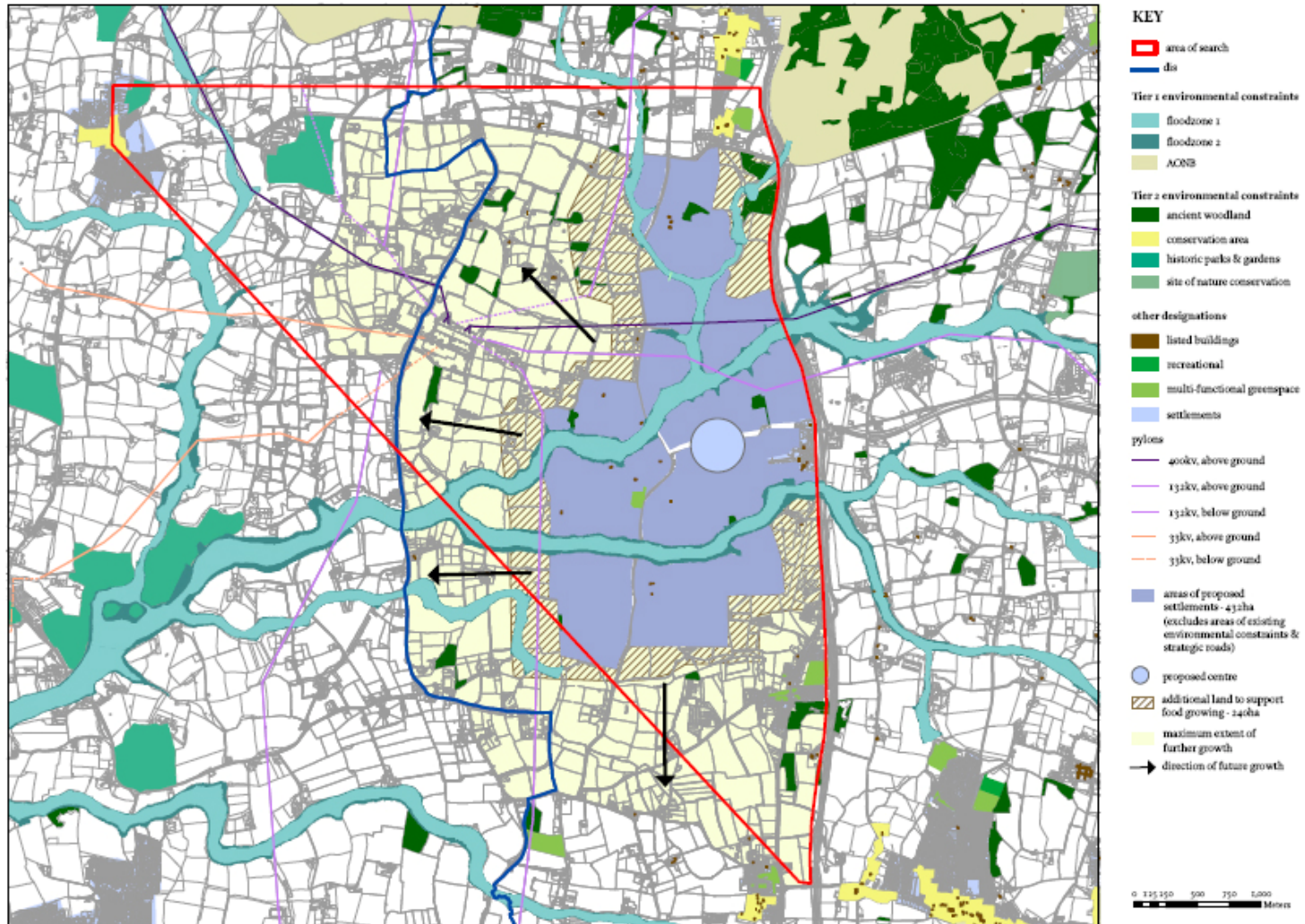
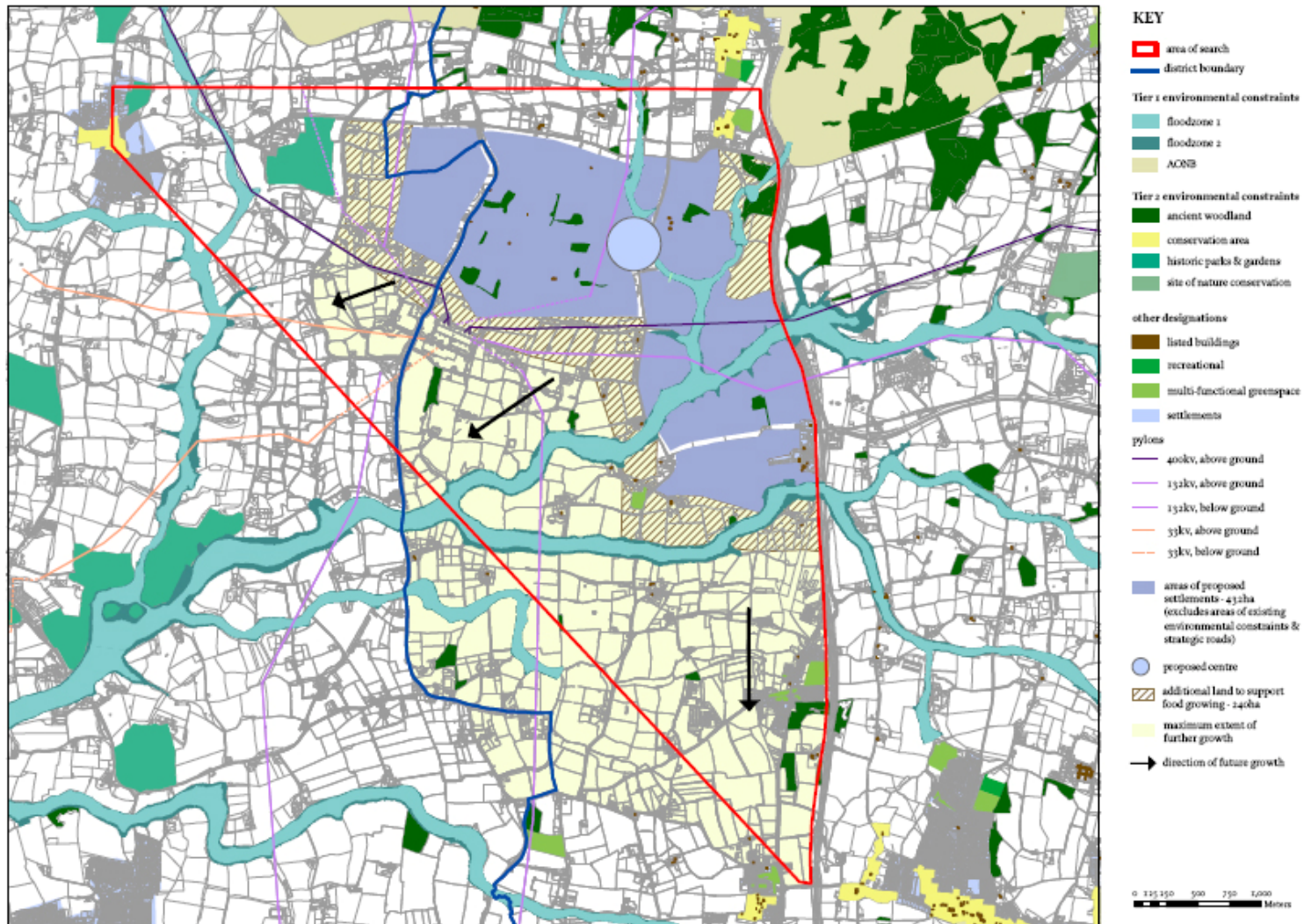


Figure 8.4: Location Option 4 – Hickstead / Cowfold Road





**Location Option 2: Hickstead / Wineham**

- 8.10 The location of Option 2 is influenced by the pattern of river tributaries and floodplain that make up a feature of the area and will help define local character. The town centre will be located at the centre of the new settlement, located close to one of the water courses. The new settlement will also link to Hickstead.
- 8.11 Future expansion beyond the area of settlement currently defined could extend both to the north and the south although expansion to the north would be affected by existing 400kv pylon route.

**Location Option 3: Hickstead**

- 8.12 The location of Option 3 has been influenced by moving some of the development close to the A272/A23 to reduce the need to improve off site links to the surrounding strategic road network. This results in a more linear, spread out settlement form. The new settlement will link to Hickstead.
- 8.13 Future expansion beyond the area of settlement currently defined could extend to the north-west, west and south. The preferred direction of growth would be to the north-west to allow the town to become more centrally located within the development. However, north-west expansion would be affected by the pylons, although only the 400kv lines are 'major' utilities constraints.

**Location Option 4: Hickstead / Cowfold Road**

- 8.14 Location Option 4 has also been developed to minimise the need to make improvements to offsite links to the A272/A23. This results in a more linear form of development with some areas more remote from the town centre. The settlement form has also been designed to avoid a substantial section of the 400kv pylons. The new settlement will link to Hickstead.
- 8.15 Future expansion beyond the area of settlement currently defined could be to the south-west and south. The preferred option would be to the south-west to allow the town centre to become more centrally

located, although this would be affected by pylons, although only the 400kv lines are 'major' utilities constraints.

**ASSESSMENT OF OPTIONS**

- 8.16 This assessment is set out as a series of objectives for the location and structure of the new market town against which the four options are assessed. The assessment is at this stage high-level, and identification of a final option will require significant further technical studies. Landscape and Environmental Constraints

**Environmental**

*The New Market Town should avoid built development on Flood Zones 2 and 3 (as defined by PPS25).*

- 8.17 All options avoid built development within the areas of flood Zones 2 and 3. The areas within Flood Zones 1 and 2 would form part of the amenity provision for the new town.

*The location of the new market town should ensure that it does not adversely affect the setting of the Higher Weald AONB to the north and the South Downs National Park to the south.*

- 8.18 Options 1 and 2 are located slightly closer to the South Downs AONB, but this degree of change is considered insignificant.

- 8.19 Options 3 and 4 are located closer to the edge of the High Weald AONB.

*The location of the New Market Town should ensure that it does not adversely affect the Tier 2 environmental constraints<sup>12</sup> that help to contribute to the uniqueness of this part of the west Sussex landscape.*

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<sup>12</sup> (ancient woodland, conservation areas, historic parks and gardens, sites of nature conservation value)

8.20 All options avoid development within the Tier 2 environmental constraints, which will form part of the green infrastructure and help create local identity. In addition, the settlements will form compact, dense development to ensure land is used efficiently.

8.21 It will be necessary through subsequent masterplanning to address the setting of existing listed buildings within the proposed development areas.

#### Landscape Character

*The character of the New Market Town should be informed by the local landscape character.*

8.22 The differences in landscape quality and landscape character across the study area are fairly fine-grained and subtle and on their own would not be very strong factors in determining the final location for the new market town. Local features would be incorporated into the design of the new settlement to help create local identity and character.

8.23 Option 2 most closely responds to the pattern of the river and its floodplains.

#### Pylons

8.24 The existing Pylons across the site have been identified as comprising principally two voltages, 132kv (sub regional EDF distribution) and 400kv (National Grid distribution). The development scheme should seek to minimise the impact on all pylons, but 132 KV pylons should not be considered to be a major constraint, as it is expected to be viable to divert these underground. 400kv lines are considered to be a major constraint which cannot be viably diverted; therefore options which include or are located close to these would require mitigation measures to minimise landscape impact.

8.25 Option 1 is located to avoid the routes of all above ground pylons routes.

8.26 Option 2 is located within the alignment of two 132kv pylon routes which would require undergrounding. A section of the settlement to the north east is located under a length of 400kv pylon route which would

require open space uses, car parking or industrial uses to be located within this vicinity. The visibility of the pylons would reduce the quality of the settlement in this area and would require carefully considered mitigation.

8.27 Option 3 is located within the alignment of one 132kv pylon route which would require undergrounding. A section of the settlement to the north east is located under a length of 400kv pylon route and would require open space uses, car parking or industrial uses to be located within this vicinity and a possible perceived separation between 2 parts of the town. The visibility of the pylons would also reduce the quality of the settlement in this area and would require carefully considered mitigation.

8.28 Option 4 is located within the alignment of two 132kv pylon routes which would require undergrounding. The settlement will be divided by 1no section of 400kv pylon route which runs west –east through the centre of the site. This would require open space uses to be located within the vicinity of the pylons and would serve to reduce the quality of the settlement in this area and result in a perceived separation between 2 parts of the town and would require carefully considered mitigation.

#### Key Views

*The new settlement should ensure that it has a minimum impact on the surrounding areas of high landscape value.*

8.29 Options 1 and 3: the layout of these two options is broadly north-south, which means the overall visual impact of the new settlement from the South Downs AONB is likely to be less than Options 2 and 4 which are aligned broadly west-east.

#### Transport and Highways Constraints

##### Public Transport

8.30 The strategic public transport strategy has been set out earlier, and includes regional services, Park and Ride routes and local services. To maximise the viability of bus services, the development should seek

to allow as much cross purpose usage of services as possible which the form and location of the layout can influence.

- 8.31 Option 1 could be expected to be largely reliant on local services but would allow some cross usage of services, and may provide the least efficient solution in terms of Park and Ride routing.
- 8.32 Option 2 could be reasonably efficient in terms of cross usage of services, still requiring additional local services, and could deliver a relatively effective Park and Ride Route, with the Park and Ride facility being provided in the vicinity of the 400kv Pylons, making efficient use of this space.
- 8.33 Option 3 could provide an efficient park and ride and regional service route, but could be largely reliant on local services in the southern part of the town. The Park and Ride facility could be provided in the vicinity of the 400kv Pylons, making efficient use of this space.
- 8.34 Option 4 could provide the most efficient public transport system, maximising cross usage of services, possibly not requiring local only services. The Park and Ride facility could be provided in the vicinity of the 400kv Pylons, making efficient use of this space.

#### Highway Access

- 8.35 To maximise flexibility, and minimise localised impacts and the need for new strategic infrastructure, the development form should seek to provide access to multiple points on both the A23 and A272, and also be located as close to these strategic routes and access points as possible. The actual scale of improvements required cannot be defined by this study but at this stage, the key access points and issues could be considered as follows:
- Option 1 would require strategic improvements to deliver routes to the A272, and significant improvements to the Sayers Common, and probably, Hickstead A23 junctions
  - Option 2 would require strategic improvements to deliver routes to the A272, and probable improvements to the A23 Hickstead junction, and possibly the Bolney Junction

- Option 3 and 4 would probably require improvements to the A23 Hickstead junction, and possibly the Bolney Junction

- 8.36 It is recognised that for all potential options, addressing the impact of development on the A23 as part of the strategic road network will be a critical issue. This is a key development constraint. This feasibility study has drawn on the most recent Highways Agency modelling of baseline traffic growth undertaken to inform the Agency's widening scheme. It has considered engineering solutions in regard to potential junction improvements and the potential contribution which the proposed development could make to supporting the delivery of the widening scheme. It has been informed by an initial dialogue with the Highways Agency. Further more detailed work will however be required to consider the potential impact of traffic from the development on the A23 and how this can be mitigated. This is discussed further in Section 11.

#### Accessibility Optimisation

*To maximise accessibility within the development, and to therefore maximise the potential for journeys to be made by sustainable modes (therefore minimising dependence on car travel), the development should seek to deliver a centrally located town centre, with all parts of the town within 2km of the centre, and maximising the proportion of the town population closer to the centre. All options should also seek to deliver a layout which allows a system of local centres providing key services and facilities to be both easily accessible to all residents, and also financially viable.*

- 8.37 Options 1 and 4 provide reasonably high proportions of the population within a good distance of a town centre location
- 8.38 Options 2 and 3 provide possibly marginally greater accessibility for the population to the town centre

#### Utilities Infrastructure Constraints

- 8.39 The utilities constraints have been identified earlier and are limited largely to the pylons, which have been considered previously in this section. A gas main runs across the study area, but is not considered

to be a material constraint which should influence the choice of layout option. The principal constraint introduced by utilities is in timing of delivery of options, with possibly the majority of development being commenced after 2018 (benefiting from publicly funded capacity enhancements which could be implemented by this tie), and any development before this time delivering developer funded infrastructure network improvements. The scale and cost of this cannot be determined at this time and would be subject of further, more detailed study and investigation with the utilities companies.

### **SUMMARY**

- 8.40 The development of the four spatial options presented herein has been informed by and taken account of the various constraints identified, including environmental, landscape and infrastructure issues.
- 8.41 In Section 11 we supplement this assessment with an initial consideration of relative infrastructure cost differentials.
- 8.42 The Consultants' team's view is that, while there are relative advantages and disadvantages of the different options (as explored below), there is not a robust and definitive case as to why one option is preferable to another. This may depend upon the relative weight which is attached to the different factors considered.
- 8.43 The assessment is at this stage high-level, and identification of a final option will require significant further technical studies.
- 8.44 We are the view that a rigid scoring mechanism is not appropriate and given our understanding of development constraints, based on the information available, consider that the local authorities should they wish to proceed should undertake further work to consider environmental, heritage, landscape, transport and utilities issues and more detailed masterplanning to inform the selection of a final option.
- 8.45 We draw together this assessment with consideration of relative infrastructure cost differentials in Section 11.



## 9. DEVELOPMENT PRINCIPLES AND REQUIREMENTS

9.1 In this section we set out key development principles then move on to consider key infrastructure requirements associated with delivery of a New Market Town of 10,000 homes.

9.2 The development principles for the New Market Town are set out below. These are illustrated as a series of diagrams<sup>13</sup>.

### Overall Settlement Form

9.3 We examined a number of settlement form models from linear models aligned parallel to the A23 to linear models running east-west following the Adur Valley. We also explored a dispersed model based upon separate villages or settlements which might involve the growth of existing settlements. The most efficient model is the simple single nuclear settlement with its town centre located centrally and a number of neighbourhood centres (probably 4 or 5) arranged around the periphery of the town centre all within easy walking distance. The overall settlement form is based upon a town centre that is served by the high frequency bus route connecting it to Burgess Hill and then onto Haywards Heath. The walk distance from the edge of the built area to the centre should aim to be no more than 800m - 1000m and each neighbourhood centre should be within 400m walk distance of its local catchment.

9.4 The location of the town centre is important. A new town centre should be located centrally to the new development to ensure that it is equally accessible to the whole community. The creation of a new town centre also allows the flexibility to adhere to high sustainability principles. The alternative scenario of creating a new town centre focussed on the

existing settlements at Hickstead or Sayers Common would result in an eccentrically located new town centre.

### Land Use Structure

9.5 One of the most significant components of the New Market Town model is the creation of an employment hub to serve the New Market Town itself and to act as draw for high quality workspace and thereby minimise out-commuting. It is envisaged that the employment hub would form a key component of the town centre, at the heart of the New Market Town and would be served by the high frequency bus route at its core. It would also be located within easy reach of the A23. In the vision for the New Market Town we described the town centre as a compact, high density mix of farmsteads and barns that would include shops and homes as well as workplaces. This would also be complemented by campus / science park type employment uses, located close to the town centre. Car parking would be minimised and confined to decked parking barns with car clubs and good cycle provision.

9.6 It is likely that the centre would be built around one of the key pieces of green infrastructure – in the form of a linear park or one of the equestrian spaces described in the vision. In the sketch masterplan, the Adur forms a green corridor running through the town centre. The centre would include higher density housing and some apartments and would also include a small scale medicentre or community hospital. Larger scale community uses such as Secondary Schools and a Community Sports Centre would be located on the edge of the town centre on the rapid transit route. Residential communities beyond the town centre are all focused on a neighbourhood centre that would include a primary school and/or a nursery, local park, local shop and recycling centre. Some neighbourhood centres might also include workspace.

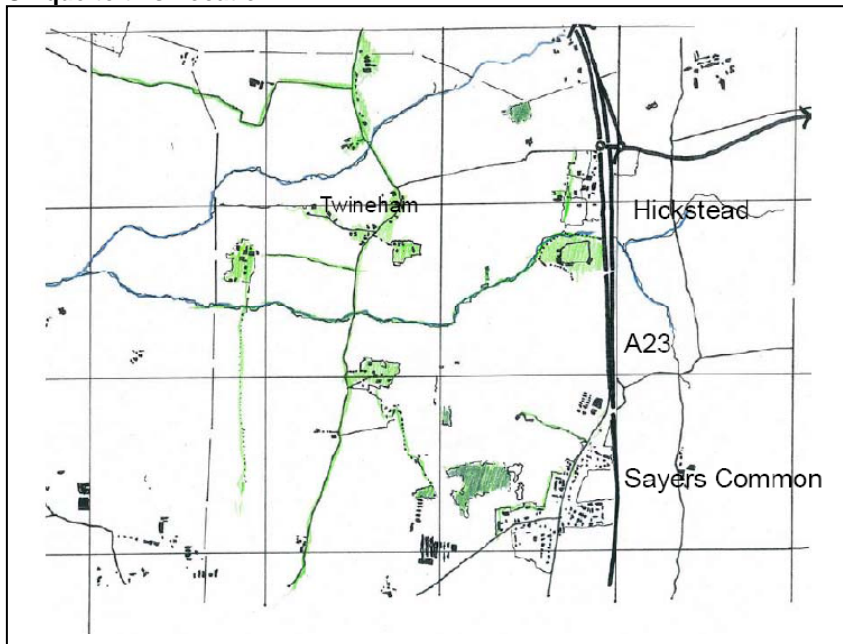
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<sup>13</sup> These diagrams use Location Option 1 as an example, although the same principles would apply whichever option was preferred.

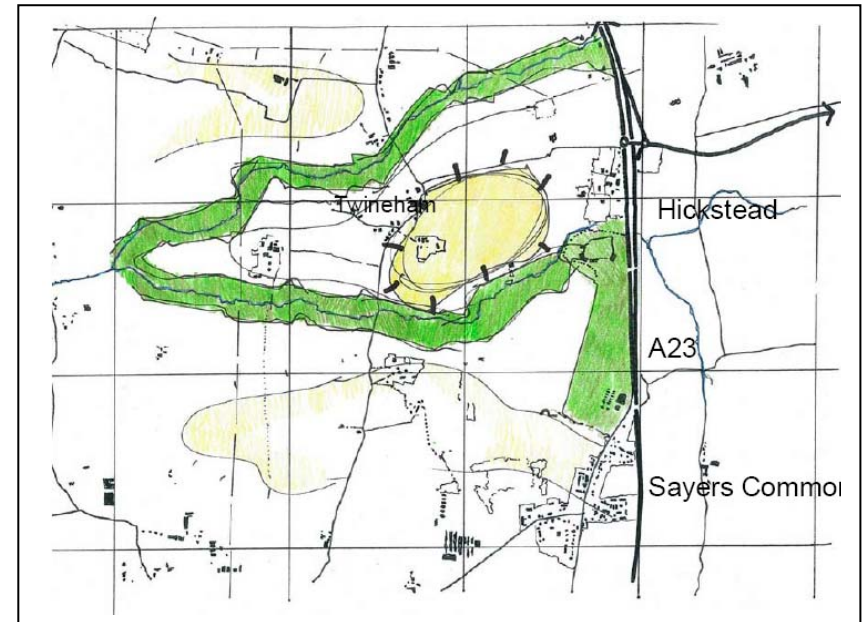
**Green Infrastructure**

9.7 One of the big challenges for the New Market Town masterplan is to retain as much of the historic landscape pattern of the study area within the urban form as possible. In the sketch masterplan illustrated in this section, it is suggested that the existing lanes and some of the most significant pieces of landscape should form a key part of the green infrastructure network, together with stream courses and ditches. Existing lanes could remain as green lanes and form part of the walking/cycling/bridleway network as well as maintaining local access to existing properties and farmsteads.

**Figure 9.1: Identifying the Historical Landscape Pattern and Character Unique to this Location**



**Figure 9.2: Topography – Defining Natural Edges and Centres**

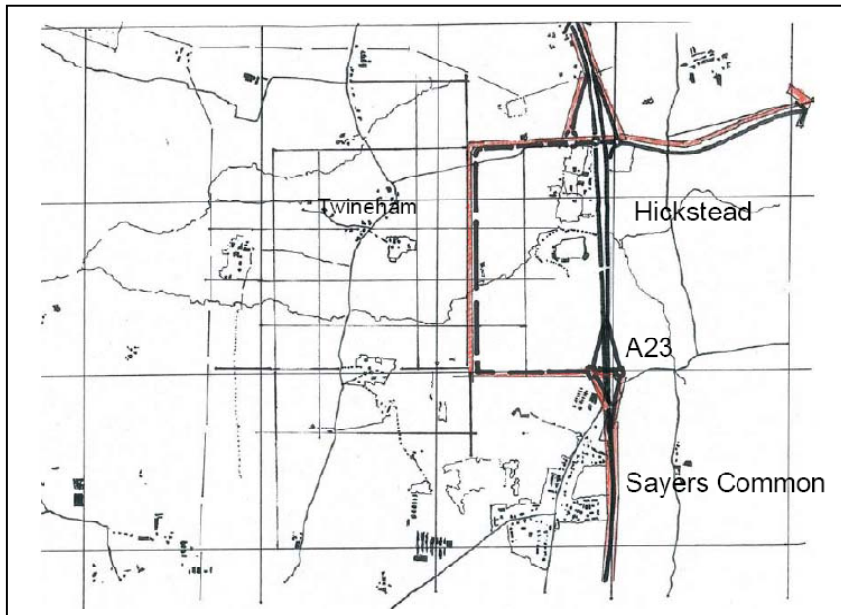


9.8 Although the Adur Valleys are not that significant in terms of their landscape presence, their low meandering courses provide opportunities for flood alleviation, sustainable urban drainage and wetland creation. Increasing woodland cover is an objective. Small woodlands and copses form a key part of the landscape character of this area and the New Market Town provides a great opportunity to increase woodland cover to provide a wide range of benefits, from a local biomass fuel source to community woodlands and local nature reserves.

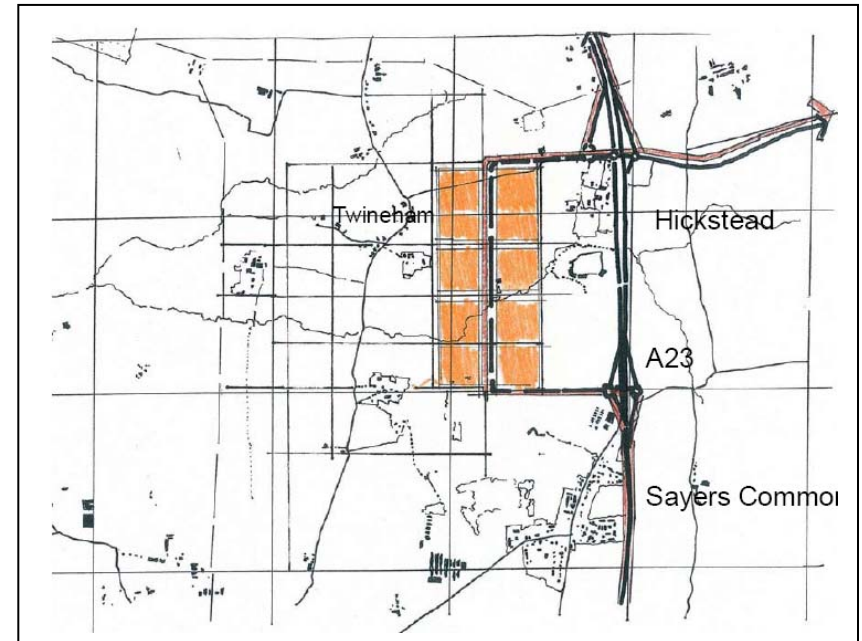
**Movement Network**

9.9 The movement network for the New Market Town will form a loose gridded pattern of streets and lanes that work with the natural grain and pattern of the landscape. The existing landscape pattern of the area has a simple informal grid network of east-west and north-south routes and the new movement pattern should build upon this existing pattern. The movement network and hierarchy should enable easy access for all forms of movement but prioritise walking, pedestrian and cycle routes.

**Figure 9.3: Movement and Linkage – Rapid Transit Route and Movement Network**



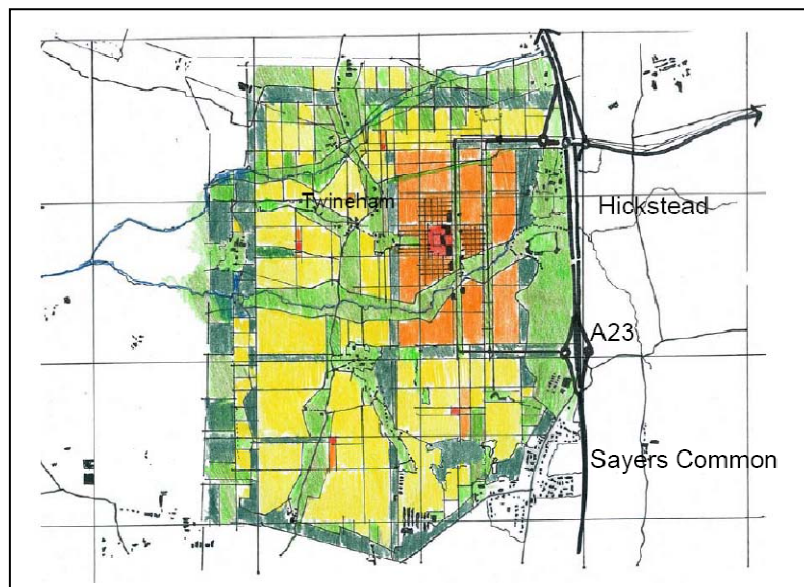
**Figure 9.4: High Density Core –Rapid Transit Route & Movement Network**



9.10 The public transport network is based around the rapid transit route with local bus networks serving the town centre and the neighbourhoods. Given the gentle nature of the topography, the development of cycling should be a high priority, both as a means of getting around the New Market Town and as a way of linking into Burgess Hill and Haywards Heath.



Figure 9.5: Creating Linked, Low Carbon Neighbourhoods



## KEY INFRASTRUCTURE REQUIREMENTS

### TRANSPORT INFRASTRUCTURE

- 9.11 Significant investment will be required to support the new market town development. For the purposes of initial viability assessment the following package of improvements have been identified:
- Cycleways: upgrade to existing (A23) showground bridge, incorporating quiet route/public right of way upgrades to form continuous link to Burgess Hill **circa £1.5M**
  - Railway Station Interchange improvements, including car park improvements, contribution **circa 2M**
  - Bus Services: upgrade and divert a number of existing services including the establishment of new inter-urban bus services, with revenue support for up to 5 years representing around 30 buses, **circa £12M**
    - Park & Ride Services
    - Crawley – 8-12 minute frequency
    - Brighton – 8-12 minute frequency
    - Brighton – Crawley – increase to 10-15 minute frequency,
    - Horsham – Burgess Hill – increase to 10-15 minute frequency
    - Horsham – Haywards Heath – delivery 15-20 minute frequency
  - Park & Ride Sites – assume circa 800 spaces, £2.5M per site (excl bus services and bus priority measures) – **circa £15M** (inclusive of land and bus priority measures)
    - Pease Pottage (J11, M23) – Crawley

- New Market Town – Burgess Hill, Horsham and Haywards Heath
  - Pycombe (A23/A273) - Brighton/Hurstpierpoint and Burgess Hill
  - A23 Junction Improvements,
    - Dual A272, Cowfold Road to The Street, including 2-3 signal controlled junctions and modest widening to roundabouts – **circa £2.5M**
    - A23 Hickstead Grade Separated interchange, including new northbound on/off slip roads and bridge over A23 (using existing bridge for southern element of roundabout) - **circa £8M**
    - A23/Sayers Common, formation of (dumb-bell style) grade separated interchange with southbound on/off slip-roads – **circa £6M**
  - A272 corridor improvements – **assume at least £7M**
  - Possible strategic roads from development to A272 corridor – **assume at least £4M**
  - A272/A281 Cowfold Relief Road (NE) – circa 1.5km with two roundabouts – **circa £3M<sup>14</sup>**
  - Contributions towards A2300 improvements – subject to Burgess Hill development package – allowance of **circa £2M**
- 9.12 The overall off-site transport package would possibly include around **£63M** of transport measures. Taking account of other development

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<sup>14</sup> There is potential for this to be delivered and funded through potentially an urban extension to the north of Cowfold of between 250 – 350 homes. An initial high level assessment of constraints suggests that this would be feasible.

land uses and on-site infrastructure this suggests that the overall package of improvements is likely to reflect a small uplift on the existing TAD contribution applied in West Sussex.

- 9.13 It is recognised that mitigating the impact of development on the A23 will be a critical issue. It may also be reasonable to include an allowance for a level of contribution towards the A23 widening scheme from Handcross to Warninglid, which is currently deferred. A package of enhanced demand management measures is likely to represent around £1-4M per year for an undefined period. The impact of the proposed development on the wider A23 network would require testing in exhaustive detail, with an eventual aim of agreeing an acceptable delivery and mitigation strategy with the Highways Agency.
- 9.14 The potential TAD contribution (including contribution to M23 widening) equates to c £11,000 per dwelling compared to £5,000 - £8,000 for other strategic development sites as identified in the Horsham Infrastructure Study. This reflects the fact that the location is remote from existing settlements. It is however recognised that not all dwellings will contribute equally to infrastructure investment, and there may be a differential between contributions from private and affordable housing.
- 9.15 All of the costs provided above are indicative, high level approximate budgets based on experience of other similar scale schemes. Any estimates for inclusion within a formal cost plan should be verified by a Quantity Surveyor following more detailed study and assessment.
- UTILITIES INFRASTRUCTURE**
- 9.16 The cost to underground existing overhead services are not confirmed but are estimated to be in the region of £1m to £1.5m per 300m span of 132kv line. Undergrounding a 400kv line is understood to be prohibitively expensive, and perhaps £20m per span.
- 9.17 Additional consideration of Waste Water Treatment Works capacity has also been identified as an area requiring further analysis. An allowance of £8k to £10k should be sufficient to progress this analysis that will define detailed waste water infrastructure requirements.

9.18 No other significant utilities cost have been identified through this study, although short term improvements to enable early progression with the development would require additional funding.

#### SOCIAL INFRASTRUCTURE

9.19 We have assumed that a New Market Town of 10,000 homes would be 'self-sufficient' in terms of social infrastructure provision. The Horsham Infrastructure Study<sup>15</sup> has provided a high level assessment of social infrastructure requirements. It identified requirements for:

- Primary school provision for c. 2,100 pupils equivalent to **five primary schools**, each with 420 places. Secondary school provision for c. 1,500 pupils and post-16 provision for c. 600 pupils, equivalent to **either one large school campus or two smaller secondary schools with sixth form facilities**;
- Requirements for **14 GPs and 12 Dentists**, with potential for smaller secondary health services to also be located in the settlement as required;
- Provision of a range of retail, employment and community uses within the Town Centre to include a **750 sq.m sub-district library**. **Up to twelve 300 sq.m community buildings** would also be required, including within local centres;
- **Built sports and leisure facilities including a main swimming pool and four 5-badminton court sports halls**; and
- A network of green infrastructure, including **23ha of nature reserve, 9.2ha of amenity open space, 1.1ha of equipped play areas** (equivalent to 11 neighbourhood play areas), **2.8 ha of allotments, 32.2 ha of sports pitches and 2.3 ha of outdoor sports courts**.

9.20 The above requirements make no allowances for existing capacity. However this is judged to be limited as against the scale and timeframes of development being considered.

9.21 Our land budget has assumed delivery of a single campus secondary school, although there may be benefits from providing a choice of provision on limiting external travel.

9.22 Community facilities, including healthcare and community buildings would be located within the town and local centres. It would be possible to co-locate some facilities.

9.23 We have assumed that the town centre would include a community medical centre, doctors surgery with 6 GPs, a dentists practice, the main library and community buildings. This would require a 12ha land area. In addition to this there would be two local centres, each housing community buildings, a doctors surgery with 4 GPs, a dentists, a pharmacy, 1-3 shops, a pub and a post office. Each would require c. 2ha land area.

9.24 We have sought to estimate 'global' costs of social infrastructure provision. For consistency this is based on applying cost benchmarks used in the Horsham Infrastructure Study. Figure 9.6 indicates the results.

9.25 The total cost for education, health and community infrastructure comes to £118 million, equating to £11,800 per dwelling<sup>16</sup>. This is almost 20% above comparative costs of social infrastructure for other potential urban extensions in Horsham District examined in the Study, largely reflecting the fact that no surplus capacity within existing facilities has been assumed to be available.

9.26 Our indicative land budget makes provision for green infrastructure provision in accordance with national standards.

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<sup>15</sup> Nathaniel Litchfield & Partners (May 2010)

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<sup>16</sup> Again, this comes with the caveat that it assumes that all dwellings will contribute equally to infrastructure investment, whereas in reality there may be a differential between contributions from private and affordable housing.

9.27 No allowance has been made at this stage for costs associated with green infrastructure provision. However we would not expect the quantum of costs to be materially different to the £1,438 per dwelling identified in the Horsham Infrastructure Study.

**Figure 9.6: Social Infrastructure Costs**

|                         |                   |              |
|-------------------------|-------------------|--------------|
| Education               | Primary Schools   | £25,742,534  |
|                         | Secondary Schools | £27,704,701  |
|                         | Sixth Form        | £12,864,904  |
|                         | Total             | £66,312,139  |
|                         | Cost per Dwelling | £6,631       |
| Health                  | GPs               | £7,553,054   |
|                         | Dentists          | £6,702,594   |
|                         | Hospital Beds     | £25,994,066  |
|                         | Total             | £40,249,714  |
|                         | Cost per Dwelling | £4,025       |
| Community               | Community Centres | £4,316,276   |
|                         | Libraries         | £2,858,575   |
|                         | Sports Halls      | £2,277,271   |
|                         | Swimming Pool     | £2,264,260   |
|                         | Total             | £11,716,382  |
|                         | Cost per Dwelling | £1,172       |
| Total Cost              |                   | £118,278,235 |
| Total Cost per Dwelling |                   | £11,828      |

**GREEN INFRASTRUCTURE**

9.28 Green Infrastructure (GI) is the network of green spaces with a wide range of different functions that combine to support a sustainable community. This includes land both within and outside urban areas and is land that is likely to include:

- recreational land in the form of formal and informal parks and gardens, playing fields, play areas;
- urban greenspace such neighbourhood and village greens, cemeteries, churchyards, school grounds, green roofs;
- natural and semi-natural green areas such as woodland, nature reserves, meadows, wetlands, flood plains heaths, commons;
- green corridors that follow river corridors, railway embankments, roads and motorway verges, pedestrian paths;
- productive land in the form of allotments, city farms, small holdings, nurseries.

9.29 Green infrastructure is required to meet the changing needs of sustainable communities both existing and proposed and is likely to be considered not just in terms of its role supporting the new market town but also in its role of supporting the infrastructure needs of towns such as Burgess Hill and Haywards Heath. In 2009, Natural England produced Green Infrastructure Guidance which defined what is meant by GI and the principles that underpin its delivery. In the South East Region there is the South East Green Infrastructure Framework jointly published by a range of bodies in the region including Natural England and closely follows the approach set out in Natural England's Guidance. The key functions of Green Infrastructure in the South East include:

- Conservation and enhancement of biodiversity, including the need to mitigate the potential impacts of new development;
- Creating a sense of place and opportunities for greater appreciation of valuable landscapes and cultural heritage;
- Increasing recreational opportunities, including access to and enjoyment of the countryside and supporting healthy living;

- Improved water resource and flood management and sustainable design;
- Making a positive contribution to combating climate change through adaptation and mitigation of impacts;
- Sustainable transport, education and crime reduction;
- Production of food, fibre and fuel.

9.30 None of the guides set any formal space standards for Green Infrastructure, and a range of standards can be used in combination, including, Natural England's Accessible Natural Greenspace (ANGSt) and the Fields in Trust's (formerly the National Playing Fields Association ) six acre standard.

9.31 The most helpful rule of thumb is provided in the Eco-towns guidance which suggests that 40% of an eco-town's total area should be allocated to green space, of which at least half should be public, which should consist of a range of types of green space, for example community forests, wetland areas and public parks. The space should be multifunctional, e.g. accessible for play and recreation, walking or cycling safely, and support wildlife, urban cooling and flood management. This compares well with other large scale urban extension masterplans we have undertaken where the total built area is close to 60% of the area required for delivering the whole community. For the new market town model we should also be considering the land required to support local food production for the whole community. In absence of further research work in this area, we have worked on the basis of 100% allotment provision for all 10,000 homes- an area of some 250ha. This results in a balance of built development to unbuilt of around 52% to 48%.

#### **INFRASTRUCTURE DEPENDENCIES AND PHASING**

9.32 As the report states 2018 is a reasonable timetable for funded infrastructure to be delivered, such as for instance provision of a new Sewage Treatment Works to support the development. Before this time, some units may be deliverable however the development potential will require significant further study. Any improvements to sewage infrastructure before this would have to be developer funded.

It may be possible to provide to undertake some development in advance of this, although this will require more detailed assessment.

9.33 In our view it could take five years or more to establish an appropriate planning framework to support delivery of a New Market Town. There are some clear advantages to having a planning framework in place by 2014/15 which can inform utilities providers' Asset Management Plans for 2015-20.

9.34 The phasing of development will be influenced by infrastructure dependencies and market capacity. To maximise housing delivery rates it will be necessary to have multiple start points, which can support development by a number of different housebuilders.

9.35 "Start points" should ideally be located to allow the character and qualities of the new settlement to be established at an early stage. These "start points" could include sites close to the proposed town centres and sites close to existing settlements which have existing road infrastructure / junction capacity.

- Option 1 settlement start points could be located at Hickstead and Sayers Common.
- Option 2 settlement start point could be either be at Hickstead or to the north, towards the Bolney junction.
- Option 3 settlement start point could be either be at Hickstead or close to Bolney junction.
- Option 4 settlement start point could either be at Hickstead, close to Bolney junction or Wineham Lane / A272 junction

9.36 A secondary start point for whichever option if progressed might be for development close to the proposed Town Centre location.

9.37 Start points and phasing should be considered further as part of subsequent masterplanning.

## 10. ADDRESSING DELIVERABILITY ISSUES

10.1 This section provides an initial high-level assessment suitability and deliverability of the various options presented, before moving on to address the availability of land. It then addresses potential options for funding infrastructure investment.

### ASSESSING RELATIVE SUITABILITY AND DELIVERABILITY

10.2 The relative assessment of options shows that there is no one option which stands out as ‘best’ – it is more of an issue about the relative weight which it attached to different factors. Some options are more compact than others, some are better from the point of view of delivering high quality public transport services. The environmental impact varies, while some avoid, and some are traversed by the overhead power lines.

10.3 It is thus appropriate to consider the relative deliverability of the options. At this feasibility stage, this comes down to a question over the ability of development to fund necessary infrastructure investment. For a range of infrastructure items, there is however likely to be no meaningful cost differential between different options. This applies for instance to social and green infrastructure. We have thus focused on the key differentiating factors. These are:

- The costs associated with undergrounding power lines;
- Junction and road improvements and cost of provision of strategic access roads.

10.4 Figure 10.1 sets out the comparative assessment of costs associated with these:

**Figure 10.1: Comparative Infrastructure Costs for Options**

| Option | 132kv Undergrounding | A23 Bolney Junction | A23 Sayers Common Junction | A272 | Strategic Access Roads to A272 | Total |
|--------|----------------------|---------------------|----------------------------|------|--------------------------------|-------|
| 1      | -                    | £1m                 | £6m                        | £5m  | £3m                            | £15m  |
| 2      | £9m                  | £3m                 | £0m                        | £7m  | £4m                            | £23m  |
| 3      | £4m                  | £3m                 | £0m                        | £7m  | -                              | £14m  |
| 4      | £9m                  | £3m                 | £0m                        | £7m  | -                              | £19m  |

10.5 As the table indicates the order of cost varies between £14 - £23 million across the four options. The most affordable options are Options 1 and 3.

10.6 Drawing on the comparative options assessment in Section 8, the key issues associated with these two options are as follows:

- Option 1: the major benefit of this option is that it avoids development around or close to the overhead electricity pylons. However it is the least efficient option in terms of Park and Ride routing and would be more reliant on local bus services.
- Option 3: this option is much more efficient in public transport terms, and would be able to support an efficient park and ride and regional bus route. While a section of the 132kV overhead could be undergrounded, the 400kV line would pass through the north-east of the town causing a degree of severance between two parts of the settlement and impacting on quality of place. This option supports marginally better public transport accessibility to the town centre.

10.7 This is perhaps the key trade off which has to be made in determining a preferred option; avoiding the power line or delivering a stronger public transport strategy.

10.8 We recommend that the local authorities establish and develop a dialogue with the Highways Agency, National Grid and EDF Energy as a priority to further consider the feasibility and costs associated with addressing the pylons and impact of development on the Strategic Road Network.

### **AVAILABILITY OF LAND FOR DEVELOPMENT**

10.9 A site or area can be considered available for development when, on the best information available, there is confidence that there are no legal or ownership problems which would inhibit development.

10.10 We are aware that there is a developer, Landstock Estates which is engaged in promoting land at the south of the area of search for development.

10.11 During the course of preparing this Study, GL Hearn has met with Landstock Estates. Our understanding is that Landstock Estates was formed just over a year ago, to promote strategic land opportunities, and that it is funded by Eliot Advisors, a US Hedge Fund.

10.12 It appears that initial transport modelling and investigation of land ownerships has steered Landstock towards the southern part of the Area of Search, between Sayers Common and Albourne.

10.13 Landstock have not shared with GL Hearn information on landownership. However in our meeting on 15<sup>th</sup> June 2010, they informed us that they currently have 97 ha under contract, including key access land; and are talking to owners of a further 800 ha. Of these they are nearing contracts (mainly in the form of promotional agreements) for a further 160-200ha. We understand that legal issues associated with the ownership of a large plot of land further to the north partly steered Landstock towards the southern area.

10.14 GL Hearn has not undertaken a detailed assessment of landownership. Nor has it been able to confirm what Landstock has said verbally. However with these caveats, it appears that Landstock are in a good position to support development of a southern-focused option.

10.15 To deliver a new settlement of this size, we are clear that the local authorities must be willing to use their Compulsory Purchase powers if necessary, such as to assemble land or address ransom issues, albeit that this is a cost to the development and a potential delivery risk which could impact on timescales.

10.16 Further investigation of landownership issues by the local authorities is recommended, as part of the next phase of work if the proposal is taken forward.

### **FUNDING INVESTMENT IN KEY INFRASTRUCTURE**

10.17 A key consideration in the feasibility of delivering a New Market Town is how infrastructure necessary to support development will be funded and delivered. Delivery of 10,000 homes on predominantly agricultural land will result in a significant value uplift, which can support infrastructure investment. However it is likely that development will not be able to pay for all of the investment in infrastructure necessary. A range of funding sources will need to be brought together. These include:

- Developer contributions;
- Public Funding streams;
- Private investment or hybrid (PFI/ PPP);
- Other sources, including voluntary sector.

10.18 The funding landscape for investment in infrastructure has continued to change and evolve over time; and there is no reason to indicate that it will not continue to do so.

10.19 Delivery of new towns in the past has been supported by Central Government funding. The model has varied over time, but for many dedicated Development Corporations were created through primary legislation which delivered both development and infrastructure, funded through loans from the Government. This was supplemented by ad hoc subsidies and other sources of income. This financial model of "closed loop investment" was extremely successful and was a direct legacy of the Garden Cities movement. In many New Towns, the land

assets which are retained in public ownership continue to provide a source of revenue today.

- 10.20 Today the funding landscape is somewhat different, and it is assumed that the latest proposals for eco-towns will largely be delivered with private funding. In this model, the private sector developer takes on the risk and is responsible for financing the delivery of development and infrastructure. In many cases in practice this works either through a consortium approach, or by a strategic developer delivering key infrastructure and selling serviced plots to housebuilders or commercial developers. Infrastructure investment is delivered either direct by the developer or by infrastructure providers. This is controlled by Section 106 agreements. The agreement identifies what contributions the developer will make to infrastructure delivery (direct or financial), and when these will be delivered or paid within the overall development programme.
- 10.21 While development contributes to the delivery of infrastructure, “mainstream” public sector funding always plays an important role. Both the education authority and health authority for instance have capital spending budgets, as do utilities providers. This form of funding is often supplemented by other area-based funding, particularly in areas where significant development is expected to occur. This includes for instance regional funding sources (through Regional Funding Allocations, RDA Single Pot or through the Homes and Communities Agency) or specific funding ‘pots’ for growth areas/ points and eco-towns (e.g. Growth Area Funding or Communities Infrastructure Fund, administered by Communities and Local Government).
- 10.22 The prospect of a New Market Town is not currently on the ‘funding radar’ for many of these agencies and infrastructure providers. Should the local authorities seek to progress the proposal for delivery of a new town, it will be necessary to engage with and seek the support of these various agencies (over a considerable period of time). It will be necessary to work with them to embed the proposal within their future investment/ asset management strategies.

### Current Picture

- 10.23 Clearly at the time of writing the potential ‘pots’ of external funding are fast drying up, as the new Coalition Government seeks to reduce the current budget deficit. This is likely to affect significant change to the ‘funding landscape’ in the short term. It is highly likely that public sector funding for capital projects will be severely curtailed at least over the next Comprehensive Spending Review (CSR) period, from 2011 – 2014, and likely longer. Funding streams/ mechanisms may also change. However we are looking at delivery of a new town over perhaps a 20 year period or more, and thus should not attach too much weight to the short-term funding situation. The lead-in time to commencing delivery of development may well take us beyond this.
- 10.24 It is sensible to consider possible infrastructure funding mechanisms, but in this context – appreciating that there is uncertainty regarding funding mechanisms and resources in the short- and long-term. We have drawn on and developed the assessment of funding sources identified within the Horsham Infrastructure Study 2010.
- 10.25 Regardless of this we can be clear that “mainstream resources” through funding for local government, basic needs funding for education or asset management planning of utilities providers will likely play an important part of infrastructure investment (much as they have looking back over the decades). However this does not mean that there will not be hard choices to make further down the line, identifying relative priorities; and taking account of the competing policy influences on development costs – affordable housing, S106 contributions to other infrastructure, sustainability standards, densities etc.

### Existing Funding Streams

#### *Transport Funding*

- 10.26 Funding for transport schemes includes Regional Funding Allocations (RFAs), Integrated Transport Block grant for capital projects included within Local Transport Plans (LTPs), DfT funding for major schemes (e.g. M25 Widening) and Route Investment Plans on the Rail Network.



There are also a number of Public Private Partnership Models which have progressed specific investment projects (including for toll roads).

- 10.27 The Department for Transport is currently using the Delivering a Sustainable Transport System (DaSTS) programme to consider alternative high level transport strategies and funding options. It will be important for the New Market Town to be given due consideration if the Gatwick Diamond DaSTS Study progresses or through any alternative approach to determining transport priorities within the sub-region as a result of the change in Government.
- 10.28 The A23 Widening Handcross-Warlinglid has previously been identified in the Regional Transport Plan and had secured DfT funding. However in June 2010 the Government announced that this was to be deferred, pending the Autumn Comprehensive Spending Review. Should the proposal for the New Market Town progress, there is potential for a private sector financial contribution to help to kick-start this scheme, or for the Treasury to recoup some of the capital investment cost over time as development is delivered.
- 10.29 More innovative models might include road user or congestion charging for residents or visitors of the New Market Town (or on a wider area basis). Recent proposals for congestion charging were damaged by the referendum on proposals in Greater Manchester in December 2008 which were resoundingly rejected. This is said to have delayed further proposals for at least a decade. However it might be possible to successfully apply the approach to a new community.

#### *Utilities Funding*

- 10.30 Funding for capital investment in utilities infrastructure is currently guided by providers' Asset Management Plans (AMPs). Utilities providers submit AMPs to their respective regulators for forthcoming 5-year time periods identifying capital funding projects. A funding settlement is then negotiated.
- 10.31 Given the lead in times for delivery of a New Market Town, it may be possible to secure funding for key utilities investment by this mechanism. There is however a risk associated with delivery timescales; such that if funding for a new STW was secured in 2015

this might not be delivered before 2019-21. These issues will warrant further investigation and discussions with utilities providers moving forward. There are alternative and interim solutions, such as the private 'stop gap' funding.

- 10.32 This is more relevant to some types of infrastructure, notably water/waste water, than others. For some types of utilities infrastructure, notably gas, utilities companies will undertake the necessary upfront works in order to secure the growth in their customer base. In most cases, developers will be responsible for 'connection charges.' We would expect that developer contributions would also play a large role in funding undergrounding of power lines if required.

#### *Social Infrastructure*

- 10.33 Capital funding for investment in health and education has been strong over the last 10 years; but is likely to be severely constrained in the short-medium term. In both cases, the funding landscape has evolved with significant growth of Private Finance Initiative (PFI) or Public Private Partnership (PPP) schemes to fund capital investment. However we are in the process of seeing public funding being significantly curtailed, most recently with the stopping of most Building Schools for the Future (BSF) projects where deals were not already done with contractors.
- 10.34 The District and County Councils both hold and manage significant community facilities. While each has capital investment programmes, we would expect large capital projects to remain quite reliant on developer contributions. The same is likely to be true for green infrastructure.

#### *Developer Contributions*

- 10.35 Developer contributions are likely to play a significant role in funding investment in transport, social/ community, and green infrastructure. They are also likely to make some contribution to utilities investment, particularly for instance in the case of undergrounding power lines.
- 10.36 The Government in early 2010 brought in legislation allowing local authorities to levy a Community Infrastructure Levy (CIL) on new

development<sup>17</sup>. A key ambition of CIL is to achieve greater consistency in funding from development to support infrastructure investment. It aims to make the system more transparent and equitable, and would likely increase the range of development schemes which make contributions towards infrastructure investment. It also addresses the link between specific development schemes and infrastructure projects, allowing pooling of contributions on an area basis and financial efficiencies. A key advantage of such a fund is it may also allow local authorities to borrow against future receipts (prudential borrowing).

- 10.37 While the financial efficiencies associated with CIL are important, and may provide a means of forward funding infrastructure, there are some issues associated with applying it to development of this scale. The economics of development of different scales varies substantially. A CIL Charging Schedule applied at a local authority level will have to take account of these differential economics, with the risk that it gets reduced to a 'lowest common denominator' and it must be set at a level which is payable in most cases.
- 10.38 While we have not looked at the economics in detail, looking at existing tariff schemes elsewhere, the Milton Keynes tariff which is applicable only to large strategic development sites, is set at a level significantly above those that apply to a range of sizes and types of development. The tariff is £18,500 per residential dwelling and £260,000 per hectare of employment space. In contrast the London Thames Gateway Development Corporation levies a tariff of £10,000 per residential dwelling in the Lower Lea Valley and £6,000 in London Riverside. The viability and level at which a tariff could be set will be influenced by what costs/ investment is included within it, and those outside of it.
- 10.39 For the New Market Town, a bespoke and detailed assessment of development viability will be required given the scale and complexity of development proposed and delivery timescales. Over the course of

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<sup>17</sup> While it is expected that the new Coalition Government may review CIL, some form of tariff measure is expected to remain.

delivery the market, funding streams and development economics may all change significantly. This will require further investigation moving forward. This should inform assessment of the potential for use of a tariff model, or for a more bespoke negotiated approach. Regardless of which is taken forward, it will be necessary to be clear early on as to what the Councils expectations are regarding developer contributions, and to provide appropriate periodic review mechanisms.

#### *Ringmaster*

- 10.40 This is a model for funding key infrastructure investment, whereby a key regeneration agency such as the Homes and Communities Agency forward funds infrastructure investment which is then recouped over time as development is delivered, through developer contributions. The HCA in this case would play the role of the 'ringmaster.' Derivatives of this include regional infrastructure funds.

#### **Other Sources of Funding**

##### *Council Tax and Business Rates*

- 10.41 The Conservatives Localism Green Paper (Spring 2010) proposed reforms to taxation which present a potential funding opportunity. The Party proposed a new financial framework to deliver rewards to local Councils for stimulating housing and economic investment. The new Coalition Government now proposes to implement these measures.
- 10.42 In addition to Council Tax, local councils currently receive funding from central government for their general (non housing) revenue expenditure in the form of formula grant and specific grants. There is an equalisation process built into this which redistributes taxation income. Currently the equalisation process means that local authorities are not necessarily rewarded proportionally from additional development.
- 10.43 The new Government proposes to replace the current Housing and Planning Delivery Grant with an alternative system, matching additional Council Tax raised from new development for each of the six years after the home is built. An average Band D property in Twineham currently pays £1,436 per annum in Council Tax. Matching

Council Tax receipts in this way for 10,000 homes would yield £86 million (+ inflation) to potentially fund service delivery and infrastructure investment.

- 10.44 A similar proposal is being put forward for business rates. These are currently levied locally but collected and redistributed as part of the Local Government Finance System. The Government has proposed to abolish the current Local Authority Business Growth Initiative (LABGI), replacing this with a Business Increase Bonus, whereby any Council in which business rates in a given year rise by more than the indexed increase in the national business rate will be entitled to keep the difference for 6 years. Subject to programming and delivery phasing, economic investment in the New Market Town could thus provide additional funding.

*Tax Increment Financing*

- 10.45 Tax Increment Financing (TIF) is based on borrowing against future increases in business rate taxation to support up-front or enabling infrastructure. While it has not been widely used in the UK to date, and will likely require primary legislative changes, it could provide a mechanism for sourcing debt finance to support up front infrastructure investment. Currently Transport for London is investigating this as a potential funding mechanism to support delivery of an extension of the Northern Line to the Vauxhall Nine Elms Battersea (VNEB) Opportunity Area. This is a mechanism which could however work well with a new settlement, where the uplift in receipts from local taxation is clear cut.

*Joint Venture Partnering*

- 10.46 The final potential mechanism worth considering is a form of joint venture partnering. In this circumstance, the three Councils do not current own significant land assets within the Area of Search (to our knowledge). Thus the approach is different to Local Asset Based Vehicles (LABVs) which have been progressed elsewhere.
- 10.47 In this case the opportunity would be more for the local authorities themselves to invest in a development vehicle; sharing some of the risks associated with development but also a proportion of the

potential profit (should the Councils take a financial stake). This would require the establishment of a Joint Venture (JV) Delivery Vehicle.

- 10.48 Alternatively the Councils could seek to secure an interest in the land. In this way they might share in the land value uplift, and by taking on a long-term stake in land and property, could creating a long-term financial return from the rental of space/ ground rents.

**SUMMARY**

- 10.49 The analysis presented in this Section indicates that of the four options, those which are likely to have the lowest comparable infrastructure costs and thus lower delivery risk are Options 1 and 3. Of these Option 1 avoids the power lines but is less efficient in terms of public transport and park and ride potential. Option 3 is better from a transport perspective but is traversed by the 400kV overhead line which would inhibit place-making and segregate the northern section of the town.
- 10.50 Which option is 'best' is somewhat subjective and influenced by what are determined as relative priorities. Against this context it is not advisable to identify a preferred location at this stage, but to allow this to emerge from further technical work if progressed.
- 10.51 Whichever option is pursued, a funding cocktail will be required to deliver key infrastructure, drawing on a range of funding mechanisms which have been examined. Both public and private sector investment will be necessary to progress the proposal.

## 11. GOVERNANCE & NEXT STEPS

11.1 This final chapter of the report addresses 'governance' issues, recognising that planning for delivery of a New Market Town will require a long-term commitment, adequate resourcing and cross-authority collaboration over a sustained time period. It then outlines key further elements of work considered necessary to further test the feasibility of delivering a New Market Town and to provide a sufficient evidence base to support its allocation within Local Development Frameworks.

### INTRODUCTION TO GOVERNANCE ISSUES

11.2 Governance has been identified as a particularly important aspect of the study and an important part of this feasibility study will be in understanding what governance arrangements will be required to support delivery of a new settlement and, in the context of delivery, what the timescales and resource implications are for the establishment of appropriate governance arrangements.

11.3 The following are critical factors in relation to the local situation which necessitate a clear and robust governance structure:

- There is currently no planning strategy to deal with this form and scale of development.
- There are three local authorities with vested interests in the consideration of a new settlement in relation to a sub regional growth strategy.
- The study area crosses the boundaries between two local planning authorities i.e. Mid Sussex District Council and Horsham District Council.
- Delivery will require consistent political buy-in and commitment across the authorities, and over a substantial time period.
- There will need to be an agreed assessment of sub-regional need.

- The land within the study area is predominantly in private ownership and there are therefore potentially competing land use and ownership considerations in addition to any parties currently engaged in site assembly.
- There are no significant public sector land holdings within the study area and as such the development is likely to be private sector led but the public sector will be required to facilitate and manage the development process and ensure that necessary sufficient community infrastructure is provided. This will require proactive engagement with various infrastructure providers.
- The impact and role of this settlement in the context of Burgess Hill and Haywards Heath needs to be managed. This will require further careful analysis and development of a robust, phased strategy for investment and regeneration across the three towns.
- The sub regional impacts and implications of the new settlement upon Horsham and Crawley need to be managed.
- There are a wide variety of stakeholder interests including the local community who will require engaging, a particularly important consideration given the new Government's Localism Agenda.
- Development of the scale envisaged (i.e. potentially 10,000 homes and 14,000 jobs) constitutes a major development and will require significant resourcing over a sustained period.
- It will be necessary to coordinate a cocktail of funding and investment by various bodies.

11.4 In considering what governance arrangements are required to oversee establishing a New Market Town, we have considered the following elements:

- Governance Principles and Key Issues;
- Assessment of Existing Structures between the Local Authorities; and
- Alternative Case Study Examples.

- 11.5 These are used to inform consideration of the potential approach to governance and cross-authority coordination.
- 11.6 These matters were the subject of a client group workshop meeting held at Horsham District Council on 2nd July 2010 and these discussions have informed and refined our considerations accordingly.

## GOVERNANCE PRINCIPLES AND KEY ISSUES

### Who will take forward a new settlement in West Sussex?

- 11.7 The New Towns of the 40s, 50s and 60s were delivered by government sponsored 'Corporations' financed by the Exchequer which assembled the land on which the new settlements would be delivered. The New Town Corporations were effective mechanisms for capturing land value uplift. However, given the current position of constraints upon public sector spending it is highly unlikely that further New Town Corporations will be established by central Government in the short-term and in any event would most likely require some form of primary legislation from Government. There is of course legislation in place which allows for the creation of Development Corporations such as those that exist in the Thames Gateway and West Northamptonshire.
- 11.8 Theoretically the Homes and Communities Agency (HCA) could take on the role of assembling land and facilitating development of a new settlement. The HCA's remit and budget has been significantly reduced by the Coalition Government and it is therefore likely that the HCA will have to focus on existing priority areas in the short-term and it is probably unlikely that it would take a lead role in West Sussex. However, should the New Market Town proposal be taken forward, then it would be beneficial for the Local Authorities to engage with HCA at an early stage to review opportunities for it to support delivery.
- 11.9 The new Government has also set in progress the process of abolishing the existing Regional Development Agencies and whilst Local Enterprise Partnerships are a new model for combining public sector (and possibly private sector) resources at a regional/sub regional level there is a great deal of uncertainty about the role and potential remit of LEPs. Thus whilst we cannot discount a LEP being

established and involved in facilitating the delivery of a New Market Town, we must await further clarification from central Government.

- 11.10 It must therefore be assumed that any public sector funding for land assembly will be limited and that delivery of a New Market Town will be developer/investor-led. There is the possibility of a developer seeking to form a Joint Venture Partnership with the public sector, should there be an appetite by the local authorities and/ or other agencies to do so, particularly with a view to harnessing local authorities Compulsory Purchase powers to assist in development and infrastructure delivery.

### What is required of the Governance Structure?

- 11.11 We have identified the following as the key aspects of governance in respect to a strategy for delivering a new settlement. The Governance Structure must:
- **Work effectively and efficiently** - this requires agreed objectives, shared working processes, adequate resourcing and effective management and decision making procedures.
  - **Maintain local democratic accountability** – this means ensuring that elected representatives are involved in key decision making structures. It must through provide a mechanism for achieving sustained long-term political buy-in.
  - **Draw together local authorities and other stakeholders** – this would include Town and Parish Councils, the District/ Borough Councils, landowners, developers, investors, the Environment Agency, Natural England, West Sussex County Council, the Highways Agency and other infrastructure providers.
  - **Demonstrate the public sector's commitment to delivery** – this would need to include procedures for guiding, facilitating and managing development and monitoring delivery with adequate resourcing against a shared set of objectives.
  - **Engage with and support private sector investment** – this means a collaborative and flexible approach and setting out clear arrangements for planning delivery which give the market

confidence and minimise investment risk in delivering the new settlement.

- **Drive quality standards and maximise local benefits** – this would include establishing a framework and guidelines to achieve quality design and sustainability standards together with the timely delivery of physical, social and green infrastructure; and provide a framework for monitoring their delivery/performance.
- **Have a legally robust decision making partnership** – this will be important to protect the authorities and give developers/investors confidence that the organisation can make cross boundary decisions without undue risk of legal challenge.
- **Have a defined planning authority function** – whether this is a single lead planning authority or a coordinated/combined planning authority.
- **Set clear priorities for infrastructure and delivery responsibilities** – establishing clear objectives and performance indicators linked to phases of development and monitoring developer performance against these targets.
- **Allow for flexibility to respond to changes in market conditions** – this means having the appropriate skills and knowledge to evaluate changing market conditions and where appropriate applying a flexible approach without undermining the original delivery objectives or quality standards.

**Where do the governance arrangements differ between key stages?**

- 11.12 The governance requirement is somewhat different across distinct stages of the process of delivery. We consider that there are two key stages to this: firstly, *visioning and strategy development* in moving towards allocating the land; and secondly *development delivery* in terms of managing the development process, including in exercising development control responsibilities.

**Stage 1: Visioning and Setting the Strategy**

- 11.13 This stage is essentially about determining the feasibility and framing the new settlement within planning policy. Key governance decisions within this stage include:

- Cross authority agreement on the principle of further investigating the potential of a New Market Town;
- Further testing the concept of a new market town and assessing its feasibility, including commissioning further technical assessments to assess feasibility and deliverability. Further technical work will include strategic transport modelling; detailed ecology, landscape and heritage assessments etc (see Next Steps section);
- Coordinating consultation with infrastructure providers, regulatory bodies and other stakeholders;
- Reviewing the scale and phasing of development within the sub regional context, including exploring further the relationship between investment in a new settlement and others within the sub-region (addressing the nature, scale and phasing of development);
- Determining whether or not the new market town is feasible and deliverable;
- Managing the process of public consultation and engagement, including liaison with parish and town councils and other interest groups;
- Agreement of the Preferred Option for future strategic development within the respective local authorities and the sub-region, and consultation through LDFs;
- Coordinated masterplanning, viability assessment and development of a delivery and implementation strategy, potentially working with landowners and developers; and
- Allocating the site of the new settlement within the Core Strategies for Horsham and Mid Sussex District Council.

11.14 The Governance Arrangements for Stage 1 are likely to focus upon (indicative timeframes in brackets):

- a) Political sign-up from all three local authorities – possibly via Sub Regional Strategy (12 months)
- b) Further technical work to inform assessment of feasibility and potential allocation within Core Strategies (12 months)
- c) Engagement and buy-in from other regulatory bodies including HA, EA, WSCC, Natural England; and initial community consultation (12 months)
- d) Identification within Core Strategy Proposed Submission Documents (12 months time)
- e) The establishment of an area action planning process (potentially jointly between HDC and MSDC) leading to the formulation of a (Joint) Area Action Plan (6-9 months).
- f) Progression of an outline planning application (9-12 months).
- g) Agreement of Section 106 or alternative planning gain arrangements (3 months+).

11.15 With regard to timeframe it is very difficult to predict how long each of these steps will take, hence we have given indicative timeframes for the key steps above. Some of these steps can run concurrently.

11.16 It is important that the authorities do not underestimate the lead in times for setting the governance arrangements in place and establishing an appropriate planning policy framework. It is possible that this stage could take five years or more to conclude.

### Stage 2: Development Delivery

11.17 This stage relates to the implementation of development, including the submission and determination of planning applications and delivery of strategic infrastructure.

11.18 Critical to this stage will be the extent to which the public sector is a *development facilitator*, *development manager* and/or *active delivery agent*. These roles are not necessarily mutually exclusive; however, their governance and resourcing may be different. These are

considered further through assessment of case study examples later in this section.

11.19 In the context of '*development facilitator*', the key governance considerations will relate to the public sector's role in:

- advocating and promoting the development including through engagement with local communities;
- brokering agreements between development partners, landowners and infrastructure providers;
- coordinating stakeholder and public consultation throughout the delivery process and maintaining relationships with all stakeholders;
- drawing in public sector financing and funding to facilitate elements of the development.

11.20 In the context of '*development manager*', the key governance considerations will relate to the public sector's function as planning authority, licensing authority and building control authority with a specific role in:

- Resourcing of the regulatory functions (including planning) – potentially in a joint authority capacity; and
- Monitoring delivery against the agreed planning framework, wider quality standards and community requirements.

11.21 In the context of '*active delivery agent*,' we have already suggested that the public sector is unlikely to take a lead role in land assembly or as a development partner per se, however, there is still a potential key role to play in land assembly through the utilisation of Compulsory Purchase powers or in some form of joint venture arrangement to deliver the development or parts thereof. In this context the Authorities might consider:

- Investing in a Joint Venture Delivery Vehicle - sharing in the risks associated with the project but also taking a share of the potential profit.

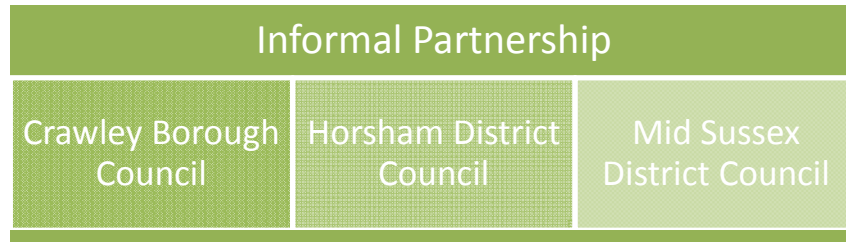
- Securing an interest in the land, benefiting from any land value uplift, and taking on a long-term stake in land and property, thus generating an income stream from the rental of space/ ground rents.

11.22 The local authorities might decide to play the role of both development facilitators and managers. Further consideration will need to be given to authorities' willingness to invest in a joint venture arrangement or land assembly, the benefits this may have in terms of driving delivery timescales; balanced against the sharing of risk and potential profits.

**EXISTING STRUCTURES BETWEEN THE LOCAL AUTHORITIES AND POTENTIAL LIMITATIONS**

11.23 Presently there is an informal partnership between the three authorities, whereby the authorities work together to address sub regional planning matters. The following sets out the key considerations of these existing arrangements and considers their relative advantages and limitations.

**Figure 11.1: Existing Partnership Structure**



11.24 Each of the Local Authorities has its own formal structure for considering strategic planning proposals. HDC has the Strategic Planning Advisory Group (SPAG), MSDC has the Better Environment Advisory Group (BEAG) and CBC has an LDF Working Group. Each Council has Cabinet Members and Portfolio Holders who would normally be key decision makers on strategic projects. The Council's have entirely separate Planning Committees.

11.25 For cross boundary projects the Councils' approach is to establish a Joint Officer Team, which report in some circumstances to a Joint Member Steering Group, while in others officers report directly to their respective members.

11.26 The most relevant example of the Councils collaborating on planning for strategic development is identifying the potential for strategic development West of Crawley. This was a collaboration between HDC and CBC in allocating the site and the key milestones in this project were as follows:

- Identified in Core Strategies 2004-7
- Joint Area Action Planning 2006-2009
- Planning application submission anticipated 2010

11.27 The advantages of this approach are that:

- Two of the authorities are familiar with the arrangement and it has, to an extent, been tested by the West of Bewbush example.
- Including all three authorities in this joint planning decision-making process means that an individual authority is less likely to become an objector.

11.28 The potential limitations of this approach are as follows:

- An informal arrangement is reliant upon authorities' good will, cooperation and sustained commitment but there is nothing to prevent one or more parties walking away from the 'partnership'.
- This structure is reliant upon separate Cabinets and Planning Committees and there is no single decision making authority or arbitrator to determine in situations where there may be competing interests between authorities.
- Authorities' willingness to enter into joint venture agreements with developers/investors (particularly in relation to CPO) may well be different.



- This approach is particularly susceptible to political shifts which is an important factor given the long term delivery timeframe envisaged.
- This informal arrangement represents a significant level of risk for any developer/investor and may reduce market interest in progressing such a complex development proposal.

11.29 We have assumed that the partnership approach to sub regional planning strategy will continue between the Authorities but there is of course a possibility, subject to selection of options that the New Market Town could be facilitated entirely within Mid Sussex in which case the role and involvement of the other Authorities would not be as critical. These authorities could potentially act as consultees, and be involved more fully through a continuing informal partnership arrangement.

11.30 There are however alternative potential governance models. We have selected a number of relevant examples which demonstrate different structures. These are examined below.

### **CASE STUDY EXAMPLES**

11.31 We have considered the existing informal structure utilised by the HDC and CBC in strategic planning for West of Bewbush. The following section considers the following alternative governance models based upon existing examples:

- (i) Single Local Authority Model – Wirral Waters, Wirral MBC
- (ii) Multi-Authority Area Development Corporation - West Northamptonshire Development Corporation
- (iii) Single Authority Development Corporation – Thurrock Urban Development Corporation
- (iv) Local Delivery Partnership - Renaissance Bedford

### **CASE STUDY 1 - Single Local Authority Model**

#### **Example: Wirral Waters, Wirral MBC**



11.32 Peel Holdings is promoting Wirral Waters a major regeneration scheme for Birkenhead and Wallasey Docks in Merseyside. Wirral Metropolitan Borough Council (WMBC) is the local planning authority. Peel submitted the UK's largest single planning application in February 2009. Wirral MBC's planning committee resolved to grant planning consent to the development in August 2010. Key Points

- Wholly developer-led proposal for 13,000 homes and 20,000 jobs on former dockyard land, promoted by landowner Peel Holdings. The envisaged timescale to delivery is up to 50 years.
- Single Planning Authority with neighbouring local authorities merely consultees.
- Planning policy context is such that there is no UDP or RSS support for the scheme, however, it is recognised in the context of the Mersey Heartlands Growth Point.

#### *How the Plans Emerged*

- Initial Vision published by Peel (October 2006)
- Baseline Study endorsed by WMBC Cabinet (July 2008)
- Refined Vision published by Peel (2008)

- Strategic Regeneration Vision agreed by Peel and WMBC (2006 with Guiding Principles Documents still emerging)
- Planning Application submitted by Peel (February 2009)
- Resolution to award Planning Permission (August 2010)

*Advantages of the Single Local Authority Model*

- The developer assumes most of the risk and cost in developing majority of planning framework.
- The developer is responsible for procurement of technical studies and advice.
- The Developer is responsible for attracting wider investment, occupiers and jobs.
- A single Local Planning Authority retains decision making powers in determining of the planning applications.

*Limitations of the Single Local Authority Model*

- There are significant resource implications for the Local Planning Authority which can result in delays in decision making (i.e. planning consent delays).
- The Council's 'stake' in the development is minimal and therefore any influence over the scheme is limited.
- The lack of a statutory planning framework due to slow progress with the LDF, set against the regeneration ambition has led to emergence of a non-statutory planning framework.
- There is significant scope for challenge to the application due to the lack of a sub regional decision making partnership between the single Local Authority and neighbouring Authorities. Thus neighbouring authorities able to object to the application and delay the process (see below).
- There is no formal structure for delivering cross boundary infrastructure and impact mitigation.
- There is no formal joint decision making process.

- 11.33 It is worth drawing out the point of potential challenge from neighbouring authorities as it particularly relevant for the commissioning authorities in this feasibility study. GL Hearn has been acting for Liverpool City Council (LCC) who is concerned about the impacts of the proposed development upon Liverpool City Centre and has made representations to WMBC on matters including scale and phasing of retail and office development. Whilst LCC supports the principles of the strategy for Wirral Waters, the fact that there is no agreed Planning Framework or formal mechanism for addressing LCC's concerns means that LCC might have had to submit an objection to the proposed scheme in order to address its concerns.

**CASE STUDY 2 - Multi-Authority Area Development Corporation**

**Example: West Northamptonshire Development Corporation**

- 11.34 Set up in 2004, West Northamptonshire Development Corporation (WNDC) has been established to promote sustainable housing growth and regeneration in Northampton, Daventry and Towcester. These towns form part of the Milton Keynes South Midlands Growth Area. WNDC has assumed Local Planning Authority powers (since 2006) from the three Councils but retains separate Planning Committees for each town, each of which has a combination of Councillor and non-political members.

- 11.35 The key activities of NWDC are:
- Delivering new homes and coordinating infrastructure to support new homes.
  - Ensuring new homes meet design and environmental quality standards and are integrated with existing communities.
  - Ensuring new homes are supported by infrastructure, employment and town centre regeneration.

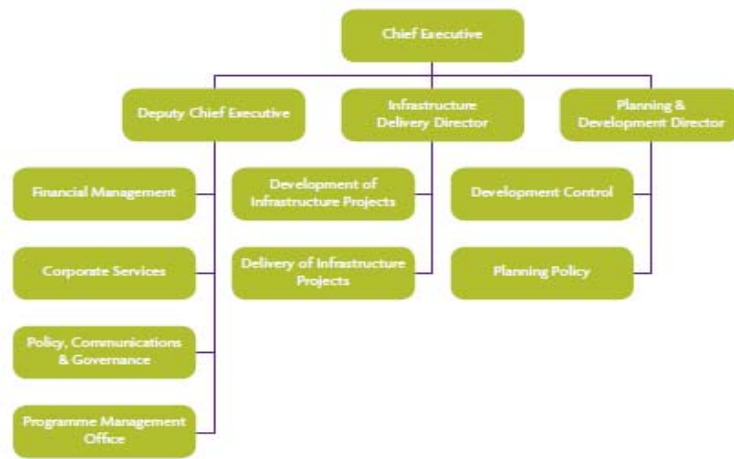
*NWDC Structure*

- 11.36 The Board comprises 13 members including Chair, Deputy Chair, three private sector interests, an education sector interest, a health

sector interest and Councillors from each of the three District Councils and the County Council.

11.37 There are separate Planning Committees for Northampton, Daventry and Towcester. These Committees are comprised of Board Members and therefore are not directly elected, other than through the Councillor representation.

**Figure 11.2: NWDC Structure**



11.38 The Planning & Development Team has in the region of 15 'planning officers', however, this team is supplemented with consultant support as necessary.

*Advantages of the Multi-Authority Area Development Corporation Model*

- Provides clear and coordinated sub regional growth agenda;
- A focus upon driving forward delivery with a clear role established;
- There is an established planning role and function;

- Provides a single point of contact for infrastructure providers;
- The Corporation is adequately resourced to manage and deliver major scale growth;
- The Corporation has a role in place-making; and
- There are locally accountable Planning Committees

*Limitations of the Multi-Authority Area Development Corporation Model*

- The model could be considered overly bureaucratic and costly to resource;
- There remains scope for disagreement between the Councils and the Corporation;
- There is the potential for some duplication of resources, functions and decision making between the Corporation and the Local Authorities.

**CASE STUDY 3 - Single Authority Development Corporation Example: Thurrock Thames Gateway Development Corporation**

11.39 This Development Corporation was established by Central Government in 2005 and covers a single authority area. Thurrock is situated within the Thames Gateway which is a recognised growth area and nationally significant priority regeneration area. The Corporation assumed control of major planning application decisions from Thurrock Council but also has a land assembly and development role.

11.40 The Corporation has brought forward six Area Masterplans; however, Thurrock Council retains responsibility for preparing the Local Development Framework. The progress on the LDF has been relatively slow and as such the masterplans constitute a non-statutory planning policy framework.

11.41 The Corporation identifies its partner organisations as CLG, EEDA, Essex County Council, the HCA and Thurrock Council.

11.42 The Corporation is part funded by Central Government to support delivery of regeneration and growth.

*Corporation Structure*

11.43 The Board comprises 13 members including Chair, Deputy Chair, four Thurrock Councillors (including the Leader and Leader of the Opposition), and other business, developer and public sector interests. It includes significant private sector representation.

11.44 The Board forms Committees for Audit; Marketing & Communications; Planning; Projects; and Resources & Coordination. The Planning Committee comprises 8 representatives, none of whom are local Councillors.

11.45 The following documents have been produced to facilitate regeneration and growth:

- Regeneration Framework
- Spatial Plan
- Annual Reports
- Six Area Masterplans
- Development Briefs and Guidance Notes

*Advantages of the Single Authority Development Corporation Model:*

- The Corporation is investment/regeneration focused. It acts as a central point of contact for developers/investors;
- The Corporation has critical role in coordinating infrastructure and public funding;
- The Board and Planning Committee benefits from wider expertise of private sector;
- Accelerated planning decisions (theoretically);
- Development has been driven forward whilst the LDF has been slow to emerge.

*Limitations of the Single Authority Development Corporation Model:*

- The planning function of the Corporation occasionally conflicts with the Local Planning Authority;
- The non-statutory masterplans progressed by the Corporation duplicate the procedures and development of the LDF;
- The Corporation can be a drain upon local authorities resources as staff seconded or re-employed at Corporation; and
- A lack of political accountability.

**CASE STUDY 4 - Local Delivery Partnership**

**Example: Renaissance Bedford**

11.46 Renaissance Bedford was established in 2005 as a Local Delivery Vehicle for Bedford and north Central Bedfordshire Area. This is situated within the Milton Keynes South Midlands Growth Area.

11.47 The partnership comprises public and private sector bodies, the Board comprising representatives from two Local Authorities, together with regional and national agencies (HCA), and representatives of the private sector, including two from the property development industry.

11.48 Renaissance Bedford seeks:

- the delivery of the key housing commitments, totalling 19,500 dwellings by 2021;
- the delivery of employment growth of up to 19,800 additional jobs in the same period; and
- that the essential infrastructure to support and create more sustainable communities in the future is costed, funded and put in place at the right time.

11.49 Renaissance Bedford's role covers coordination of homes, jobs and infrastructure. It has a role in promotion of the area and attracting inward investment. It works with the two local authorities and infrastructure providers (including through an Infrastructure Forum). It

does not have planning powers, which are retained by the local authorities.

11.50 The Partnership has a core team of four comprising:

- Chairman;
- Project Coordinator for investment and jobs;
- Project Coordinator for housing delivery; and
- Project Coordinator for infrastructure.

*Advantages of the Local Delivery Partnership Model*

- Cross boundary coordination and promoting of inward investment role;
- It is a tool for attracting private sector investment and expertise;
- It acts as a broker between various public sector bodies and developers; and
- It has a delivery focus.

*Limitations of the Local Delivery Partnership Model*

- It has no planning powers;
- It has limited influence in delivery decision making; and
- Limited resourcing which makes the organisation reliant upon partner organisations assisting in delivery / work streams.

## CONSIDERING THE POTENTIAL APPROACH

11.51 At paragraph 11.11 we detailed the critical factors influencing the requirement of specific governance arrangements. There is currently no agreed planning strategy to deal with this form and scale of development, particularly in a cross-border context. Land is predominantly in private ownership, however there is a role for both public and private sectors in coordinating and bringing forward development and infrastructure.

11.52 Successful delivery of a New Market Town will also require sub-regional coordination to address impacts and implications, to develop

a clear and coordinated strategy for investment and regeneration in existing towns alongside the new settlement. Critically it will require the development and maintenance of political, stakeholder and community buy-in over the long-term.

11.53 We also identified the following as the tenants of governance in relation to delivering a project of this nature. Each of these has been linked to a key requirement based up on our evaluation of governance in other development delivery models.

- **Work effectively and efficiently** – set agreed objectives, allocate sufficient resources and working processes, set effective management and decision making procedures.
- **Maintain local democratic accountability** – setting a clear role for elected representatives in key decision making structures. It must though provide a mechanism for achieving sustained long-term political buy-in; **Draw together local authorities and other stakeholders** – establishing partnership arrangements with Town and Parish Councils, the District/ Borough Councils, landowners, developers, investors, the Environment Agency, Natural England, West Sussex County Council, the Highways Agency and other infrastructure providers.
- **Demonstrate the public sector's commitment to delivery** – established procedures for guiding, facilitating and managing development and monitoring delivery with adequate resourcing against a shared set of objectives.
- **Engage with and support private sector investment** – having a clear remit to promote and facilitate investment, working in partnership and potentially joint venture with the private sector to attract wider funding and investment.
- **Drive quality standards and maximise local benefits** – this would include establishing a framework and guidelines to achieve quality design and sustainability standards together with the timely

delivery of physical, social and green infrastructure and provide a framework for monitoring their delivery/ performance.

- **Have a legally robust decision making partnership** – have an agreed charter and/or constitution which creates the legal basis for decision making and finance management.
- **Have a defined planning authority function** – a ‘Development Control’ team potentially seconded from the existing Authorities with ability to draw on support skills from consultants as necessary and a Joint Planning Committee.
- **Set clear priorities for infrastructure and delivery responsibilities** – a ‘Development Facilitator Team’ responsible for coordinating and monitoring delivery of infrastructure in liaison with an Infrastructure Stakeholder Group.
- **Allow for flexibility to respond to changes in market conditions** – a ‘Development Facilitator Role’ with planning and development skills with a sound grasp of development economics and an ability to negotiate with developer partners.

11.54 Drawing upon the considerations of what makes for effective governance, our understanding of existing local structures, and, models used elsewhere, we now set out proposed structures for Governance across the key stages of (i) Vision to Strategy and (ii) Development Delivery.

11.55 This model sets out an approach that should feasibly work for a single authority or a multi authority partnership.

11.56 Cabinet and Council are required to buy-in to the process and sign off on key decisions which will include:

- (i) Initial political sign-up from all three local authorities – possibly via Sub Regional Strategy;
- (ii) Approval / Allocation of New Market Town within Core Strategies;
- (iii) Development, approval / adoption of Area Action Plan; and

- (iv) Planning Committee to determine outline planning application and associated S106.

Figure 11.3: Potential Governance Structure – Stage 1

11.57 A (Joint) Project Board or ‘Steering Group’ comprising Senior Officers and potentially Lead Members would coordinate work streams and have delegated authority to:

- (i) Seek engagement and buy-in from other regulatory bodies including HA, EA, WSCC, Natural England;
- (ii) Progress technical work and consultation to allocate within Core Strategies;
- (iii) Establish an area action planning process (potentially jointly between HDC and MSDC) leading to the formulation of a (Joint) Area Action Plan;
- (iv) Consider outline planning application(s) ; and Consider Section 106 or alternative planning gain arrangements (as above).

11.58 The final component is the Working Groups collaborating across a number of themes and consulting widely with various stakeholders including landowners, developers, infrastructure providers etc.

11.59 The resource implications for this Model are as follows:

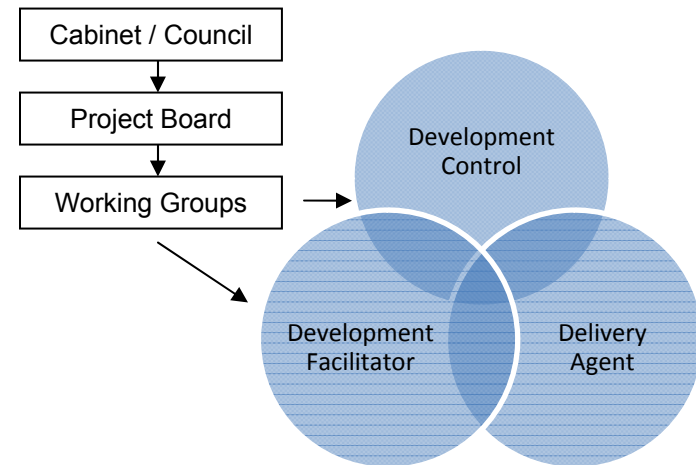
- Utilisation of existing Cabinet / Council Structures.
- Lead coordinator to be identified for each Authority ideally senior officers and probably separate from existing 'Spatial Plan Managers'.
- Formation of Joint Project Board Group comprising Lead Coordinator (officer), potentially Lead Members and key partner organisations such as WSCC, Parish Councils.
- Resourcing of Working Groups both from appropriate Council Officers and partner organisations
- Commissioning of consultants to support on specialist/technical work as appropriate.

11.60 At Stage 2 the management structures are the same as in the first stage, however, additional development surveying and development control skills may need to be brought in.

11.61 The officer working groups assume the roles of (i) Development Control, (ii) Development Facilitator and (iii) Delivery Agent.

11.62 At this stage the three Authorities have not determined to what extent they would progress the "development facilitator" and "delivery agent" role and further work would be required to evaluate the relative merits, risks and cost exposure of these roles.

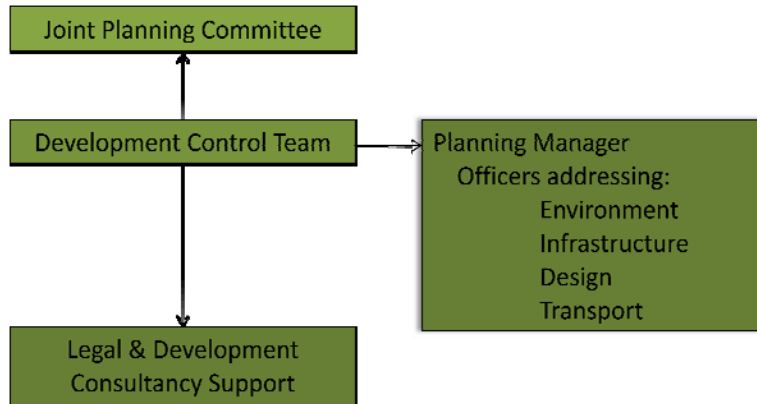
**Figure 11.4: Potential Governance Structure – Stage 2**



11.63 With regard to the development control function, it is likely that a designated team will have to be in place to provide consistency of approach and resourcing. This team could be resourced from existing officers of either one or all of the authorities, potentially on secondment. It is also likely that technical support and legal costs will be incurred by the Authorities in evaluating planning applications.

11.64 It is not unusual in such situations for a Planning Performance Agreement to be required and it may also be possible to secure 'costs' from developers towards the resourcing cost of the Development Control Team in return for the Authority committing to determining planning applications within the terms of the Planning Performance Agreement.

**Figure 11.5: Potential Structure for Development Control Function**



**NEXT STEPS**

- 11.65 The brief for this Study was to undertake an initial feasibility exercise to explore the potential for a New Market Town. The consultants' team has taken this exercise as far as possible within the constraints of resources and programme.
- 11.66 It will now be necessary for each of the three authorities to consider the relative merits of the New Market Town proposal. Each authority will need to consider future development requirements to meet their area's long-term needs, and consider this against other potential strategic spatial options. The Gatwick Diamond Economic and Spatial Strategy provides a potential means for the local authorities to come together to consider strategic planning issues relating to the scale, location and impact of development across the sub-region. Critically it will be important that Members as well as potentially Town Councils (such as in Burgess Hill and Haywards Heath) are engaged in this process.

- 11.67 Progressing proposals for a New Market Town will require a joint commitment from the three authorities. If this is achieved, it would then be necessary to undertake further more detailed investigations to explore feasibility. In this final section we have sought to set out what further work may be necessary to provide a sufficient evidence base to support the allocation of a New Market Town within the authorities LDF Core Strategies and potentially through preparation of a Joint Area Action Plan. The steps and timescales set out should be regarded as indicative at this stage.
- 11.68 We consider that the further work necessary to support an allocation can be organised around the following key stages:
  - (i) Member and Key Stakeholder Engagement;
  - (ii) Further Feasibility Analysis;
  - (iii) Masterplanning, Options Development and Testing;
  - (iv) Defining a Preferred Option; and
  - (v) Post Allocation.

*1. Member and Key Stakeholder Engagement*

- 11.69 The initial task following completion of this feasibility exercise is for officers of each authority to report back to Members. The three Councils are working separately to consider issues relating to housing numbers. The New Market Town proposal also needs to be considered alongside other potential spatial options for development. There is the potential for the local authorities to use the Gatwick Diamond Economic and Spatial Strategy as a mechanism to coordinate and examine high level options regarding the level and distribution of future development. We anticipate that this stage will take 2-3 months to complete.
- 11.70 It would be appropriate to give further detailed thought to governance and planning mechanisms at this point.



## 2. Further Feasibility Analysis

- 11.71 If the three authorities agree to further test the potential for a New Market Town, additional feasibility analysis will be necessary together with consultation with statutory consultees and infrastructure providers, including WSCC, the HA, EA, Natural England, EDF and Southern Water. The Councils should also further develop a dialogue and mechanisms to engage with Burgess Hill and Haywards Heath Town Councils.
- 11.72 It is recommended that the authorities engage proactively with any developers promoting the delivery of a New Market Town. There may be an opportunity for the developer to contribute funding towards further feasibility work necessary. However it will be important that the Councils retain ownership of the process, and that further feasibility work considers the full area of search and various options identified and is not unduly influenced by developers' existing land options.
- 11.73 We recommend that further investigation of land ownership patterns is undertaken at this stage, although this should not unduly influence the feasibility analysis and potentially subsequent masterplanning.
- 11.74 We consider that it will be necessary to undertake the following further studies in order to provide a robust understanding of physical constraints, potential solutions and associated costs:
- Water Study – considering flooding, water supply, drainage and foul water issues;
  - Services Study – particularly considering options to address electricity infrastructure within the area of search;
  - Desktop Ecology Study & Phase 1 Habitats Survey; and
  - Archaeology & Heritage Assets Study – drawing on the County Council's Historic Environment Record.
- 11.75 A Baseline Water Cycle Study should include a baseline flooding assessment, including assessment of off-site impacts and identification of river modelling requirements for flood risk assessment. It should baseline drainage strategy, including assessment of sustainable water cycle strategies available for the site such as black water recycling, demand offsetting and water neutrality; and the impact of this on water demand. It should consider the size and positioning of detention basins and SUDS measures. It should consider the water quality of existing water courses, the impacts on water quality and options to improve it. It should provide a baseline foul drainage strategy, including through liaison with the Environment Agency and Southern Water to consider options for foul treatment and discharge consents. The Study will provide an assessment of constraints, identify options for sustainable water management and feed into any subsequent masterplanning.
- 11.76 The Services Study will provide a full assessment of the location and capacity of available infrastructure and help identify at an early stage abnormal costs associated with servicing, diversionary requirements and any exclusion zones. The Study should focus strongly on existing electricity infrastructure. It would include detailed mapping of existing infrastructure, liaison with statutory undertakers to establish availability capacity, locally and strategically, and trigger points for reinforcement with associated costs and timescales for on- and off-site works. It would test options for diversion, lowering and undergrounding of existing infrastructure identifying no build or exclusion zones, access requirements and associated budgets and costs. Again this will inform options selection and masterplanning.
- 11.77 The archaeology and heritage assets study should consider non-designated environment and heritage assets. It should draw on the County Council's existing knowledge.
- 11.78 The Councils should draw together this further analysis to appraise potential development constraints, both in terms of physical constraints and infrastructure requirements and costs. This will inform assessment on whether to proceed to masterplan options development and testing. If the Councils are to proceed, a consultation strategy and programme should be developed.
- 11.79 It is anticipated that this stage will take 3 months to complete.

3. *Masterplanning, Options Development and Testing*

11.80 This stage should involve further technical work to inform the development of masterplan options, then with an iterative process of options development, testing and viability/ deliverability analysis used to inform consideration of the location, size and structure of the New Market Town.

11.81 As we have identified in this report, the relationship between a New Market Town and the existing towns of Burgess Hill and Haywards Heath needs to be carefully planned. The concept of the 'three towns network' will require significant evidence gathering and assessment. This will need to address issues related to employment, retail and town centres, leisure and community infrastructure and transport links. It will also be necessary to consider governance issues in terms of the relationship of a new community to the existing towns, how the residents, members and town/ parish councils can be engaged in planning for a new settlement alongside regeneration of existing towns. We see this work moving towards the development of a coordinated, phasing investment strategy for the three main settlements and their hinterland.

11.82 To achieve this, we consider that following studies are critical:

- Employment Demand and Three Town Economic Study – considering in detail the existing employment offer; strategic gaps in this and how it can be developed to maximise sub-regional economic performance; evidence of market demand; and how a strategy for investment and regeneration of existing sites and location can be addressed and phased alongside delivery of new employment space in a New Market Town; and
- Retail and Town Centres Study – a similar study which considers the hierarchy of centres in the sub-region and how this might be developed; and develops a strategy linked to this to create a sustainable hierarchy and movement patterns. This needs to address the relative scale and offer of centres and phasing of investment. It is

will be critical to maximising the potential for housing growth to act as a conduit for town centre regeneration.

11.83 Additional work will be necessary to consider leisure and community infrastructure; while it will be important some elements of transport planning work to take account of development and interventions across the three towns area and sub-region more widely. Proposals for road, junction and public transport investment will need to take a sub-regional view.

11.84 Further transport assessment and modelling will be required to inform masterplanning and identify transport proposals and infrastructure requirements. WSCC have indicated that it will be possible to use their strategic transport model to inform further strategic assessment work. The revised and updated version of the model will be available in Summer 2010. The County Council has indicated that it is prepared to make this model available for development testing. To inform modelling work it will be necessary to refine trip generation data to provide a formal technical note to WSCC and the HA. This will be informed by the employment and retail studies identified above and initial masterplanning.

11.85 It will be necessary to work closely with the Highways Agency to explore further the potential to mitigate the impact of development on the A23 and to consider the feasibility and funding of the A23 widening scheme.

11.86 It will be necessary to consider link and junction capacity and potential improvements. From our initial analysis we consider that this will include identification of junction concept design and capacity analysis of A23 junctions, as well as assessment of the A272 through Cowfold and the potential concept design of a relief road including A272 (E) and A281 (N) junctions. Traffic surveys will be necessary to inform these. Ongoing liaison with WSCC and the HA will be necessary to consider the potential for A23 widening.

11.87 The public transport strategy should be advanced to identify potential bus routes and service frequencies, potentially based on three primary routes and two alternative inter-urban services. The potential for park and ride should be considered alongside this.

- 11.88 High level transport cost estimates should be provided to inform masterplan development and viability testing.
- 11.89 Through this Study we have identified a number of potential locational options for a New Market Town. The further feasibility analysis and technical work identified above will provide a basis for reviewing these options and identifying key issues. This can form this basis of initial issues and options consultation with stakeholders and local communities.
- 11.90 It is envisaged that an iterative options appraisal process would be adopted, drawing together technical work, masterplanning, viability and community and stakeholder engagement. Options appraisal is likely to involve broad masterplanning to a level which enables appraisal against social, economic and environmental objectives. This would involve analysis to identify developable areas and broad brush access, movement and land use strategies. Appraisal of broad options will need to take a form which accords with SA/ SEA requirements.
- 11.91 The masterplanning process will need to involve and be informed by assessment of social/ community and green infrastructure requirements, with associated consultation with service providers.
- 11.92 Robust testing of viability and deliverability should be undertaken alongside masterplan options development and testing. This needs to consider market demand and values, development costs, infrastructure costs and funding, and the phasing of development and infrastructure investment. Detailed consideration should be given to delivery timescales and actions necessary to support the preferred delivery programme.
- 11.93 It will be a combination of factors, including deliverability issues, community engagement and SA/SEA, which informs selection of the preferred option.
- 11.94 It is anticipated that this stage would take around 6 months.

4. *Defining the Preferred Option*

- 11.95 This final stage involves the further work necessary to support allocation of the site. We consider that it will be necessary to draw the work undertaken together to provide the following outputs:
- Concept Masterplan;
  - Implementation and Delivery Plan (including Infrastructure Delivery Strategy);
  - Sustainability Appraisal Final Report.
- 11.96 Statutory consultation on the Preferred Option will be necessary.
- 11.97 It is important that the Implementation and Delivery Plan gives further thought to governance mechanisms as well as to delivery risks, and how these can be mitigated.
- 11.98 Detailed thought should also be given at this stage to mechanisms to ensure design quality. This would include development of a detailed masterplan and the use of development framework plans and design codes. Design competitions and design review panels are other mechanisms which should be considered.

**APPENDIX 1: INDICATIVE LAND BUDGET**

|   | no    | rate | area           |
|---|-------|------|----------------|
| <b>Housing</b>  |       |      |                |
| proposed population (2.2x)  | 22000 | no   |                |
| housing area requirement (ha) @ net average density. Includes local roads & local play.   | 10000 | no   | 45 dph 222 ha  |
| <b>Employment</b>   |       |      |                |
| 10000 jobs minimum. 35-40 ha  |       |      | 40 ha          |
| <b>Retail / Town Centre / Local Centres</b>   |       |      |                |
| Town Centre - to include retail & food store, 750m <sup>2</sup> library, Community Medical Centre, Doctors surgery (6 GPs), Dentists (4no), community buildings.        |       |      |                |
|   | 1     | no   | 10 ha 12 ha    |
| Local centre - 4-5no. To include community buildings, 2no doctors surgery (4 drs), 2no dentists (4no), 2no pharmacies, local shops (5-7no), 2no pubs, 2no post offices. |       |      |                |
|   | 5     | no   | 2 ha 10 ha     |
| <b>Strategic Transport</b>  |       |      |                |
| Allowance as % of housing area.   | 222   | ha   | 20% 44 ha      |
| Park & Ride   |       |      | 2 ha           |
| <b>Education</b>  |       |      |                |
| Secondary School c. 1500 pupils + post 16 provision for 600 no pupils. Assume single campus.  |       |      |                |
|   | 1     |      | 10 ha 10 ha    |
| Primary Schools provision for 2100 pupils - 5 x 420 place schools.  |       |      |                |
|   | 5     |      | 2.7 ha 13.5 ha |
| Nurserys - inc  |       |      |                |
|   | 5     |      | 0.02 ha 0 ha   |

|   | no    | rate | area | ratio          | ratio     |            |
|---|-------|------|------|----------------|-----------|------------|
| <b>Energy / Sustainability / Recycling</b>  |       |      |      |                |           |            |
| District heating system.  |       |      | 7    | ha             |           |            |
| Waste water treatment plant.  |       |      | 1.5  | ha             |           |            |
| Recycling centre.   |       |      | 2    | ha             | 79% 52%   |            |
| <b>Open Space</b>   |       |      |      |                |           |            |
| Formal Playing Pitches at npfa standards (1.6ha / 1000 pop). (Potential to share some allocation with schools + use of MUGAs)   |       |      |      |                |           |            |
|   | 22000 |      | 1.6  | ha             | 35 ha     |            |
| Childrens Play - to be located within housing areas at npfa standards (0.8ha / 1000 pop) = 18 ha - included within Housing areas. HDC requirement 1.1 ha for equipped play.                   |       |      |      |                |           |            |
| Allotments - assume 5% of households with 1no full plot (250m <sup>2</sup> ). HDC requirement - 1.1 ha. PPS17 - allotments, community gardens & urban farms to be provided on a demand basis. |       |      |      |                |           |            |
|   | 10000 | 5%   | 250  | m <sup>2</sup> | 13 ha     |            |
| Areas for flood alleviation (SUDs / balancing ponds) area depends on drainage strategy.   |       |      |      |                |           |            |
|   |       |      |      |                | 20 ha     |            |
| Existing constraints, existing floodplain, existing strategic roads. (HCA min requirements: 23 ha nature reserve / 9.2ha amenity space) Varies from 32 to 37ha between options.               |       |      |      |                |           |            |
|   |       |      |      |                | 32 ha     |            |
| open space total (PPS 1 ecotowns target: 20% min public use)  |       |      |      |                |           |            |
| <b>total</b>  |       |      |      | <b>464</b>     | <b>ha</b> | <b>21%</b> |
| <b>Land required to support local food production</b>   |       |      |      |                |           |            |
| eg community farms / orchards - Based on 1no allotment for each household.  |       |      |      |                |           |            |
|   | 10000 | 95%  | 250  | m <sup>2</sup> | 238 ha    |            |
| <b>total</b>  |       |      |      | <b>702</b>     | <b>ha</b> | <b>48%</b> |
| <b>energy sources</b>   |       |      |      |                |           |            |
| woodland biomass - further research required.   |       |      |      |                |           |            |
|   |       |      |      |                | 0 ha      |            |
| other eg ground source heat / solar / wind turbines - further research required.  |       |      |      |                |           |            |
|   |       |      |      |                | 0 ha      |            |