Land West of Burgess Hill: Landscape and Visual Appraisal

Prepared on behalf of Thakeham Homes

July 2017



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1.0 INTRODUCTION

- 1.1 Barton Willmore Landscape Planning and Design (BWLPD) was commissioned by Thakeham Homes in February 2016 to undertake a Landscape and Visual Appraisal of the Land to the West of Burgess Hill, West Sussex (the 'Site'), in relation to its suitability for residential development. The Landscape and Visual Appraisal has been informed by the vision set out in the Submission District Plan for Mid Sussex and undertaken in the context of the proposed employment area to the north of the Site, including the recently approved Glenbeigh Business Park.
- 1.2 The objectives of the Landscape and Visual Appraisal are to:
 - Assess the landscape characteristics and quality of the Site and its surroundings and function within the landscape;
 - Assess the visibility of the Site and the nature and quality of the existing views from the surrounding area; and
 - Identify the opportunities and constraints of residential development on the Site, from a landscape and visual perspective.
- 1.3 The Landscape and Visual Appraisal should be read in conjunction with the following illustrative material:
 - Figure 1: Site Context Plan;
 - Figure 2: Topographical Features Plan;
 - Figure 3: Landscape Character Plan;
 - Figure 4: Site Appraisal Plan;
 - Figure 5: Green Infrastructure Plan;
 - Figure 6: Visual Appraisal Plan;
 - Figure 7: Landscape and Visual Sensitivity Plan;
 - Site Appraisal Photographs A H; and
 - Site Context Photographs 1 11.

2.0 METHODOLOGY

- 2.1 The Landscape and Visual Appraisal has been prepared with reference to the guidelines as set out in the 'Guidelines for Landscape and Visual Impact Assessment 3rd Edition', prepared by the Landscape Institute and the Institute of Environment Management and Assessment.
- 2.2 A desktop review of the study area was undertaken, including for a review of the published landscape character information, landform, landscape features, relevant landscape and visual policy and landscape designations. This information was used as the initial basis against which to appraise the Site. Visits to the Site and surrounding area were subsequently undertaken in March and August of 2016 to verify the desk-based review findings and add further information to the landscape and visual context of the Site.
- 2.3 A description of the existing land use of the surrounding area is provided and includes reference to existing areas of settlement, transport routes and vegetation cover, as well as local landscape designations, elements of cultural and heritage value, and local landmarks or tourist destinations.
- 2.4 To determine the extent of visual influence, a visual appraisal was undertaken of the Site to consider the nature of existing views from publicly accessible viewpoints including roads, Public Rights of Way (PRoW) and public open space. Consideration was given to private views, however access to private properties was not obtained. Views were considered from all directions and from a range of distances. The viewpoints chosen are not intended to be exhaustive, but rather to represent the potential views obtained towards the Site in order to identify areas of higher visual sensitivity that may not be best suited for development.
- 2.5 The landscape sensitivity of the Site is considered in terms of its value and susceptibility to the type of development proposed.
- 2.6 The assessment of value is based on a combination of landscape-related planning designations and the following attributes:
 - Landscape quality (condition): the measure of the physical state of the landscape;
 - Scenic quality: the extent that the landscape appeals to the visual sense;
 - Perceptual aspects: the extent that the landscape is recognised for its perceptual qualities (e.g. remoteness or tranquillity);
 - Rarity: the presence of unusual elements or features;
 - Representativeness: the presence of particularly characteristic features;
 - Recreation: the extent that recreational activities contribute to the landscape; and
 - Associations: the extent that cultural/historical associations contribute to the landscape.

- 2.7 The susceptibility of the landscape is a measure of its vulnerability to the type of development proposed, without undue consequences for the maintenance of the existing situation. The assessment of susceptibility is based on the following attributes:
 - Scale;
 - Enclosure;
 - Landform:
 - Pattern/complexity;
 - Composition/relationship with existing built forms and infrastructure;
 - Land cover/use; and
 - Settings/skylines.
- 2.8 The appraisal of the Site is considered in combination with the visual appraisal, which concerns views towards the Site from the surrounding area (which includes consideration of the value of the views obtained and the susceptibility of the visual receptors at those identified locations), and together assist in the identification of opportunities and constraints to successfully accommodate the type of development proposed.

3.0 SITE CONTEXT

Landscape Setting

3.1 The Site is approximately 97.2 hectares (ha) in size and is irregular in shape. The predominant land use of the Site is agricultural, albeit there are areas of woodland (some of which is defined as ancient woodland), scrub vegetation, informal green space, and existing built development. Pook Bourne extends through the centre of the Site on a broadly east-west alignment.

Location and Land Use

3.2 As illustrated on Figure 1: Site Context Plan, the Site and the surrounding landscape context (with the exception of the main built-up area of Burgess Hill that lies to the east of the Site) comprises a mosaic of irregularly shaped fields bounded by hedgerow and treebelt vegetation or varying condition, poorly maintained woodland, and dispersed areas of settlement. With reference to Natural England's Agricultural Land Classification Mapⁱ, the land classification for the Site is Grade 3 - Moderate to Good.

Access and Rights of Way

- 3.3 The Site and surrounding landscape features a number of Public Rights of Way (PRoW) that provide recreational access and connectivity between the areas of dispersed settlement. The Site itself is traversed by five PRoW, including:
 - PRoW 48Hu, which extends west-east through the western part of the Site and runs adjacent to the northern edge of Northend Copse, connecting Cuckfield Road with Danworth Lane/High Hatch Lane;
 - PRoW 49Hu, which extends west-east through the southern central part of the Site,
 connecting Danworth Lane/High Hatch Lane with Malthouse Lane;
 - PRoW 80Hu, which extends north-south along Pangdean Lane, connecting Gatehouse Lane with Malthouse Lane;
 - PRoW 18Hu, which extends north-east to south-west, connecting The Dene on Gatehouse Lane with Shalford on Cuckfield Road; and
 - PRoW 54Hu, which passes through the eastern part of the Site, connecting Malthouse Lane with the built-up area of Burgess Hill, following the course of the Pook Bourne.
- 3.4 In addition, there are a number of informal areas of open space and permissive paths within the eastern part of the Site, and an area of amenity space including a play space adjacent to the built-up area of Burgess Hill.

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- 3.5 Key transport routes in the vicinity of the Site include:
 - Gatehouse Lane, which defines the northern extent of the Site;
 - Cuckfield Road, which defines the western extent of the Site and connects Goddards'
 Green with Hurstpierpoint;
 - Danworth Lane/High Hatch Lane, which runs north-south through the central part of the Site, connecting Goddards' Green with Hurstpierpoint;
 - Malthouse Lane, which extends through the eastern part of the Site, connecting Burgess
 Hill with Hurstpierpoint;
 - Pomper Lane, which partly defines the southern extent of the Site;
 - A273 Jane Murray Way, which forms a ring road to the main built-up area of Burgess Hill and defines the eastern extent of the Site;
 - A2300, which runs east-west through the landscape to the north of the Site and connects Burgess Hill with the A23; and
 - A23, which runs north-south through the landscape to the west of the Site and connects Brighton with the M23.

Topography and Hydrology

3.6 The Site lies within a generally low lying area that features a number of localised valley formations that are orientated east-west, as illustrated on Figure 2: Topography Plan. The Site itself forms part of one such valley formation and is associated with the Pook Bourne watercourse, which extends through the centre of the Site. Consequently, the northern part of the Site comprises south facing slopes ranging in height between approximately 20m Above Ordnance Datum (AOD) and approximately 30m AOD, and the southern part of the Site comprises north facing slopes ranging in height between approximately 20m AOD and approximately 35m AOD, albeit minor variations in the underlying landform are present including the localised hillock associated with Jackson's Pit.

Vegetation

- 3.7 The Site is perceived to be partly wooded in character due to the extent of containment provided by existing areas of woodland and scrub (some of which is defined as ancient woodland, including Northend Copse in the south-west of the Site, Jackson's Pit in the central part of the Site, and Parson's Withes in the north-east of the Site) and treebelt vegetation bounding the agricultural fields. Nonetheless, the western part of the Site is relatively less visually contained as the fields are enclosed by trimmed hedgerows or gappy hedgerows.
- 3.8 The south-eastern part of the Site features an area of recently established woodland, whilst the eastern edge of the Site is well defined by linear woodland adjacent to the A273 Jane Murray Way. The habitats of highest nature conservation value within the Site are the areas

of semi-natural broadleaved woodland (some of which is defined as ancient woodland), the species-rich hedgerows and treelines that coincide with the historic landscape pattern, and semi-improved neutral grassland, running water and ponds.

- 3.9 Species within the hedgerows include hawthorn, blackthorn, field maple, hazel, dogwood, ash, oak, holly, rose and honeysuckle. Mature trees are also present in many of the hedgerows, predominantly comprising pedunculated oak trees, although ash and field maple trees also occur. Many of the hedgerows within the Site are likely to be classified as 'important' under the Hedgerow Regulations (as amended) 1997.
- 3.10 Within the wider landscape, vegetation is generally associated with the hedgerows and treebelts that bound the fields, woodland copses, and ornamental planting associated with residential properties.

Designations

- 3.11 The Site is not covered by any national, regional or local landscape designations. The nearest nationally designated landscapes include the High Weald Area of Outstanding Natural Beauty (AONB), which is located approximately 2.5km to the north of the Site, and the South Downs National Park, which is located approximately 4km to the south of the Site. However, given the Site's location within the Pook Bourne, it makes little contribution to the setting of these designated landscapes.
- 3.12 There are no Country Parks or Nature Reserves within the vicinity of the Site.

Historical Development

- 3.13 Historically the Site has remained agricultural in character, divided into numerous fields, the pattern of which largely remains intact today. The Site was dissected in the 19th century by two north-south roads and populated by two farmsteads (Northend and High Hatch). Following the arrival of the railway, additional construction within the vicinity of the Site arose, with the landscape surrounding Burgess Hill rapidly expanding to form a substantial country town. Nonetheless, the Site itself remained largely undeveloped.
- 3.14 The Site is not covered by any listed features. Those in the vicinity of the Site include:
 - The Grade II listed Sportsman Inn, located approximately 30m to the north-west of the Site; and
 - The Grade II listed North End Farm Barn, located adjacent to the western boundary of the Site.

3.15 There are no Registered Parks and Gardens, conservation areas, or scheduled monuments within the vicinity of the Site.

Landscape Character

- 3.16 The landscape character assessment approach is a descriptive approach that seeks to identify and define the distinct character of landscapes that make up the country. This approach recognises the intrinsic value of all landscapes, not just 'special' landscapes, as contributing factors in people's quality of life, in accordance with the European Landscape Convention. It also ensures that account is taken of the different roles and character of different areas, in accordance with the NPPF Core Principles.
- 3.17 The description of each landscape is used as a basis for evaluation in order to make judgements to guide, for example, development or landscape management. The extent of published landscape character areas in the vicinity of the Reserved Site are illustrated on Figure 3: Landscape Character Plan.

National Landscape Character

- 3.18 As part of Natural England's responsibilities in delivering the Natural Environment White Paper,
 Biodiversity 2020 and the European Landscape Convention, Natural England has developed a
 series of National Character Area (NCA) profiles. These NCA profiles provide a broad range of
 information including an outline of the key characteristics of a given area; a description of the
 ecosystem services provided and how these relate to people, wildlife and the economy; and an
 array of opportunities for positive environmental change.
- 3.19 The Site is located in the southern part of National Character Area (NCA) Profile 121: Low Wealdⁱⁱ, which is described as a broad, low-lying clay vale, being predominantly dominated by agricultural land use with many densely wooded areas and a proportion of ancient woodland. Burgess Hill is noted as one of the main settlements
- 3.20 The stated key characteristics are:
 - "Broad, low-lying, gently undulating clay vales with outcrops of limestone or sandstone providing local variation;
 - The underlying geology has provided materials for industries including iron working, brick and glass making, leaving pits, lime kilns and quarries. Many of the resulting exposures are critical to our understanding of the Wealden environment;
 - A generally pastoral landscape with arable farming associated with lighter soils on higher ground and areas of fruit cultivation in Kent. Land use is predominantly

- agricultural but with urban influences particularly around Gatwick, Horley and Crawley;
- Field boundaries of hedgerows and shaws (remnant strips of cleared woodland) enclosing small, irregular fields and linking into small and scattered linear settlements along roadsides or centred on greens or commons. Rural lanes and tracks with wide grass verges and ditches;
- Small towns and villages are scattered among areas of woodland, permanent grassland and hedgerows on the heavy clay soils where larger 20th-century villages have grown around major transport routes;
- Frequent north—south routeways and lanes, many originating as drove roads, along which livestock were moved to downland grazing or to forests to feed on acorns;
- Small areas of heathland particularly associated with commons such as Ditchling and Chailey. Also significant historic houses often in parkland or other designed landscapes;
- The Low Weald boasts an intricate mix of woodlands, much of it ancient, including extensive broadleaved oak over hazel and hornbeam coppice, shaws, small field copses and tree groups, and lines of riparian trees along watercourses. Veteran trees are a feature of hedgerows and in fields;
- Many small rivers, streams and watercourses with associated watermeadows and wet woodland;
- Abundance of ponds, some from brick making and quarrying, and hammer and furnace ponds, legacies of the Wealden iron industry;
- Traditional rural vernacular of local brick, weatherboard and tile-hung buildings plus local use of distinctive Horsham slabs as a roofing material;
- Weatherboard barns are a feature. Oast houses occur in the east and use of flint is notable in the south towards the South Downs."

County Landscape Character

3.21 The Landscape Character Assessment of West Sussexⁱⁱⁱ was published in 2003 and identifies 42 unique areas across West Sussex. The Site is identified within area LW10: Eastern Low Weald, which extends westwards from Burgess Hill to Littleworth and is characterised as:

"The Eastern Low Weald within Mid Sussex and Horsham Districts comprises a lowland mixed pastoral and arable landscape with a strong hedgerow pattern. It lies over low ridges and clay vales drained by the upper Adur streams. In the east, the area has experienced high levels of development centred on Burgess Hill."

- 3.22 The stated key characteristics of the LW10: Eastern Low Weald area are:
 - "Gently undulating low ridges and clay vales;"
 - Views dominated by the steep downland scarp to the south and the High Weald fringes to the north;

- Arable and pastoral rural landscape, a mosaic of small and larger fields, scattered woodlands, shaws and hedgerows with hedgerow trees;
- Quieter and more secluded, confined rural landscape to the west, much more development to the east, centred on Burgess Hill;
- Biodiversity in woodland, meadowland, ponds and wetland;
- Historic village of Cowfold and suburban village development at Partridge Green, Shermanbury and Sayers Common;
- Mix of farmsteads and hamlets favouring ridgeline locations, strung out along lanes;
- A modest spread of designed landscapes;
- Crossed by north-south roads with a rectilinear network of narrow rural lanes;
- London to Brighton Railway Line crosses the area through Burgess Hill;
- Varied traditional rural buildings built with diverse materials including timber-framing, weatherboarding, Horsham Stone roofing and varieties of local brick and tilehanging;
- Major landmarks include Hurstpierpoint College and St Hugh's Charterhouse Monastery at Shermanbury;
- Principal visitor attraction is the Hickstead All England Equestrian Showground."

3.23 The key issues related to change are stated as:

- "Growing impact of development in the east;
- Continuing amalgamation of small fields, severe hedgerow loss, and the ageing and loss of hedgerow and field trees;
- Visual impact of new urban and rural development including modern farm buildings, horse riding centres and paddocks;
- Introduction of telecommunications masts on ridges;
- Increasing pervasiveness of traffic movement and noise, particularly around Burgess Hill, and busy use of some rural lanes;
- Perceived increased traffic levels on small rural lanes with consequent demands for road improvements;
- Gradual loss of locally distinctive building styles and materials:
- Gradual suburbanisation of the landscape including the widespread use of exotic tree and shrub species."

3.24 The stated landscape and visual sensitives are:

- "High level of perceived naturalness and a rural quality in the quieter, rural landscape to the west of the A23 Trunk Road:
- Woodland cover and the mosaic of shaws and hedgerows contribute strongly to the essence of the landscape;
- Pockets of rich biodiversity are vulnerable to loss and change;
- Parts of the area are highly exposed to views from the downs with a consequently high sensitivity to the impact of

new development and the cumulative visual impact of buildings and other structures."

District Character

- 3.25 In addition the Landscape Character Assessment for Mid Sussex^{iv} was published in 2005 by Mid Sussex District Council in association with West Sussex County Council and was prepared to help protect and enhance the distinctive character of the District and to manage change.
- 3.26 The Landscape Character Assessment for Mid Sussex has been prepared alongside the Integrated Landscape Character Assessment of the South Downs (2006) and shares landscape character area boundaries with it. Within the Landscape Character Assessment for Mid Sussex the Site is covered by Landscape Character Area 4: Hickstead Low Weald which is summarised as follows:

"Lowland mixed arable and pastoral landscape with a strong hedgerow pattern. It lies over low ridges and clay vales drained by the upper Adur streams. In the east, the area has experienced high levels of development centred on Burgess Hill."

- 3.27 The key characteristics of Landscape Character Area 4: Hickstead Low Weald, considered relevant to the Site are:
 - "Alternating west-east trending low ridges with sandstone beds and clay vales carrying long, sinuous upper Adur streams;
 - Views dominated by the steep downland scarp to the south and the High Weald fringes to the north;
 - Arable and pastoral rural landscape, a mosaic of small and larger fields, scattered woodlands, shaws and hedgerows with hedgerow trees;
 - Quieter and more secluded, confined rural landscape to the west, much more development to the east, centred on Burgess Hill;
 - Biodiversity in woodland, meadowland, ponds and wetland;
 - Mix of farmsteads and hamlets favouring ridgeline locations, strung out along lanes;
 - A modest spread of designed landscapes and major landmark of Hurstpierpoint College;
 - Crossed by north-south roads including the A23 Trunk Road, with a rectilinear network of narrow rural lanes;
 - London to Brighton Railway Line crosses the area through Burgess Hill;
 - Varied traditional rural buildings built with diverse materials including timberframing, weatherboarding, Horsham Stone roofing and varieties of local brick and tilehanging; and
 - Principal visitor attraction is the Hickstead All England Equestrian Showground."

3.28 The supporting text notes that:

"The landscape to the west of the A23 Trunk Road is strongly rural, quieter and less frequented (particularly around Twineham and Wineham) compared with the area to the east of the road, where the pervasive impact of modern development has altered landscape character. The dominant change has been the post-Victorian expansion of Burgess Hill including the recent westward expansion of the town. Other modern influences in the landscape include roadside commercial and other development along the old A23; modern, large farm and industrial estate buildings; electricity sub stations, sewage works and pylons; suburban village development at Sayers Common; and the Hickstead All England Equestrian Showground and other equestrian centres and land uses. The Hurstpierpoint College buildings are prominent in the view from the downs. Most of the more important roads are busy, as are many of the country lanes, particularly immediately west and south of Burgess Hill.

3.29 The evolution of change key issues are stated as:

- "Growing impact of development in the east of the area;
- Continuing amalgamation of small fields, severe hedgerow loss, and the ageing and loss of hedgerow and field trees;
- Visual impact of new urban and rural development including modern farm buildings, horse riding centres and paddocks;
- Pressures for further urban development in the east of the area;
- Introduction of telecommunications masts on ridges;
- Increasing pervasiveness of traffic movement and noise, particularly around Burgess Hill, and busy use of some rural lanes:
- Perceived increased traffic levels on small rural lanes with consequent demands for road improvements;
- Gradual loss of locally distinctive building styles and materials; and
- Gradual suburbanisation of the landscape including the widespread use of exotic tree and shrub species."

3.30 The stated landscape and visual sensitives are:

- "High level of perceived naturalness and a rural quality in the quieter, rural landscape to the west of the A23 Trunk Road;
- Woodland cover and the mosaic of shaws and hedgerows contribute strongly to the essence of the landscape;
- Pockets of rich biodiversity are vulnerable to loss and change; and
- Parts of the area are visually exposed to views from the downs with a consequently high sensitivity to the impact of new development and the cumulative visual impact of buildings and other structures."

Landscape Guidelines

National Landscape Guidelines

- 3.31 With respect to the NCA Profile 121: Low Weald, the following relevant Statements of Environmental Opportunity (SEO) are provided:
 - "SEO 1: Protect, manage and significant enhance the area's intricate and characteristic mix of semi-natural ancient woodlands, gill woodland, shaws, small field copses, hedgerows and indicial trees to reduce habitat fragmentation and benefit biodiversity, while seeking to improve and encourage access for health and wellbeing and reinforce sense of local identity...; and
 - SEO 3: Work at a landscape scale to improve the quality, state and structure of all Wealden rivers, streams and standing waterbodies and their appropriate flood plains, taking account of water quality, water flow and hydraulic connection with the flood plain, while seeking to enhance biodiversity, historic features and recreation opportunities and reinforcing sense of place."
- 3.32 The following landscape opportunity of relevance to the Site is identified:

"Plan new landscapes within and around predicted growth areas across the region...by encouraging the incorporation of high quality green infrastructure and buffering of zones drawing on the existing strong landscape pattern for example, the incorporation, creation and restoration of traditional shaws and meadows within new development..."

County and District Landscape Guidelines

- 3.33 With respect to the LW10: Eastern Low Weald are, the following landscape management guidelines are provided:
 - "Maintain and restore the historic pattern and fabric of the agricultural landscape including irregular patterns of smaller fields;
 - Plan for long-term woodland regeneration, the planting of new small and medium-sized broad-leaved farm woodlands, and appropriate management of existing woodland;
 - Promote the creation of arable field margins and corners including alongside the sides of streams;
 - Avoid skyline development and ensure that any new development has a minimum impact on views from the downs and is integrated within the landscape;
 - Pay particular attention to the siting of telecommunications masts;
 - Where appropriate, increase tree cover in and around villages, agricultural and other development and on the

- rural urban fringe of suburban areas and Burgess Hill, including along the approach roads to settlements and along busy urban routes including the A23 Trunk Road;
- Conserve and replant single oaks in hedgerows to maintain succession and replant parkland trees;
- Conserve, strengthen and manage existing hedgerows and hedgerow trees, especially around irregular fields, and replant hedgerows where they have been lost;
- Maintain and manage all lakes and ponds and their margins for their landscape diversity and nature conservation value;
- Protect the character of rural lanes and manage road verges to enhance their nature conservation value;
- Reduce the visual impact of stabling and grazing for horses;
 and
- Minimise the effects of adverse incremental change by seeking new development of high quality that sits well within the landscape and reflects local distinctiveness."
- 3.34 The stated landscape guidelines at a district level are based on Conserve, Enhance and Restore, and are as per the guidelines for the LOW10: Eastern Low Weald area.

Landscape Capacity

Mid Sussex Landscape Capacity Study (July 2007)^v

- 3.35 The Mid Sussex Landscape Capacity Study was prepared for Mid Sussex District Council by Hankinson Duckett Associates and was published in July 2007. Within the Mid Sussex Landscape Capacity Study the Site forms part of 'Zone 5: Burgess Hill and surrounding areas' which is noted for the following structural components:
 - Gill woodland along the river corridor crossing the northern part of the Site; and
 - Prominent slopes across the western part of the Site.
- 3.36 The Site forms part of an area described as:

"Immediately west of Burgess Hill is a mosaic of generally small fields, which includes unmanaged land, paddocks, horticulture and settlement. This area is bounded by the A2300 to the north, High Hatch Lane and Danworth Lane to the west and Herrings Stream to the south. This area sits in the wider landscape that is generally low lying, however, minor local variations in topography results in this area facing eastwards towards Burgess Hill."

- 3.37 The Site has been categorised into the following Landscape Character Types:
 - H1 Horticulture;
 - L1a Weald enclosed, large-scale arable;
 - L2 Weald medium/small scale arable;

- L3 Weald Enclosed Pasture:
- L6 Deciduous Woodland:
- L15 Apparently unmanaged land; and
- T1 Amenity / recreation.
- 3.38 The Site also forms part of the West Burgess Hill Low Weald (58) Landscape Character Area (LCA) and the Cobb's Mill Lowe Weald (59) LCA.
 - Landscape Character Area 58: West Burgess Hill Low Weald
- 3.39 This LCA extends from the western edge of Burgess Hill to High Hatch Lane / Danworth Lane and covers the eastern and central parts of the Site.
- 3.40 The LCA is noted for a slight landscape sensitivity (range from: negligible / slight / moderate / substantial / major) as a result of the following attributes:
 - Inherent Landscape Qualities medium to low hedgerow network and woodland (although poorly maintained);
 - Contribution to distinctive settlement setting western setting to Burgess Hill is not distinct and formed of a hard edge;
 - Inconsistency with existing settlement form/pattern low lying western slopes similar to west edge of Burgess Hill;
 - Contribution to rurality of surrounding landscape fairly high urban influence and scattered settlement, low contribution; and
 - Contribution to separation between settlements no good function as gap.
- 3.41 The LCA is noted for a slight landscape value as a result of the following attributes:
 - Designations some ancient woodland;
 - Historical associations medieval areas; and
 - Perceptual aspects low scenic beauty, low tranquillity.
- 3.42 As a result of the above combination of landscape sensitivity and landscape value, Area 58: West Burgess Hill Low Weald is considered to have a high landscape capacity, meaning that it is an area with the least constraints, which from a landscape perspective could accommodate significant allocations of development.
 - Landscape Character Area 59: Cobb's Mill Low Weald
- 3.43 This LCA extends westwards from High Hatch Lane / Danworth Lane and covers the western part of the Site.

- 3.44 The LCA is noted for a moderate landscape sensitivity as a result of the following attributes:
 - Inherent Landscape Qualities moderate to poor hedgerow network;
 - Contribution to distinctive settlement setting no significant contribution;
 - Inconsistency with existing settlement form/pattern separate from surrounding settlements:
 - Contribution to rurality of surrounding landscape setting to the Downs and largely rural context; and
 - Contribution to separation between settlements some contribution.
- 3.45 The LCA is noted for a substantial landscape value as a result of the following attributes:
 - Designations proximity to AONB and ancient woodland, including for the contribution to the setting of the South Downs;
 - Historic associations association with the South Downs; and
 - Perceptual aspects fairly rural and moderate scenic beauty.
- 3.46 As a result of the above combination of landscape sensitivity and landscape value, Area 59: Cobb's Mill Low Weald is considered to have a low landscape capacity, meaning that development would have a significant and detrimental effect on the character of the landscape as a whole. However, it should be noted that areas the scale of the Site do have the capability to incorporate areas of ancient woodland without detrimental effects, through the careful consideration of the siting and layout of introduced built form.
 - Capacity of Mid Sussex District to accommodate development (June 2014) vi
- 3.47 Land Use Consultants were commissioned to undertake a study on the capacity of Mid Sussex to accommodate new development, which builds on the findings of the previous Mid Sussex Landscape Capacity (July 2007) and includes consideration of a range of environmental factors in order to provide a detailed and robust assessment of the constraints to development in Mid Sussex District.
- 3.48 The 2014 study included for the definition of new landscape character areas not covered in the 2007 study and also redefined the criteria for assessing landscape sensitivity and landscape value. As a result the landscape capacity for LCA 58: West Burgess Hill Low Weald was altered to Medium/High (based on Slight landscape sensitivity and Slight landscape value), while LCA 59: Cobb's Mill Low Weald was altered to Low/Medium landscape capacity (based on Moderate landscape sensitivity and Substantial landscape value).

Mid-Sussex Strategic Site Selection Paper (August 2014) viii

3.49 The Strategic Site Selection Paper draws together the Sustainability Appraisal and the Strategic Housing Land Availability Assessment, providing a comprehensive assessment of all the sites in the region to aid in the site election process. Within Appendix A of this Paper the Site is identified as 'D: Land to the West of Burgess Hill' and notes that the Site has a High landscape capacity / suitability to accommodate development, stating:

"The LUC SHLAA Audit only assessed sites that had been deemed unsuitable in landscape terms — therefore this site was not assessed in the audit. Overall this site has High potential for development according to previous studies, in landscape terms."

Other Relevant Published Landscape Information

A Revision of the Ancient Woodland Inventory for Mid Sussex District, West Sussex (Revised February 2007) viii

- 3.50 This study was revised to identify areas of ancient woodland and the potential key issues and threats that may affect them. The Site consists of the following ancient semi-natural woodland (areas of woodland composed predominantly of tree and shrub species native to the area that have arisen from natural regeneration or coppice re-growth rather than original planting):
 - Parson's Withes located in the north-eastern part of the Site, extending from the south of Gatehouse Lane
 - Part of Jackson's Pit in the north central part of the Site; and
 - Northend Copse located in the south-western part of the Site, extending to the south
 of PRoW 48Hu.

Future Baseline

Glenbeigh Business Park

- 3.51 An outline planning application has been approved for the provision of an employment development, known as the Glenbeigh Business Park, on the land to the north of the Site, encompassing the land to the east of Goddard's Green towards the A2300 corridor, with access provided via Cuckfield Road. This area of land is gently sloping and largely contained by dense vegetation. In this regard, should the Business Park be constructed it would alter the northern context to the Site to one featuring built development, albeit with very limited intervisibility with the Site given the extent of containment provided by vegetation.
- 3.52 The development of the Glenbeigh Business Park would effectively extend the footprint of Burgess Hill westwards and amalgamate the settlement of Goddards' Green. As such, the

- development of the Site would consolidate the built development pattern of Burgess Hill, with Cuckfield Road forming a definitive edge to the settled area.
- 3.53 This area is proposed as an employment area under Policy DP2 and DP9 of the Submission District Plan 2014-31.
 - Science and Technology Park
- 3.54 The area to the north-west of Cuckfield Road, towards the A2300, is proposed as a science and technology park under Policy DP2 of the Submission District Plan 2014-31. The broad location has been identified on the basis of the Coast to Capital Strategic Economic Plan. A planning application is yet to be submitted, however, should development occur in this broad location it would further extend the settlement pattern to the west, although the western context to the Site will remain predominantly rural in character.

4.0 LANDSCAPE PLANNING POLICY CONTEXT

National Planning Policy Framework (March 2012) ix

- 4.1 The NPPF promotes a presumption in favour of sustainable development, defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs", and providing it is in accordance with the relevant up-to-date Local Plan, and policies set out in the NPPF including those identifying restrictions with regard to designated areas.
- 4.2 The NPPF states that "the purpose of the planning system is to contribute to the achievement of sustainable development" and that there are "three dimensions to sustainable development: economic, social and environmental". The role the environment plays is described as "contributing to protecting and enhancing our natural, built and historic environment; and as part of this, helping to improve biodiversity, use of natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy".
- 4.3 Twelve Core Planning Principles are set out, of which the following are relevant to the consideration of landscape and visual matters, stating that planning should:
 - "not simply be about scrutiny, but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives;
 - always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;
 - take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;
 - contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework; and
 - conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations."
- 4.4 Section 7 of the NPPF provides guidance on ensuring the delivery of good design. The NPPF requires development proposals to respond to local character and be visually attractive, as well as emphasising the need to integrate development proposals into the natural environment.

Paragraph 58 of the NPPF states that planning policies and decisions should aim to ensure that developments:

- "will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- establish a strong sense of place, using streetscapes and buildings to create attractive and comfortable places to live, work and visit;
- optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses (including incorporation of green and other public space as part of developments) and support local facilities and transport networks;
- respond to local character and history and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation;
- create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and
- are visually attractive as a result of good architecture and appropriate landscaping".
- 4.5 Paragraph 61 of the NPPF states that:

"...planning policies and decisions should address the connections between people and places and the integration of new development into the natural, built and historic environment."

- 4.6 With respect to the natural environment, Paragraphs 109 125 of the NPPF focus on the conservation and enhancement of the local and natural environment. The NPPF states that the planning system should contribute to and enhance the local environment by inter-alia "protecting and enhancing valued landscapes, geological conservation interests and soils".
- 4.7 Paragraph 110 of the NPPF sets out that the aim in preparing plans for development should be to minimise adverse effects on the local and natural environment, and that plans should allocate land with the least environmental or amenity value. Paragraph 114 notes that furthermore, Local Planning Authorities should:

"set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure."

Mid Sussex Local Plan (adopted May 2004)^x

- 4.8 In September 2007, the Government Office for the South East confirmed that the majority of policies within the Local Plan are saved indefinitely. The Site is covered by the following:
 - Informal Open Space (Policy BH21) covering the eastern part of the Site, between the A273 and Pangdean Lane;
 - Local Gap covering the south-east part of the Site up to Malvern Lane;
 - Floodplains covering the river corridor across the central part of the Site; and
 - Countryside Area of Development Restraint covering the remainder of the Site.
- 4.9 The Local Plan attaches great weight to the protection and improvement of the urban and rural environment of Mid Sussex and encourages high standards of design wherever new development is permitted, to reduce the impact of that development to a minimum. Relevant saved policies are:
 - Policy B1 requires a high standard of design and layout in new buildings, with proposals
 demonstrating an approach which respects the character of the locality and provides
 for new planting and the enhancement and protection of existing green corridors and
 river courses;
 - Policy B2 in relation to new residential estates developments will be expected to
 establish design concepts of a variety of design types; link areas of open spaces and
 play areas; establish co-ordinated networks of footpaths and cycleways and ensure that
 layouts are not visually dominated by roads;
 - Policy B7, whereby development which results in the loss of trees which are of significant public amenity value will be resisted;
 - Policy C1 in relation to Countryside Areas of Development Restraint is aimed at protecting the countryside from development, restricted to developments which are essential to meet the needs of the community and which cannot be accommodated within the built-up areas; proposals which a specific policy reference is made and proposals which significantly contribute to a sense of local identity and regional diversity;
 - Policy C2 in relation to Strategic Gaps does not permit development unless it would not
 compromise individually or cumulatively the objectives and fundamental integrity of the
 gap and it makes a valuable contribution to the landscape and amenity of the gap and
 enhances its value as open countryside; and
 - Policy G1 will not permit development which causes unacceptable environmental damage, and under Policy G2 development will be expected to meet high standards of design, including for adequate open space and the creation of high quality landscape settings.

4.10 With regards to Burgess Hill, the policy aims are focused on protecting the separate identity of Burgess Hill by maintaining the Strategic Gaps in combination with providing a modest amount of additional housing and commercial development as far as possible on previously developed land and consolidating and extending the 'Green Crescent' as a strategic area of open space.

Submission District Plan 2014-31 (August 2016)xi

- 4.11 The District Plan will be the main planning document used by the Council when considering planning applications, with an intended adoption date of 2017. The vision for Mid Sussex of promoting the development of sustainable communities is underpinned by protecting and enhancing the environment. This includes for promoting development that is well located and designed, as well as protecting valued landscapes and creating and maintaining easily accessible green infrastructure and green corridors.
- 4.12 With reference to the on-line draft policies mapping, the Site is proposed to be covered by:
 - Informal Open Space covering the eastern part of the Site, between the A273 and Pangdean Lane;
 - Local Gap covering the eastern part of the Site, as per the informal open space with the exception of Parson's Withes ancient woodland;
 - Floodplains covering the river corridor in the central part of the Site; and
 - Countryside Area of Development Restraint covering the remainder of the Site.
- 4.13 The area to the north of the Site is proposed as an employment area (Policy DP2 and DP9), with a proposed science park to the north-west of the Site (Policy DP2).
- 4.14 The following provides a summary of the key policies:
 - Policy DP1: Sustainable Development in Mid Sussex This policy promotes economic, social and environmental gains through development, with environmental aims focused on the protection, enhancement and restoration of natural and environmental assets which respect the intrinsic character and beauty of the countryside;
 - Policy DP7: General Principles for Strategic Development at Burgess Hill this includes for providing new and/or improved connected recreation and open space around Burgess Hill;
 - Policy DP10: Protection and Enhancement of the Countryside which permits development in the countryside, defined as the area outside of built-up area boundaries on the Policies Map, provided it maintains or where possible enhances the quality of the rural and landscape character of the District;

- Policy DP11: Preventing Coalescence which permits development providing it does not result in the coalescence of settlements which harms the separate identity and amenity of settlements and would not have an unacceptably urbanising effect on the area between settlements;
- Policy DP20: Rights of Way and other Recreational Routes these routes will be
 protected by ensuring development does not result in the loss of, or adversely affect a
 right of way. Access to the countryside will be encouraged by development providing
 safe and convenient links to PRoW and other recreational routes;
- Policy DP24: Character and Design all development and surrounding spaces will be
 well designed to reflect the distinctive character of the towns and villages, with layouts
 including for appropriate landscaping and greenspace; protecting trees and creates and
 sense of place while addressing the character and scale of the surrounding buildings
 and countryside;
- Policy DP36: Trees, Woodland and Hedgerows development will protect and enhance existing vegetation through incorporation within the layout, including for ensuring the ecological corridors are not severed and that development is positioned as far as possible from ancient woodland, with a minimum buffer of 15m between the development and ancient woodland;
- Policy DP37: Biodiversity biodiversity will be protected and enhanced by ensuring development contributes and takes opportunities to improve, enhance, manage and restores biodiversity;
- Policy DP38: Green Infrastructure development will contribute to the establishment of green infrastructure and support its improvement, management and restoration and develops a connected network of multi-functional greenspace, including links with rivers and floodplains and part of the 'Green Circle'; as well as responding to existing on-site green infrastructure; and
- Policy DP39: Sustainable Design and Construction all major development must demonstrate risks associated with future climate change and have been planned for as part of the layout of the scheme.

Burgess Hill Neighbourhood Plan 2015-2031 ('made' January 2016)^{xii}

4.15 While the Site is not included within the Neighbourhood Plan boundary (which follows the alignment of the A273 to the east of the Site), new and improved linkages around Burgess Hill are noted within the Green Infrastructure strategy.

Hurstpierpoint & Sayers Common Neighbourhood Plan Parish 2031 ('made' 2015) xiii

4.16 The Site lies within the Neighbourhood Plan area for Hurstpierpoint and Sayers Common, with the Neighbourhood Plan setting out a number of development principles for future building and land use in the area. The majority of the Site is covered by Policy C1, which states:

"Development, including formal sports and recreation areas, will be permitted in the countryside, where:

- It comprises an appropriate countryside use;
- Tt maintains or where possible enhances the quality of the rural ands landscape character of the Parish area..."
- 4.17 The eastern part of the Site is identified as a Local Gap and is covered by Policy C3, which states:

"Development will be permitted in the countryside provided that it does not individually or cumulative result in coalescence and loss of separate identity of neighbouring settlements, and provided that it does not conflict with other countryside policies in this plan..."

Mid Sussex District Council Landscape and Biodiversity Supplementary Planning Guidance (November 2003)xiv

- 4.18 The strategy aims to provide the vision and direction to conserving and enhancing the landscape and habitats in Mid Sussex, and that good quality development occurs which enhances landscape and biodiversity in rural and urban environments.
- 4.19 The Site is covered by the Low Weald Natural Area, with key landscape features to consider creating, restoring and enhancing including:
 - "Woodland;
 - Hedgerows;
 - Road verges
 - Floodplain grassland; and
 - Rivers and Streams."
- 4.20 The guidance also notes that the key component to a sustainable strategy for landscape are based on the understanding of landscape character (including visual), biodiversity and good design to achieve development which makes a positive contribution to the enhancement of the local environment.

Mid Sussex District Council Strategic Housing Land Availability Assessment (November 2015) xv

4.21 The Site was included as area no.740 and considered not currently developable.

- Burgess Hill: Visioning the Future (July 2007) xvi
- 4.22 This background document will be used in the preparation of the Council's Local Development Documents.
- 4.23 The Site forms part of the 'Second and Third' potential development area to the west of Burgess Hill, including for the retention of the ancient woodland and new structural planting adjacent to the A273.
 - Feasibility Study for Development Options at Burgess Hill (2005) xvii
- 4.24 The Site formed the western part of the study area for this feasibility study which identified the northern part of the Site as suitable for medium to high density development as a result of the flat landform and limited intervisibility. The western and southern parts of the Site were considered for either open space or unsuitable for development due to ancient woodland and elevated locations resulting in increased intervisibility.

5.0 SITE LANDSCAPE AND VISUAL APPRAISAL

Landscape Appraisal

- 5.1 The Site and the surrounding environment was visited in March 2016, with Site Appraisal Photographs A H demonstrating the existing character of the Site. The locations from which the Site Appraisal Photographs were taken are shown on Figure 4: Site Appraisal Plan.
- 5.2 A landscape appraisal has been undertaken to ascertain the existing character of the Site. This is accomplished through recording and analysing the existing landscape features and characteristics, the way the landscape is experienced, and the value or importance of the landscape and visual resources in the vicinity of the Site. The elements of the landscape that contribute to landscape character include the built and natural form, the pattern of features, detailing, scale, planting, land use and human perception. In this regard, landscape character is derived as a result of the perception of, and action and interaction of, natural and human factors.
- 5.3 As illustrated on Figure 5: Green Infrastructure Plan, the Site features a number of existing green infrastructure linkages through the Site that provides physical and visual containment and results in a strong landscape framework. The field boundaries are generally well defined by either treebelts or trimmed hedgerows, although within the southern part of the Site gappy hedgerows are more commonplace. There are three areas of extensive woodland within the Site, and a large area of scrub vegetation within the centre of the Site associated with Jackson's Pit.
- As illustrated in Site Appraisal Photographs A H the Site exhibits a varied character. The western part of the Site is more rural in character and has a visual connection with the wider rural landscape to the west, whilst the central and eastern parts of the Site exhibit an urban fringe character due to intervisibility with existing built forms and the audible intrusion from passing vehicles on the A273 Jane Murray Way. Pook Bourne extends through the Site and heavily influences the landscape, both in terms of character and the underlying landform orientation.
- 5.5 The Site is considered to range between low and medium landscape value. The Site is generally not of noteworthy scenic beauty; comprises predominantly agricultural land that is commonplace with urbanising influences; contains some landscape features of importance, including areas defined as ancient woodland and mature trees; affords the opportunity for outdoor recreation, including an area of informal open space through the eastern part of the Site; and is not covered by any landscape designations.

Visual Appraisal

- 5.6 A visual appraisal has been undertaken to determine the relationship of the Site with its surroundings and its approximate extent of visibility within the wider landscape from publicly accessible locations.
- 5.7 The potential visibility of the Site is largely determined by the intervening landform, as topographic features such as ridgelines and subtle undulations may block or curtail views towards the Site. In addition, land cover has an important role in determining potential visibility as woodland, treebelts or built forms may contribute to additional blocking, filtering or curtailing of views.
- 5.8 The effectiveness of vegetation as a screen depends to a considerable extent on its scale. A large mature feature will form a substantial screen throughout the year, but a hedgerow or intermittent treebelt may only be effective during the summer months. Whilst small features, such as hedgerows and individual trees can be very important, particularly when their combined effect is taken into account, they cannot be considered to be substantial or wholly effective screening features or visual barriers due to the seasonal nature of their effect.
- 5.9 To indicative the degree of visibility of the Site, three categories of visibility have been used in this appraisal:
 - Open View: a clear view of a substantial proportion of the Site;
 - Partial view: a view of part of the Site, or a filtered view of the Site, or a distant view in which the Site is perceived as a small part of the wider view; and
 - No View: Where the Site is not visible, due to visual barriers, such as intervening landform, vegetation or built form.
- 5.10 In order to represent that nature of identified views, a number of Site Context Photographs (Nos. 1 11 inclusive) were selected from those taken as part of the visual appraisal. The photographic locations are illustrated on Figure 6: Visual Appraisal Plan, which also indicate the levels of visibility of the Site from the surrounding area.
- 5.11 As the Site lies in the context of an undulating landscape featuring dense treebelts and areas of woodland, there are very few locations where the Site is visible, despite its large extent. For those receptors travelling along Cuckfield Road, to the immediate west of the Site, near distance views of the Site are obtainable (as illustrated in Site Context Photographs 1 and 6), both partial views through localised gaps in the roadside vegetation, as well more open views across the western part of the Site. West of Cuckfield Road the Site is screened from view by the intervening rising topography and vegetation (as illustrated in Site Context Photograph 7).

- 5.12 In views from the north, visibility of the Site is generally restricted to receptors travelling along Gatehouse Lane whereby parts of the Site are intermittently visible for short durations (as illustrated in Site Context Photographs 1 2). Further afield, topographical variations and successive bands of vegetation generally combine to screen views of the Site. However, there are isolated locations where long distance views of the more elevated north facing slopes of the Site are visible (such as through gaps in the roadside vegetation when travelling along the B2036), albeit heavily screened and forming a very small component of the wider views available. In views from the east of the Site the roadside vegetation alongside the A273 Jane Murray Way curtails views of the Site.
- 5.13 To the south, views of the Site are for the most part curtailed by the intervening rising landform as the Site is effectively contained by a ridgeline that extends westwards from the south of the existing built-up area of Burgess Hill. Nonetheless, there are open views of the western part of the Site obtained from residential properties on Pomper Lane. In contrast the eastern part of the Site is enclosed by dense treebelt vegetation along the southern boundary, curtailing northward views of this part of the Site as illustrated in Site Context Photograph 3. In this regard the Site is not visible from within landscape separating Burgess Hill from Hurstpierpoint (as illustrated in Site Context Photographs 5, 8 and 9).
- 5.14 However, there are longer distance views available towards the Site from the elevated landscape of the South Downs National Park (as illustrated in Site Context Photographs 10 and 11). At this distance the Site forms a very small part of the views obtained and is seen in the context of the existing built-up areas of Burgess Hill and Hurstpierpoint.
- 5.15 In addition, views of the Site are obtained from the properties that are enclosed by the Site, as well as from the PRoW and roads that traverse the Site. However, as illustrated in Site Context Photograph 4, views from Danworth Lane are partially restricted as this route is in cutting. Given that the visual envelope of the Site is very localised and limited there is no one location where the Site can be seen in its entirety, in part due to the containment provided by vegetation that screens views of the Site, and also due to the underlying nature of the landform of the Site.

Landscape and Visual Sensitivity

5.16 On the basis of the above, and with reference to Figure 7: Landscape and Visual Sensitivity Plan, the Site has been divided into 15 character areas (Area A - Area 0) based on their key attributes and landscape and visual sensitivity, and are described in Table 5.1.

Table 5.1: Landscape and Visual Sensitivity Areas

Area	Sensitivity	Key Attributes
A	Low/Medium - Medium	 Area of relatively flat agricultural land bounded by trimmed hedgerows, featuring a pond; Subject to urban influences associated with Goddards' Green, including a metal recycling station, the Jewson depot, and vehicular movements, which affects the tranquillity of this area; and Open views obtained across this area, including from residential properties and the Sportsman Inn Public House, forming setting to Goddards' Green.
В	Low	 Area of gently sloping agricultural land that is well contained by existing treebelt vegetation; Area features a number of existing built forms, waterbodies (including Pook Bourne), and areas of scrub; and Some open views obtained to the west of the area from High Hatch Lane and Cuckfield Road.
С	Low	 Area of relatively flat land that is well contained by the existing vegetation framework, including the surrounding areas of woodland and treebelt vegetation; and Some partial views obtained from the adjoining residential property on Gatehouse Lane to the north-west.
D	Medium	 Area of ancient woodland that contributes to the sense of time depth and the visual enclosure and screening of views into parts of the site, including from Gatehouse Lane.
E	Low	 Area of relatively flat land that is well contained by the existing vegetation framework, including the surrounding areas of woodland and treebelt vegetation; and Existing Downsview property lies within the area, as does a pond.
F	Low/Medium	 Area of sloping agricultural land that is contained by existing vegetation and features existing built forms at Shalford; and Pook Bourne extends through the area, whilst a sunken lane lies to the east, offering limited opportunity for views across this area.
G	Medium	 Area of north facing sloping agricultural land that is rural in character and visually exposed when travelling along Cuckfield Road; and Pook Bourne lies to the north of this area.
Н	Low/Medium	 Area of gently sloping land that is contained by treebelt vegetation and influenced by the adjoining residential land use; and Partial views obtained by residential receptors at North End House.
I	Medium	 Area of elevated woodland, some of which is defined as ancient woodland, which contributes to the sense of time depth and the visual enclosure of parts of the Site and perceived wooded character of the landscape.
J	Low	 Area of gently sloping agricultural land that is traversed by remnant hedgerows, treebelts and gappy hedgerows in a poor condition; The wooded Pook Bourne corridor extends through the area; Generally well contained with limited opportunities for views with the exception of open views obtained from the PRoW that traverses the area; and Eastern part of the area in proximity to Malthouse Lane is degraded, with dilapidated built forms also located within the area.
K	Low/Medium	 Area of informal open space that is well contained by robust tree belt vegetation; and Limited opportunity for views due to the enclosure provided by the adjoining vegetation framework including woodland and treebelts.

Area	Sensitivity	Key Attributes
L	Medium	Narrow woodland strip adjacent to the A273 that contributes to the screening of views into the site from the east.
М	Low	 Area of relatively flat agricultural land and informal open space featuring existing built forms; Contained by existing vegetation framework with partial views obtained from Malthouse Lane to the west; and Pook Bourne extends through the area.
N	Low/Medium	 Area of enclosed informal amenity space, including a play area to the east of the A273; and Limited opportunity for views due to containment provided by treebelt vegetation.
0	Medium	 North facing sloping area of elevated land that exhibits a partly rural character and features an area of ancient woodland; and Open views obtained across this area from nearby residential properties, including on Pomper Lane, and when travelling along Cuckfield Road to the immediate west.

6.0 SCOPE FOR DEVELOPMENT

6.1 From the above, a series of landscape and visual opportunities and constraints have been identified in order to successfully integrate new residential development within the Site.

6.2 The opportunities are:

- The Site is not covered by any national, regional or local landscape designations (NPPF Paragraph 113), nor is it within a conservation area or contains any scheduled ancient monuments, Registered Parks and Gardens or listed buildings. Therefore, with reference to Paragraph 17 of the NPPF (which states "allocations of land for development should prefer land of lesser environmental value"), and Paragraph 110 (which states "plans should allocate land with the least environmental or amenity value") the Site is considered an area of lesser environmental value;
- The central and eastern parts of the Site have been identified within the Mid Sussex Capacity Study (2014) as Area 58: West Burgess Hill Low Weald and considered to have a Medium/High landscape capacity, meaning that it is an area with few constraints, which from a landscape perspective could accommodate significant allocations of development;
- The Feasibility Study for Development at Burgess Hill (2005) identified the northern part of the Site as suitable for medium to high density development as a result of the flat landform and limited intervisibility;
- The Site is not of the highest agricultural quality (considered to be Grade 3 ALC), which with reference to Paragraph 126 of the NPPF states that in relation to development "...authorities should seek to use areas of poorer quality land in preference to that of a higher quality";
- The generally low lying position of the Site within the Pook Bourne valley, in combination with the existing vegetation structure of woodlands, roadside vegetation and hedgerows reduces the extent of potential visibility of development;
- The gently undulating landform in combination with the large inter-connected parcels within the Site provide a high degree of flexibility for siting development;
- There is existing development adjacent to the central and northern parts of the Site, resulting in the character and visual amenity of the Site already being influenced by built forms, with the Site also offering the potential to tie-in with the Northern Arc proposals, including the approved Glenbeigh Business Park;
- Development within the Site could include for responding positively to the published landscape character aims of conserve, enhance and restore, including for planning for long-term woodland regeneration; planting new woodlands and appropriately managing existing woodlands; ensuring new development has a minimal impact on views from the

- Downs and is integrated within the landscape and increasing tree cover on the roads within the Site:
- Development could include for the enhancement of the Pook Bourne river corridor and provision of a robust greeb buffer along the southern edge of the Site to strengthen the strategic gap;
- Residential development could provide for new opportunities of public access, integrating with the wider PRoW networks; and
- The Site is well positioned in relation to the existing road network.

6.3 The constraints of new residential development are:

- The woodland areas (including ancient woodland) within the Site, which can be accommodated by offsetting development in relation to root protection areas and by a minimum of 15 metres from ancient woodland, as well as incorporating the existing vegetation structure within the new green infrastructure layout;
- The flood plains of the Pook Bourne which can be accommodated by avoiding development within these areas and retaining them as open space, ecological corridors and opportunities for new woodland planting;
- The western part of the Site has been identified within the Mid Sussex Landscape Capacity Study (2007) as within Area 59: Cobb's Mill Low Weald which is considered to have a low landscape capacity, meaning that development would have a significant and detrimental effect on the character of the landscape as a whole. This can be accommodated by prioritising this part of the Site for open space and low-density development, retaining the existing character in combination with implementing the stated landscape enhancements;
- The proposed extension of the local gap across the eastern part of the Site and proposed designation as an area of informal space within the Submission District Plan, which can be accommodated by including for new green infrastructure within the new residential layout;
- The presence of historic routes and PRoW, which could be sympehtetically incorporated into the layout of development within the Site; and and
- The visibility of the Site from the South Downs National Park, which can be addressed through careful consideration of the siting, scale, and massing of the new built form set within a robust landscape structure (including the provision of a robust green buffer along the southern boundary of the Site), so that the visual impact is minimised and the development is integrated within the landscape.

Landscape Strategy

- 6.4 The following landscape strategy is recommended to successfully integrate new residential development within the Site:
 - Minimise development within the western part of the Site to respond to the higher landscape sensitivity; utilising this part of the Site for open space, low-density development, and new planting to establish a planted edge to development and soft edge to Burgess Hill;
 - Locate medium to high density development within the central and eastern parts of the Site, set within a robust landscape framework which retains where possible the existing hedgerow pattern and includes for new planting and green infrastructure linkages;
 - Development within the eastern part of the Site should include for a continuous green infrastructure linkages link to form part of a 'Green Circle';
 - Offset development from the flood plains of the Pook Bourne and establish the river corridor as the principle blue/green infrastructure network across the Site, in combination with enhancing the ecological and biodiversity value of the corridor;
 - Ensure that the scale, mass and materials of the built form within the newly developed area would respond to the local vernacular within Burgess Hill to reinforce the character of the existing settlement pattern;
 - Ensure that development proposals include for a variety of design types; linking areas of open spaces and play areas; establish co-ordinated networks of footpaths and cycleways (tying in with the Northern Arc proposals) and ensure that the scheme layout is not visually dominated by roads;
 - Retain all areas of existing ancient woodland and ensure development is offset by a minimum of 15m from the edge of the woodland;
 - Incorporate areas for long term woodland creation to respond positively to the stated landscape guidance and soften and fragment the extent of proposed built form;
 - Avoid development on the most elevated parts of the Site and minimise built form on adjacent areas to low density;
 - Provide a robust green buffer of between 10 to 20 metres depth along the southern edge of the Site, comprising hedgerows, hedgerow trees, groups of trees and understorey planting;
 - Retain and enhance the existing vegetation adjacent to the A273; and
 - Provide holistic management and maintenance to the existing and proposed green infrastructure including existing and proposed vegetation and open spaces, biodiversity and ecological habitats and Sustainable Urban Drainage Systems, thereby providing positive enhancements in the longer term via a Landscape and Biodiversity Management Strategy.

Landscape and Biodiversity Management

- 6.5 To secure the long-term establishment and maintenance of the landscape features within the Site, it is recommended that development within the Site is subject to an ongoing positive management regime, such as a Landscape and Biodiversity Management Strategy, to provide a holistic approach to the management of the landscape, ecology and amenities associated with development within the Site.
- 6.6 The following key aims for a Landscape and Biodiversity Management Strategy are recommended to complement development within the Site:
 - Create a high quality landscape setting to the introduced built forms and areas of recreational space;
 - Retain and enhance the existing features where they would contribute positively to the setting of development within the Site;
 - Enhance the biodiversity and ecological value of the Site, resulting in 'ecological gain';
 - Enhance the attractiveness and robustness of the landscape setting; and
 - Soften and integrate the introduced built forms within the landscape, taking cues from the pattern of the historic landscape.

7.0 SUMMARY AND CONCLUSIONS

- 7.1 Barton Willmore Landscape Planning and Design (BWLPD) was commissioned by Thakeham Homes to undertake a Landscape and Visual Appraisal of the Land to the West of Burgess Hill, West Sussex (the 'Site'), in relation to its suitability for residential development.
- 7.2 The Site, equating to approximately 89.98ha in size, comprises a mosaic of irregularly shaped fields bounded by hedgerow and treebelt vegetation and woodland. The predominant land use of the Site is agricultural, albeit there are areas of woodland (some of which is defined as ancient woodland), informal green space, a burial ground, and existing built development. Pook Bourne extends through the Site on a broadly east-west alignment.
- 7.3 The Site lies within a generally low lying area that features a number of localised valley formations that are orientated east-west. The Site itself forms part of one such valley formation and is associated with the aforementioned Pook Bourne watercourse. Consequently, the northern part of the Site comprises south facing slopes ranging in height between approximately 20m AOD and 30m AOD, and the southern part of the Site comprises north facing slopes ranging in height between approximately 20m AOD and 35m AOD. Minor topographical variations are present within the Site, including the hillock associated with Jackson's Pit.
- The Site itself is not covered by any national, regional or local landscape designations. The nearest nationally designated landscapes include the High Weald Area of Outstanding Natural Beauty (AONB), which is located approximately 2.5km to the north of the Site, and the South Downs National Park, which is located approximately 4km to the south of the Site. The southeastern part of the Site coincides with land designated as a strategic gap, providing separation between Burgess Hill and Hurstpierpoint. There are two listed buildings located within the vicinity of the Site, the Grade II listed Sportsman Inn and the Grade II listed North End Farm Barn.
- 7.5 The published landscape character assessment at the national level broadly describes the Site as being located within a low-lying clay vale predominantly dominated by agricultural use and densely wooded areas. At a county and district level the Site and surrounding area is broadly characterised as a lowland mixed pastoral and arable landscape lying over low ridges and clay vales, including for high levels of development in the vicinity of Burgess Hill.
- 7.6 As reflected within the published landscape guidelines and recommendations relating to development, any future development should reinforce a sense of local identity and work at a landscape scale to enhance biodiversity and recreation opportunities while protecting, managing and enhancing the existing areas of woodland and providing for high quality green

infrastructure and the creation of meadows within new development. Furthermore, skyline development should be avoided to minimise the potential for adverse visual impacts and, where appropriate, tree cover should be increased while also conserving and strengthening the existing field pattern formed by existing hedgerows and hedgerow trees.

- 7.7 The Site is considered to range between low and medium landscape value. The Site is generally not of noteworthy scenic beauty; comprises predominantly agricultural land that is commonplace with urbanising influences; contains some landscape features of importance, including areas defined as ancient woodland and mature trees; affords the opportunity for outdoor recreation, including an area of informal open space through the eastern part of the Site; and is not covered by any landscape designations.
- 7.8 Given the Site's location within a localised vale landscape resulting in a generally lower-lying position within the wider landscape, in addition to the extent of enclosure afforded by woodland and treebelt vegetation, the visual envelope of the Site is limited to a localised area. In addition, given the above there is no one location where the Site is visible in its entirety. While longer distance views of the Site are obtained from the elevated South Downs National Park to the south of the Site, the Site forms a very small part of the wider panoramic views obtained and is seen in the context of the existing built-up area of Burgess Hill.
- 7.9 As part of the landscape and visual appraisal process a series of landscape and visual opportunities and constraints have been identified in order to successfully integrate new residential development within the Site and to devise an appropriate landscape strategy. This appraisal has identified that the Site does have the capacity to accommodate residential development in landscape and visual terms should it be set within a robust landscape framework in line with the devised landscape strategy, and which would accord with the published landscape strategy guidelines and recommendations relating to development, while responding positively to the relevant policy directions at national and local levels.
- 7.10 Specifically, in heeding the NPPF's call for planning to be a creative force in enhancing and improving the places where people live, development within the Site provides the opportunity to elicit a positive response to planning policy in pursuing an overall strategy that complements the locality, whilst simultaneously improving the quality of the environment through design, layout, SuDS and hard and soft landscaping measures.
- 7.11 In conclusion, residential development could be effectively assimilated at the Site in combination with a comprehensive landscape strategy with development sensitivity designed through siting, layout, materials, and massing.

i Natural England Agricultural Land Classification, 2010, http://publications.naturalengland.org.uk/publication/141047?category=5954148537204736

ii Natural England, National Character Area Profile 121: Low Weald, September 2013, http://publications.naturalengland.org.uk/publication/12332031?category=587130

iii West Sussex County Council, Landscape Character Assessment of West Sussex, https://www.westsussex.gov.uk/land-waste-and-housing/landscape-and-environment/landscape-character-assessment-of-west-sussex/

iv Mid Sussex District Council, A Landscape Character Assessment for Mid Sussex, November 2005, http://www.midsussex.gov.uk/media/2323/lca01-titlecontentsforeword.pdf

v Mid Sussex District Council, Mid Sussex Landscape Capacity Study, July 2007, http://www.midsussex.gov.uk/media/3607/textlandscapecapacitystudy.pdf

vi Mid Sussex District Council, Capacity of Mid Sussex District to accommodate development, June 2014, http://www.midsussex.gov.uk/media/3463/6035_mid_sussex_capacity_study.pdf

wii Mid-Sussex District Council, Strategic Site Selection Paper, August 2016, http://www.midsussex.gov.uk/media/77656/ep23_strategicsiteselectionpaper_aug16.pdf

viii Weald Ancient Woodland Survey High Weald AONB Unit, A revision of the Ancient Woodland Inventory for Mid Sussex District, West Sussex, Report and inventory Maps, Revised February 2007, http://www.midsussex.gov.uk/media/3621/mid_sussex_awi_survey_full_report_with_revised_maps_feb_07_-_lowres.pdf

ix Department of Communities and Local Government, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

x Mid Sussex District Council Local Plan, adopted May 2004, http://www.midsussex.gov.uk/planning-licensing-building-control/planning-policy/mid-sussex-local-plan/

xi Mid Sussex District Council, Submission District Plan, http://www.midsussex.gov.uk/media/77665/bp1-submission-district-plan-august-2016.pdf

xii Burgess Hill Neighbourhood Plan, made January 2016, http://www.midsussex.gov.uk/media/76507/burgess_hill_neighbourhood_plan_jan_2016.pdf

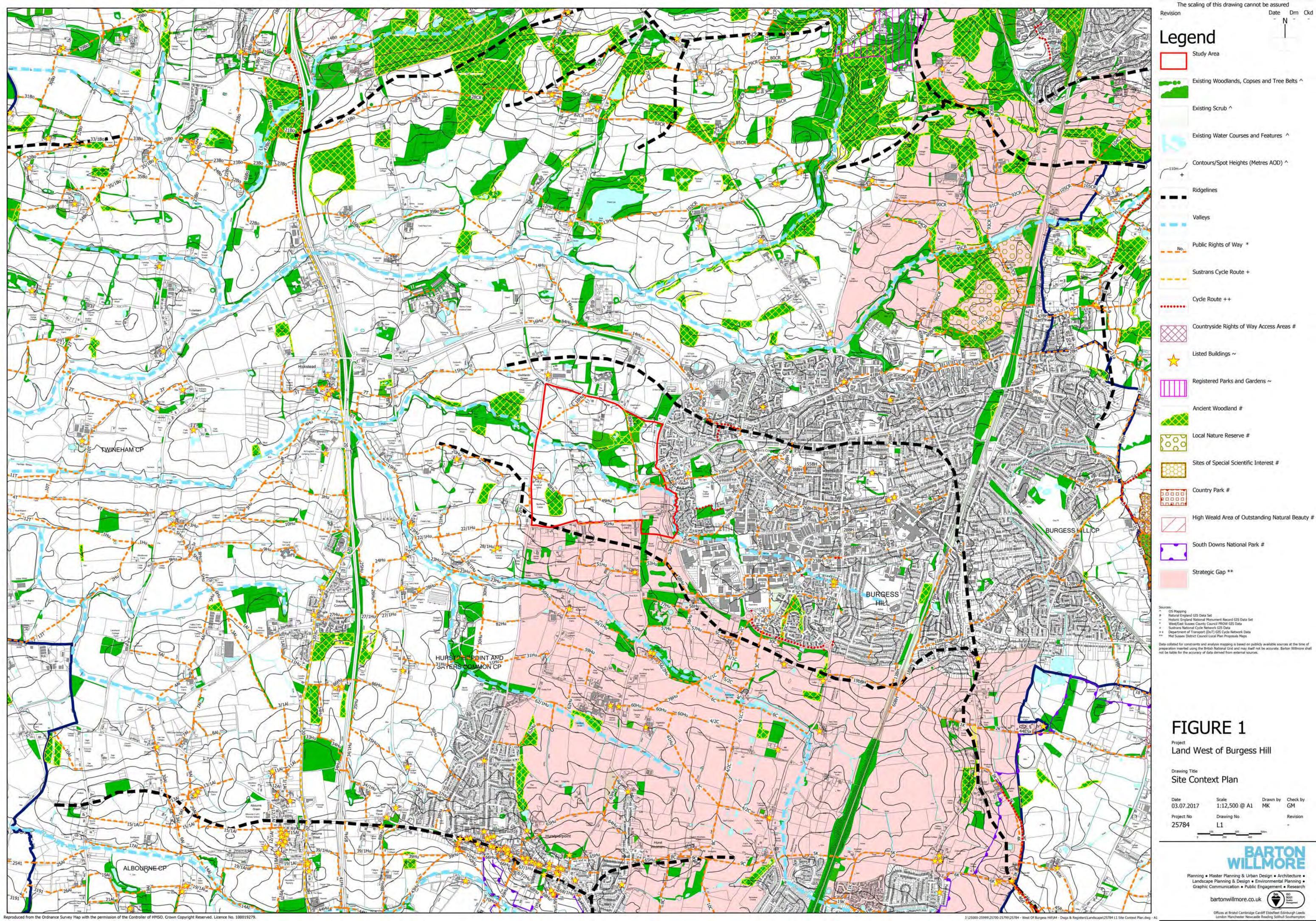
Hurstpierpoint & Sayers Parish Council, made 2015, http://www.hurstpierpoint-pc.org.uk/files/general/PARISH%202031%20NP%20MADE%20version%20%2020%20March%202015%20final.pdf

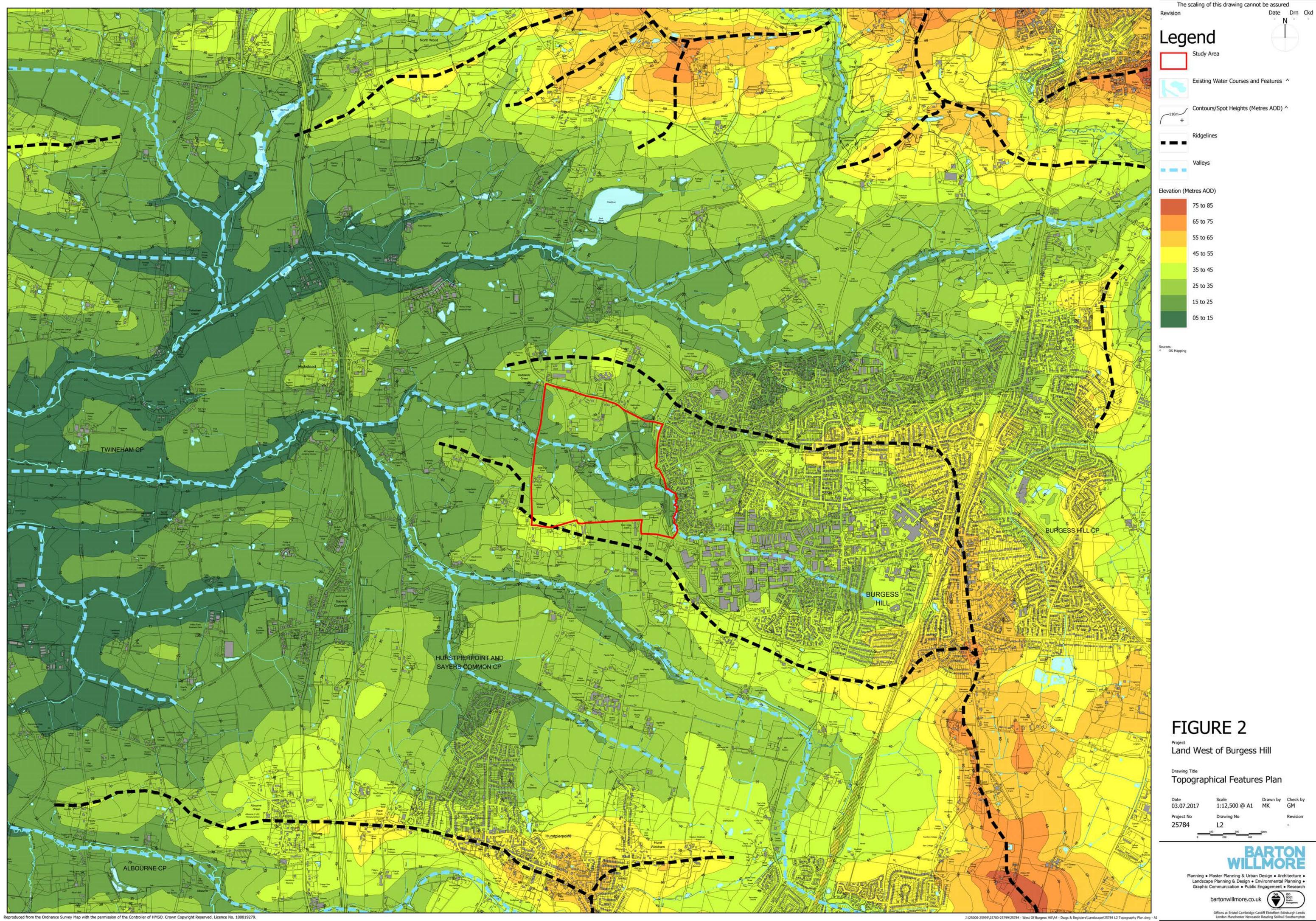
xiv Mid Sussex District Council, Landscape and Biodiversity Supplementary Planning Guidance, November 2003, http://www.midsussex.gov.uk/media/2329/planning_guidance.pdf

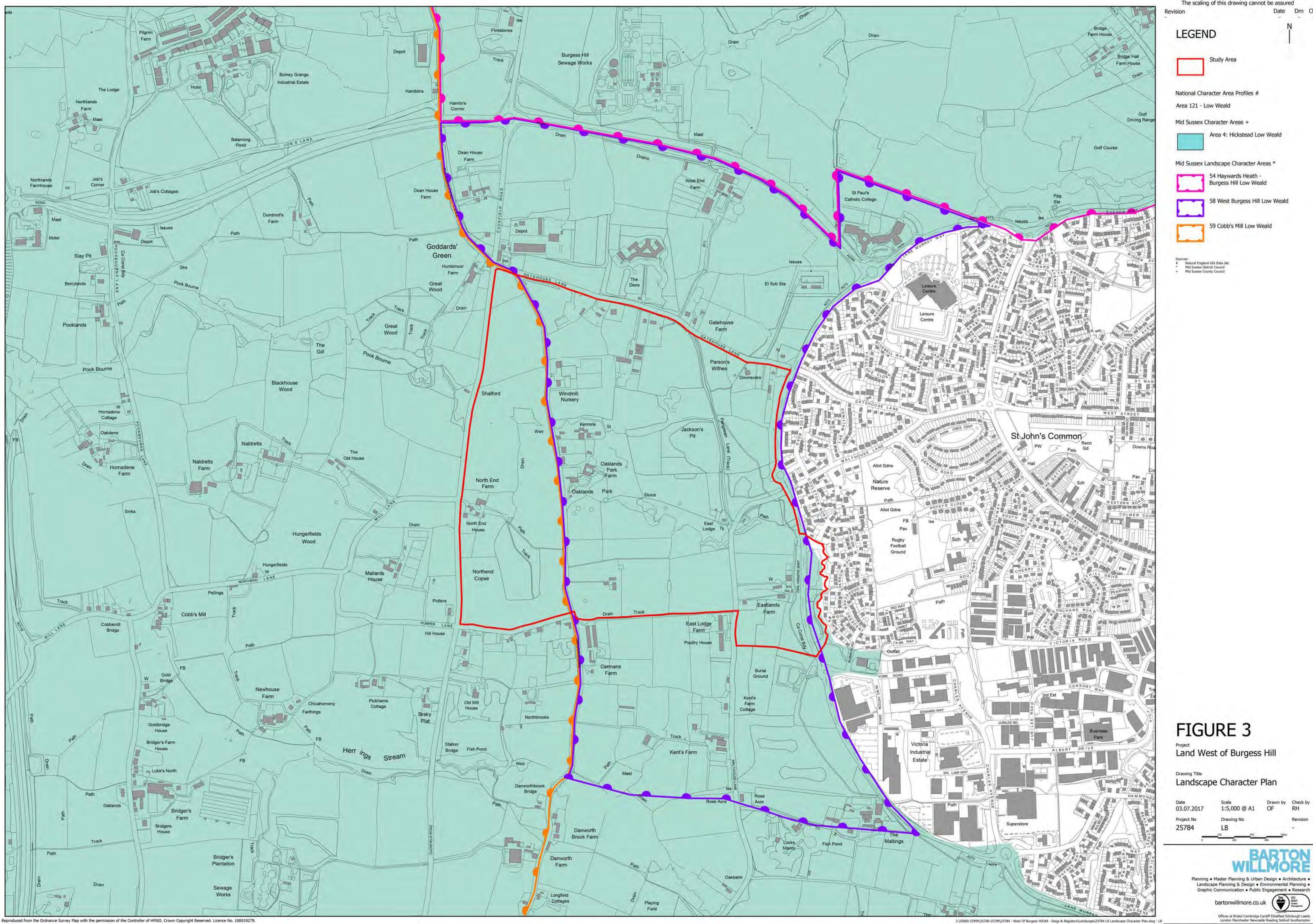
xv Mid Sussex District Council, Strategic Housing Land Availability Assessment, November 2015, http://www.midsussex.gov.uk/planning-licensing-building-control/planning-policy/local-development-framework/evidence-base/strategic-housing-land-availability-assessment/

xvi Mid Sussex District Council, Burgess Hill: Visioning the Future, July 2007, http://www.midsussex.gov.uk/media/3620/completedocumentcompressed.pdf

xvii Mid Sussex District Council, Feasibility Study for Development Options at Burgess Hill, 2005, http://www.midsussex.gov.uk/planning-licensing-building-control/planning-policy/local-development-framework/evidence-base/feasibility-studies-for-development-options-at-burgess-hill-and-haywards-heath/







The scaling of this drawing cannot be assured Study Area National Character Area Profiles # Area 121 - Low Weald Mid Sussex Character Areas + Area 4: Hickstead Low Weald Mid Sussex Landscape Character Areas * 54 Haywards Heath -Burgess Hill Low Weald 58 West Burgess Hill Low Weald 59 Cobb's Mill Low Weald

FIGURE 3

Land West of Burgess Hill

Landscape Character Plan

1:5,000 @ A1





FIGURE 4

Land West of Burgess Hill

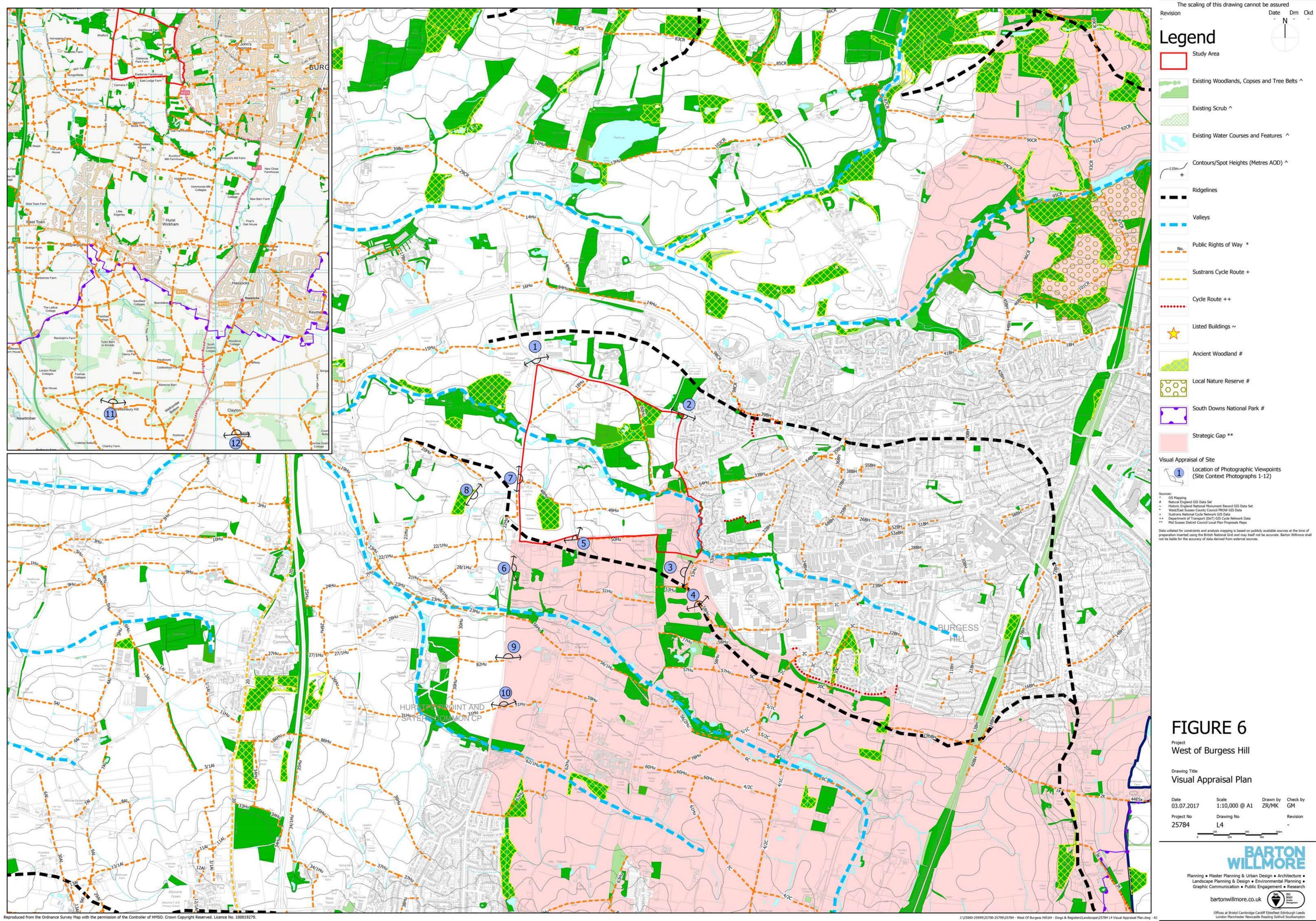
Site Appraisal Plan

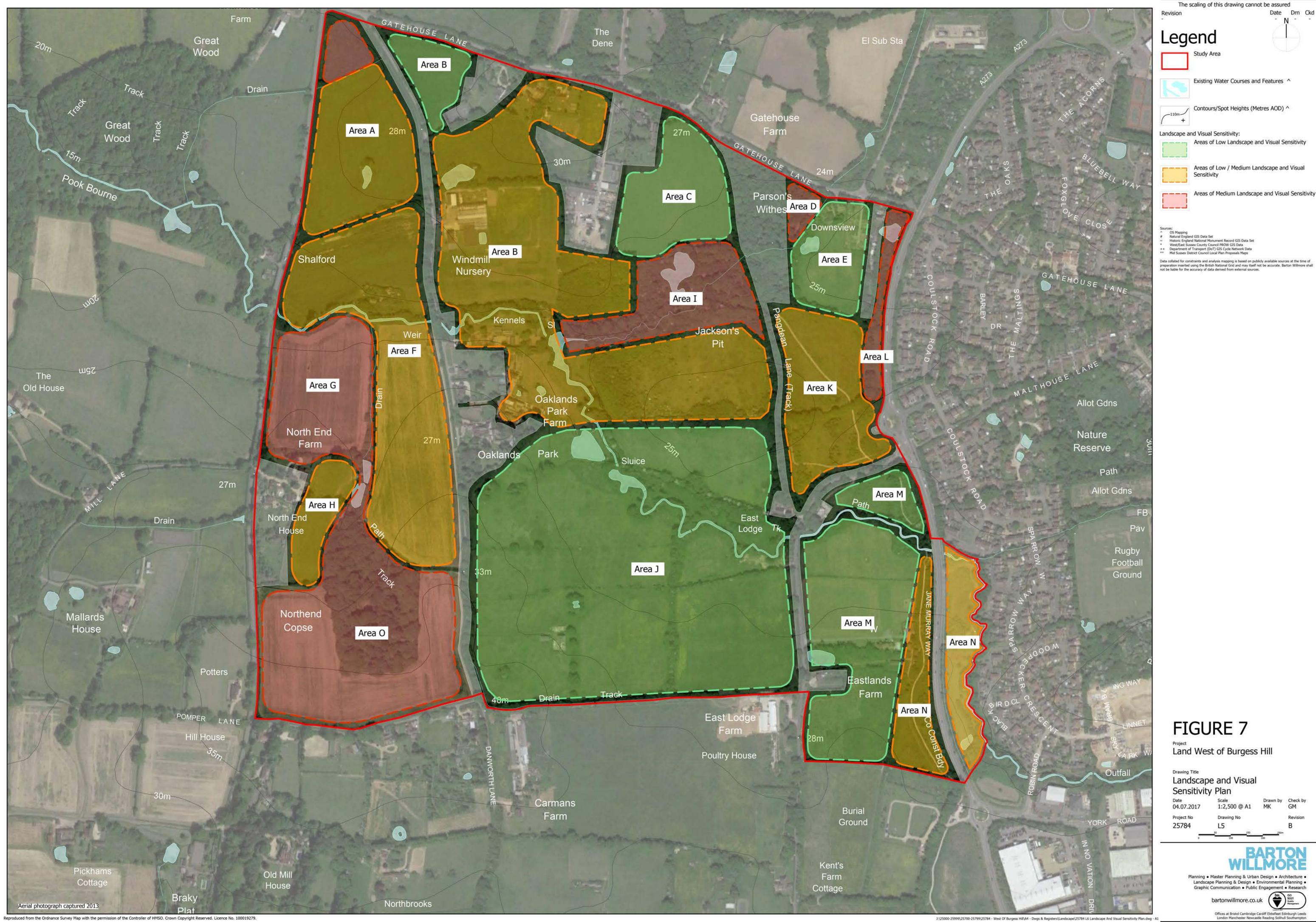
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SITE APPRAISAL PHOTOGRAPH A



SITE APPRAISAL PHOTOGRAPH B



SITE APPRAISAL PHOTOGRAPH C

SITE APPRAISAL
PHOTOGRAPHS: A - C

RECOMMENDED VIEWING
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SITE APPRAISAL PHOTOGRAPH D



SITE APPRAISAL PHOTOGRAPH E



SITE APPRAISAL PHOTOGRAPH F

SITE APPRAISAL
PHOTOGRAPHS: D - F

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SITE APPRAISAL PHOTOGRAPH G



SITE APPRAISAL PHOTOGRAPH H

SITE APPRAISAL
PHOTOGRAPHS: G & H

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SITE CONTEXT PHOTOGRAPH 1: VIEW SOUTH-EAST FROM JUNCTION OF CUCKFIELD ROAD, GATEHOUSE LANE AND BISHOPSTONE LANE



SITE CONTEXT PHOTOGRAPH 2:VIEW SOUTH-WEST FROM GATEHOUSE LANE



SITE CONTEXT PHOTOGRAPH 2: VIEW NORTH-WEST FROM BURGESS HILL BURIAL GOUND

SITE CONTEXT
PHOTOGRAPHS: 1 - 3

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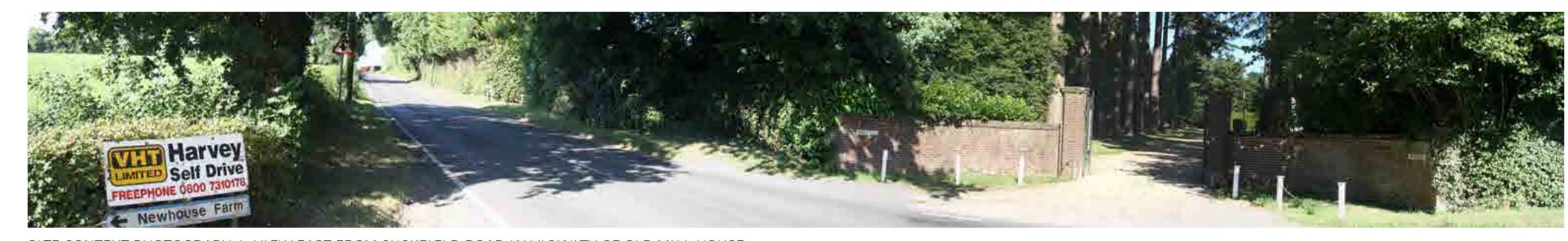
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SITE CONTEXT PHOTOGRAPH 4: VIEW NORTH-WEST FROM PUBLIC RIGHT OF WAY 58HU



SITE CONTEXT PHOTOGRAPH 5: VIEW NORTH FROM DANWORTH LANE



SITE CONTEXT PHOTOGRAPH 6: VIEW EAST FROM CUCKFIELD ROAD IN VICINITY OF OLD MILL HOUSE

SITE CONTEXT
PHOTOGRAPHS: 4 - 6

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DISTANCE: 20CM @A1

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PROJECT NUMBER: 25784

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SITE CONTEXT PHOTOGRAPH 7: VIEW EAST FROM INTERSECTION OF MILL LANE AND CUCKFIELD ROAD



SITE CONTEXT PHOTOGRAPH 8: VIEW EAST FROM MILL LANE



SITE CONTEXT PHOTOGRAPH 9: VIEW NORTH FROM ACCESS ROAD TO DANWORTH FARM

SITE CONTEXT PHOTOGRAPHS: 7 - 9 RECOMMENDED VIEWING DISTANCE: 20CM @A1 DATE TAKEN: MARCH & AUGUST 2016





SITE CONTEXT PHOTOGRAPH 10: VIEW NORTH FROM PUBLIC RIGHT OF WAY 31HU



SITE CONTEXT PHOTOGRAPH 11: VIEW NORTH FROM PUBLIC RIGHT OF WAY 22PY, ON WOLSTONBURY HILL



SITE CONTEXT PHOTOGRAPH 12: VIEW NORTH FROM PUBLIC RIGHT OF WAY 15C, ON CLAYTON WINDMILLS

SITE CONTEXT PHOTOGRAPHS: 10 - 12

RECOMMENDED VIEWING DISTANCE: 20CM @A1

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S511 Land to the West of Burgess Hill Flood Risk, Drainage and Utilities Note For Thakeham
July 2017

Introduction

This note presents the findings of initial investigations into the issues and options relating to flood risk, drainage, and utilities for the land to the west of Burgess Hill, Sussex. The findings outlined in the note have been used to inform the promotion of this location for strategic development and will be built upon with more detailed studies as the proposals progress.

Sources of Flooding

The site is affected by a narrow band of Flood Zone 3 and 2 (the high and medium probability flood areas respectively). The Flood Zones emanate from the Pook Bourne, a designated Main River which flows westwards through the site.

The surface water flood maps for the site show a greater extent of floodplain either side of the Pook Bourne and also highlights various smaller streams and (dry) upland valleys which would have been excluded from Flood Zone mapping by virtue of their smaller scale. The upland flood routes are predominantly associated with low risk flooding and would therefore tend only to flow during the more extreme rainfall events.

Groundwater flooding is not considered to be a threat to the proposals. The British Geological Survey (BGS) Infiltration SuDS GeoReport for the area notes the potential for shallow groundwater in the north / north-east of the site. Any groundwater emerging at the surface is likely to follow ground levels and enter the network of watercourses and ponds and should be readily manageable through appropriate masterplanning.

Southern Water sewer plans show surface water sewers to the east of the site serving the developed area. There is also a short length of sewer within Gatehouse Lane that outfalls to a tributary of the Pook Bourne. Any floodwater arising from overloading of the network would, with appropriate masterplanning, be directed along low impact flood routes (landscaped areas primarily) into the network of watercourses. Overloading of surface water sewers is not therefore considered to be a significant or unmanageable source of flooding for the proposals.

Flood Management

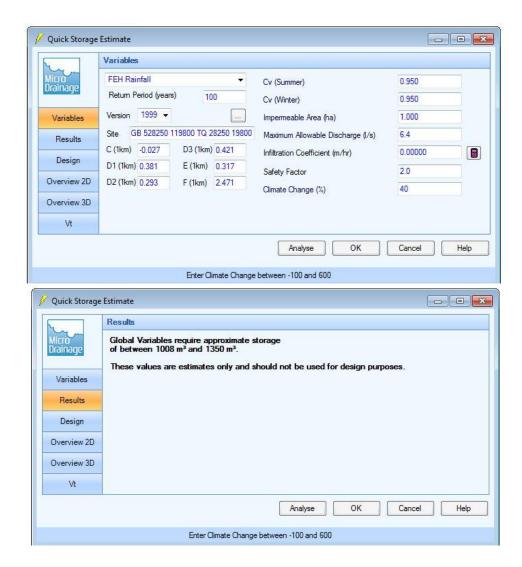
Flood management at the site will primarily focus on avoidance. The strategic development parcels should be designed so as to avoid crossing into Flood Zones 3 and 2, and the high and medium risk surface water flood areas.



Areas of low surface water flood risk will be accounted for within the layout of the various plots by allowing space for water in the form of rural and urban flood routes which allow for flows to continue their path and/or accumulate in low impact areas.

Surface Water Management

The BGS Infiltration SuDS GeoReport for the area suggests that conditions at the site are unlikely to support the disposal of surface water runoff via infiltration. It is therefore envisaged that the primary pathway for the disposal of surface water runoff from the proposed development will be an attenuated discharge to the network of on-site watercourses. It is proposed that surface water flow rates are restricted to the mean annual greenfield flow rate of 6.4 l/s/ha. Based on a quick storage estimate (see below) the attenuation required for each impermeable hectare of development is up to 1,350 m³. This is assuming a 1 in 100 annual probability storm plus a 40% allowance for climate change





Utilities Infrastructure

This section provides an overview of the servicing constraint and supply implications associated with the proposed strategic development; the content relates to the site being developed for 1,500 dwellings.

The site is primarily a greenfield site and is therefore not connected to the local utility networks; however, the site does border the fully serviced existing settlement with significant infrastructure in close proximity and crossing the site.

Energy

The electrical network in the area is owned and maintained by UK Power Networks (UKPN). Goddards Green Primary Substation is located to the north-east of the site and there are number of high voltage (HV) cables crossing the site.

Initial correspondence with UKPN provides a number of budget estimates for undergrounding the overhead electrical infrastructure crossing the site. The costs were found to be of a scale that can be accommodated by the proposed strategic development.

Initial correspondence with UKPN also provides a new supply budget for servicing the development. With the Primary Substation so close and HV infrastructure crossing there is an initial cost estimate of £1.6m for the scale of development proposed. This cost estimate includes for four new 800kVA substations with a HV "ring main" from where LV property supplies could be taken.

Southern Gas Networks (SGN) has a network of low pressure (LP) mains serving the adjacent developed area of Burgess Hill. There is also a medium pressure (MP) main that crosses Jane Murray Way (A273) which runs along Gatehouse Lane. SGN has provided an initial budget estimate for servicing the proposed development from this MP main.

Water Supply and Wastewater

There are existing South East Water (SEW) potable water mains crossing the site, some large diameter strategic mains and some local supply mains. The proposed development will be supplied from these mains but SEW has not provided any initial costs at this early stage.

Southern Water own and operate the wastewater conveyance and treatment works serving the area. There is an on-site pumping station which lies in the east of the site on the northern bank of the Pook Bourne. This pumping station conveys incoming flows from Burgess Hill to Goddards Green Wastewater Treatment Works (WwTW) to the north of the site. There is a 50 m zone around this pumping station within which residential development should be excluded. The associated sewers and rising main are limited to the eastern edge of the site.



New conveyance infrastructure will be provided as part of the development. The proximity of the WwTW in this instance gives the opportunity to directly connect this new infrastructure so as to not require network upgrades to the various elements of the existing system.

Southern Water's current headroom prediction at Goddards Green WwTW would indicate that there is currently insufficient spare treatment capacity to deliver this strategic proposal alongside all other planned developments in the catchment. Southern Water are investigating options to increase treatment capacity in this location alongside the Environment Agency who control the issuing of discharge consents. The current headroom prediction extends to thousands of dwellings and hence this constraint is far from an immediate one that needs to be resolved by Southern Water, more a consideration for the later phases of development and how these link to the timing of the Southern Water upgrade works.

Telecommunications

BT operates a service in the area and has overhead and underground cables crossing the site. BT has a statutory obligation to provide telecommunication services but it will be the developer's responsibility to arrange the required service at the appropriate time when the development proposals advance.

Ultra-fast broadband, such as fibre to the premises or an equivalent will be provided.



Land West of Burgess Hill

Transport Feasibility Report

On behalf of



Project Ref: 37111/001 | Rev: 0 | Date: July 2017





Document Control Sheet

Project Name: Land West of Burgess Hill

Project Ref: 37111

Report Title: Transport Feasibility Report

Doc Ref: 37111/R001
Date: July 2017

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Approved by:	Sarah Matthews	Partner	SM	6.07.17

For and on behalf of Peter Brett Associates LLP

Revision	Date	Description	Prepared	Reviewed	Approved

This report has been prepared by Peter Brett Associates LLP ('PBA') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which PBA was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). PBA accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

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1 Executive Summary

1.1 Overview

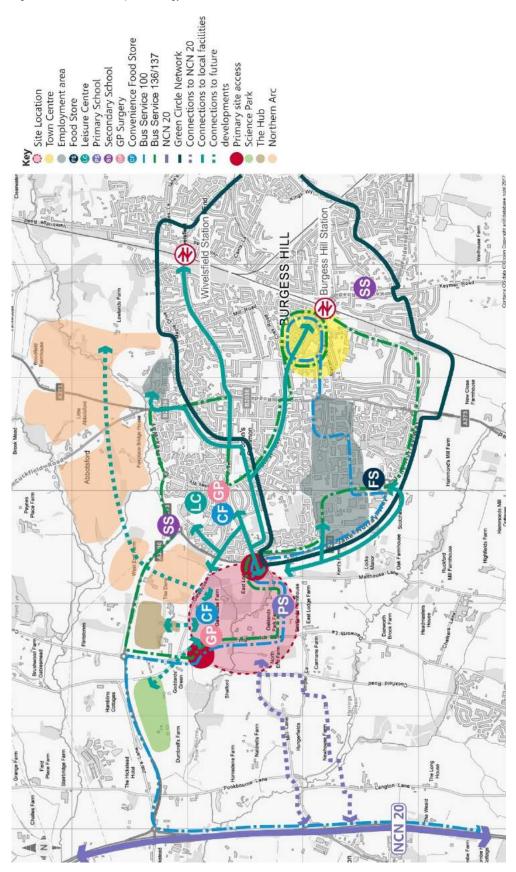
1.1.1 This feasibility report has considered the strategic transport case for a development option at Land West of Burgess Hill. The site offers excellent opportunity to deliver a sustainable and attractive community to live, given the adjacent town facilities and planned employment ('The Hub' and 'Science and Technology Park' on the A2300) and community/sports area.

1.2 Transport

- 1.2.1 The site lends itself for the creation of a new community due to its excellent strategic location adjacent to the A273 and just south of the A2300 and the potential to connect to Burgess Hill and surrounding planned development via a range of pedestrian links, cycle routes, bus services and vehicle connections. These connections will allow integration between the existing community and planned development to the north.
- 1.2.2 These opportunities are shown indicatively on **Figure 1.1** and discussed in more detail below.



Figure 1.1 Potential Transport Strategy





1.3 Opportunities

1.3.1 The delivery of development in this location provides the opportunity to:

Walk and Cycle

- provide an integrated mix of housing supported by the delivery of new social infrastructure and community facilities (such as a primary school, retail, open space and play space) and provide easy access to:
 - existing and proposed facilities in Burgess Hill such as leisure, sports, culture, education and health
 - planned employment ('The Hub' and 'Science and Technology Park') on the A2300
 - planned community and sports area on the A2300

This will deliver development where facilities are within a practical walk or cycle distance.

- provide new segregated or low trafficked routes between Burgess Hill and the planned employment along the A2300 with natural surveillance and safer crossings over the A273 to join existing cycle and pedestrian routes, such as the Green Circle network and NCN20. This will provide wider benefit to the existing residents at Burgess Hill improving accessibility and quality of foot and cycle provision.
- use the existing narrow roads within the site to provide 'green' routes for walking and cycling (and vehicle access to the existing properties) to connect the potential facilities on site, including schools, retail, community facilities, reducing existing travel distances and car trips.
- enhance links to the countryside

Bus

- the street network within the development will be designed to allow buses to travel through to/from Burgess Hill and onto the planned employment areas ('The Hub' and 'Science and Technology Park') via the A2300, but to discourage 'through' traffic and therefore bus priority along residential streets by the geometric design and/or a bus gate.
- introduce a comprehensive network of bus routes to serve the development, wider community at Burgess Hill, planned employment ('The Hub' and 'Science and Technology Park' on the A2300) and more strategic connections to Hickstead, Henfield, Steyning, Storrington, Pulborough, Billingshurst and Horsham with at least three services an hour to Burgess Hill Town centre and railway station.
- provide bus access into the site from:
 - a new access on the A273/Coulstock roundabout; and
 - a new access of Cuckfield Road to reach the A2300
- generate relatively high regular two-way public transport patronage as a result of the proximity of the planned employment areas ('The Hub' and 'Science and Technology Park' on the A2300), which would potentially increase the demand and therefore commercial viability of:
 - extending service 100 into the development



- extending service 136/100 into the development
- increasing the frequency and extending operating hours of the above services
- implement a comprehensive internal bus route plan to provide easy access across the development site, linking all key facilities, and providing excellent access to Burgess Hill town centre and railway station.

Rail

- locate the development in close proximity of the railway stations at Burgess Hill and Wivelsfield, which offers links to Brighton, Littlehampton, Eastbourne Gatwick Airport, St Pancras International and Luton Airport Parkway, as well central London termini.
- extend bus services through the site to effectively provide a shuttle service between the railway station.
- Improve links and upgrade crossings over A273 to join existing cycle and pedestrian routes to Green Circle network which links to Burgess Hill railway station.

Highway

- improve and provide new access junctions to accommodate the development traffic at both:
 - a new access on the A273/Coulstock roundabout; and
 - a new access of Cuckfield Road to reach the A2300 to minimise traffic impact at the A2300/A273 roundabout
- can contribute to A2300 dualling scheme
- deliver improvements to off-site junctions, such as increasing flare lengths on approaches to the roundabouts.



2 Introduction

2.1 Background

- 2.1.1 Peter Brett Associates (PBA) has prepared this report on behalf of Thakeham in relation to the promotion of Land West of Burgess Hill as part of the Mid Sussex Local Plan. PBA has been instructed to provide an interim summary of the transport studies being undertaken.
- 2.1.2 The development could deliver up to 1500 homes and can support the delivery of new social infrastructure and community facilities (such as a primary school, retail, open space and play space) and provide easy access to existing and proposed facilities in Burgess Hill such as leisure, sports, culture, education and health.
- 2.1.3 The site location is shown in **Figure 2.1**.

Figure 2.1: Site Location



2.2 Report Structure

- 2.2.1 This report reviews the existing conditions and opportunities for the Strategic Site Option for each means of transport, including:
 - walk and cycle,
 - bus,
 - rail, and
 - highway.



- 2.2.2 The reviews for each mode of transport are summarised under the following headings:
 - Existing Conditions;

The availability of each means of travel is discussed for Land West of Burgess Hill. Where possible, the existing provision and capacity is reviewed and summarised.

Opportunities;

The opportunities to improve access, provision or any issues are discussed under this heading.

Evaluation and Viability;

The opportunities identified have been evaluated based on available data, or details are set out of any further assessment that has been carried out. The viability and deliverability of the opportunities identified to improve accessibility/provision and mitigate impacts are also discussed under this heading.

Summary

Provides a summary of the key points under each heading.



3 Walking and Cycling

3.1 Existing Conditions

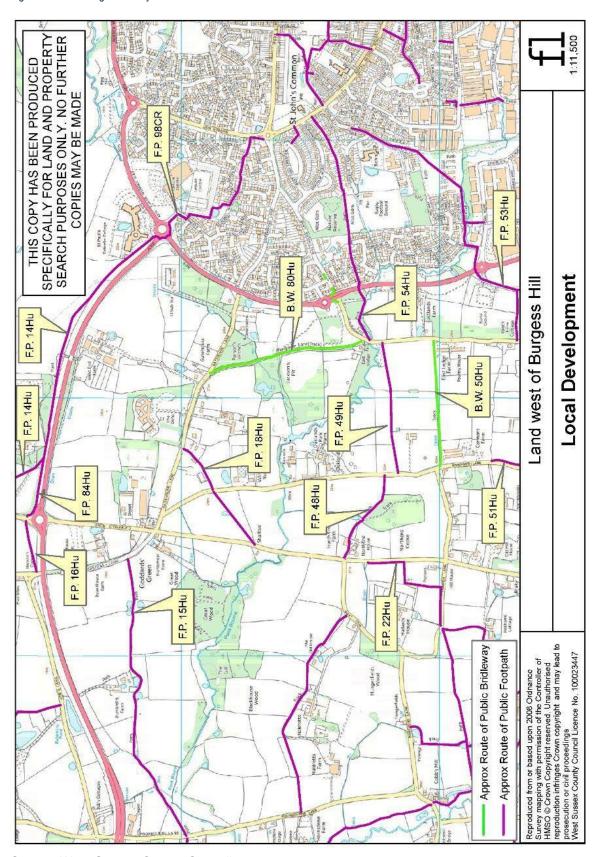
- 3.1.1 The site (from its centre) is located just 2500m from Burgess Hill town centre. There is a large food superstore to the south west of Burgess Hill only 1700m from the site, as well various smaller stores within the town centre and suburbs. A leisure centre is located north west of Burgess Hill only 900m from the site.
- 3.1.2 The town centre, Sheddingdean Business Park, Braybon Business Park, as well as the proposed Business Park at the Northern Arc and Science and Technology Park on the A2300 are key local employment areas.
- 3.1.3 Three secondary schools are located in Burgess Hill: St Paul's Catholic College on the A2300 north of site; and Downlands Community School and Burgess Hill Girls to the south west of Burgess Hill town centre.
- 3.1.4 There are a number of GP surgeries within Burgess Hill. Princess Royal Hospital at Hayward Heath offers an A&E department.
- 3.1.5 Burgess Hill benefits from two railway stations at Burgess Hill town centre and Wivelsfield.

Walk and Cycle Routes

3.1.6 There are number of footpaths and bridleways that transverse the site or provide connections to/from the site.



Figure 3.1: Public Rights of Way



Source: West Sussex County Council



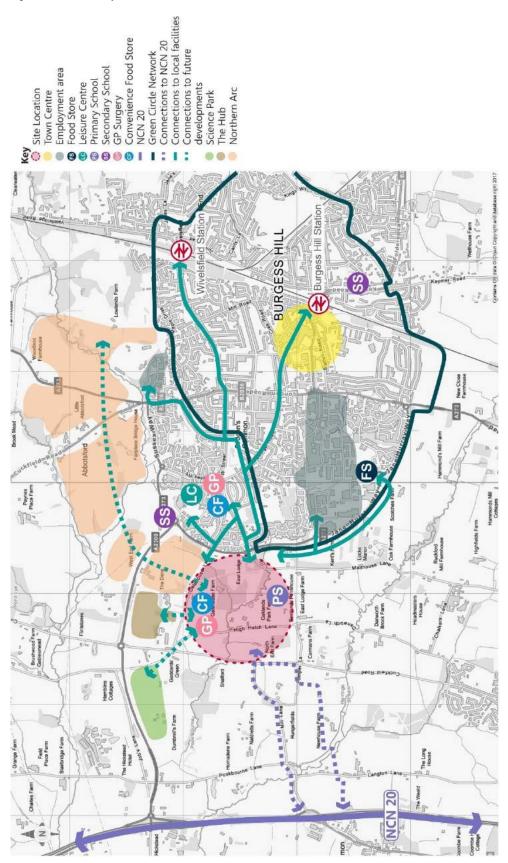
- 3.1.7 There are existing walk and cycle routes that connect the development with Burgess Hill town centre, railway stations and existing employment areas. These are illustrated in **Figure 3.2**.
- 3.1.8 The Burgess Hill Green Circle Network also runs adjacent to the site along the west side of the A273 providing a cycle (or walk) route around Burgess Hill.

3.2 Opportunities

- 3.2.1 The site lends itself for the creation of a new community due to its excellent strategic location adjacent to the A273 and being just south of the A2300 with the potential to connect to Burgess Hill and surrounding planned development via a range of pedestrian links, cycle routes, bus services and vehicle connections. These connections will allow integration between the existing community and planned development to the north, see Figure 3.2.
- 3.2.2 Pedestrian and cycle access can be achieved to existing areas of Burgess Hill via Gatehouse Lane and also via Malthouse Lane, to cross A273 Jane Murray Way.
- 3.2.3 There are also opportunities to connect to the Northern Arc development, in particular the Community/sports area and the Hub (business park) via connections from Gatehouse Lane. The planned Science and Technology Park would benefit from the use of effectively redundant road to the A2300 from the site, which has been blocked off for traffic use on to the A2300. This would offer a traffic-free route to/from these planned business areas.
- 3.2.4 Improvements to walk and cycle routes and crossing facilities will be delivered to connect the development to/from the Science and Technology Park and Hub along the A2300 and also to/from Burgess Hill town centre. This will benefit the wider Burgess Hill area with segregated or low trafficked routes between the planned business areas and community/sport facilities on the A2300 and residential areas.
- 3.2.5 The existing narrow roads within the site will be retained to provide 'green' routes for walking and cycling (and vehicle access to the existing properties). New streets will be delivered alongside these 'green' routes, for vehicles and bus use, to minimise impact on the historic hedgerows and to allow the historic connections to the site's rural surroundings to be retained and protected.



Figure 3.2: Walk and Cycle Connections





3.3 Evaluation and Viability

3.3.1 The distances people are prepared to walk to destinations will be dependent on local circumstances (such as quality of route, topography, ease and number of road crossings etc.), weather conditions and the reason for the trip. For example, people are often prepared to walk further as part of a journey to work than a main shopping trip. **Table 3.1** summarises the suggested acceptable walking distances by the Institute of Highways and Transportation for pedestrians without mobility impairment, for some common trip purposes.

Table 3.1: Suggested Walking Distances and Times

Definition	Town Centres (metres, m), (mins)	Commuting/School Sight-seeing (metres, m), (mins)	Elsewhere (metres, m), (mins)
Desirable	200, 2.5	500, 6.25	400, 5
Acceptable	400, 5	1000, 12.5	800, 10
Preferred Maximum	800,10	2000, 25	1200, 15

Source: Providing for Journeys on Foot, Institute of Highways and Transport (IHT 2000)

- 3.3.2 It should be noted that people are willing to walk further to a railway station (800m) than a bus stop (400m).
- 3.3.3 Local Transport Note (LTN) 1/04 Policy, Planning and Design for Walking and Cycling provides further guidance stating that: "There are limits to the distances generally considered acceptable for utility walking and cycling. The mean average length for walking journeys is approximately 1 km (0.6 miles) and for cycling, it is 4 km (2.4 miles), although journeys of up to three times these distances are not uncommon for regular commuters. The distances people are prepared to walk or cycle depend on their fitness and physical ability, journey purpose, settlement size, and walking/cycling conditions."
- 3.3.4 It is considered that development at Land West of Burgess Hill, combined with suitable measures and infrastructure, could achieve a higher proportion of walk and cycle mode share than the 14% that has been achieved in nearby residential areas (based on 2011 national census Travel to Work (TTW) statistics). This is not just because of the new links that would be provided to Burgess Hill, but also because of the proximity of the future employment uses planned along the A2300 just north of the site.
- 3.3.5 New facilities will be designed into the scheme from the outset as the masterplan emerges to achieve easy walk/cycle distances between key destinations are achieved.



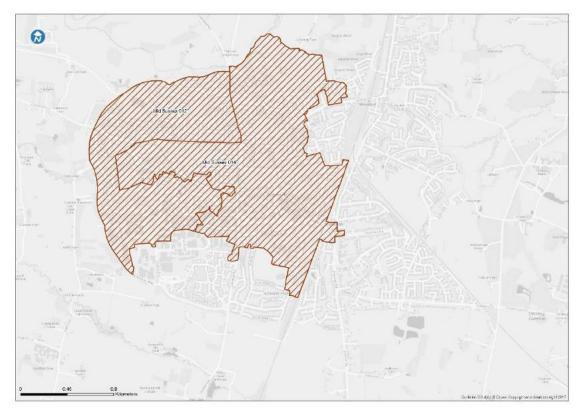
Table 3.2: Location of Facilities From the Centre of the Site

Local Facilities	Distance from Centre of Site (approx. to centre)	Feasible Walk Distance	Feasible Cycle Distance
Town Centre	2500m	-	Yes
Primary School	On site	Yes	Yes
Secondary Schools:			
St Paul's Catholic College	900m	Yes	Yes
Downlands Community School	4900m	-	Maybe
Burgess Hill Girls	3000m	-	Yes
Food superstore	1700m (Tesco)	Yes	Yes
Leisure centre	900m (The Triangle)	Yes	Yes
GP surgery	On site	Yes	Yes
Princess Royal Hospital at Hayward Heath (A&E department)	6100m	-	Maybe
Employment:			
Business Park at Northern Arc	1500m	Yes	Yes
Braybon Business Park	1500m	Yes	Yes
Sheddingdean Business Park	2000m	Yes	Yes

3.3.6 The potential trip generation by walk and cycle has been derived the TRICS 7.4.1 database and mode share determined from 2011 census TTW data for Middle Super Output Areas (MSOA) Mid Sussex 012 and Mid Sussex 014, illustrated in **Figure 3.3**.



Figure 3.3: MSOAs Mid Sussex 012 and 014



- 3.3.7 Potential person trip rates for privately owned houses have been derived from TRICS based on the following:
 - Most recent 10 year period,
 - Suburban Area and Edge of Town only,
 - 100 to 1500 dwellings,
 - No sites selected within Greater London, Scotland, Wales and Ireland,
 - Weekday counts only.
- 3.3.8 These criteria result in the selection of 21 sites, the average person trip rates and resulting walk and cycle trips are summarised in **Table 3.3**. Analysis of 2011 census TTW data shows that 14% of trips could be made by walk and cycle.



Table 3.3: Potential Person Trip Generation and Walk/Cycle Trips

Potential Trip Generation (1,500 homes)				
		Arrive	Depart	Two-Way
	AM Peak	0.204	0.765	0.969
Person Trip Rates	PM Peak	0.593	0.360	0.953
Naics	Daily	3.976	4.251	8.227
Minimum	AM Peak	40	170	210
Walk and Cycle Trips	PM Peak	130	80	210
(internal and external)	Daily	860	920	1780

- 3.4.1 The site would be well served by pedestrian and cycle connections toward existing local facilities in Burgess Hill, Northern Arc and planned employment areas along the A3200. The railway stations and town centre shops and employment are also accessible by cycle.
- 3.4.2 The on-site pedestrian and cycle network will be designed to provide high quality, segregated or on low trafficked routes towards existing and proposed pedestrian and cycle routes in Burgess Hill.
- 3.4.3 Due to these strong walking and cycling connections from the development to key destinations, there is great opportunity to minimise private car use and promote walking and cycling and healthy living.



4 Bus

4.1 Existing Conditions

- 4.1.1 Burgess Hill is a key local centre served by a number of inter-urban, urban and rural bus routes. Regular bus services are available from the town centre on a number of corridors to Pulborough, Horsham, Haywards Heath, Crawley, Brighton, Lewes and East Grinstead. There is also a network of urban services providing local travel opportunities within the town boundaries.
- 4.1.2 The site location is currently served by three local bus routes which operate on the A273 to the east and A2300 to the north. These are shown in **Table 4.1** below.

Table	41.	Existing	Bus	Services

Service /	Route	Frequency	
Operator	Route	Mon – Sat Daytime	Evening & Sunday
36A Compass Travel	Town Service: Church Road – The Triangle – Tesco – Church Road (anti-clockwise)	60 mins Mon-Fri off- peak	No service
36C Compass Travel	Town Service: Church Road – Tesco – The Triangle – Church Road (clockwise)	60 mins Mon-Fri off- peak	No service
100 Compass Travel	Burgess Hill – Hickstead – Henfield – Steyning – Storrington – Pulborough – Billingshurst – Horsham	60 mins	No service

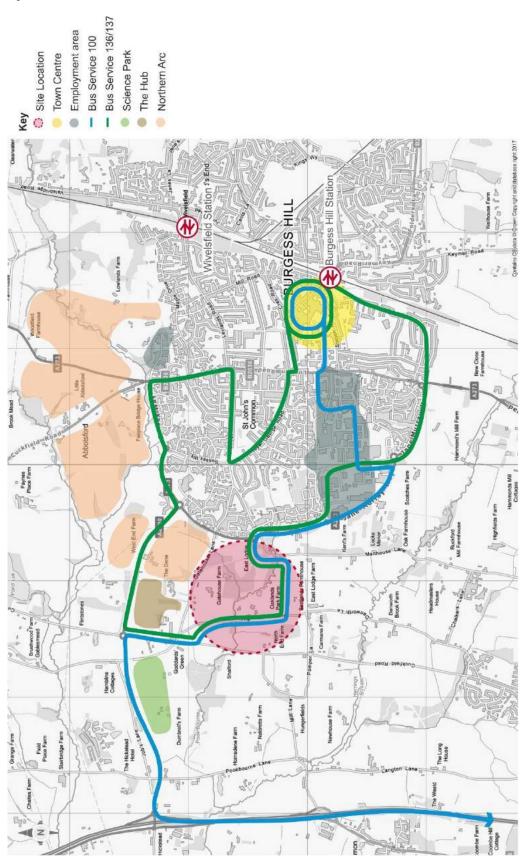
- 4.1.3 These services offer up to three buses per hour to key locations including Burgess Hill town centre, railway station, the Victoria Business Park and Tesco superstore, as well as one bus per hour to other destinations in Mid Sussex and Horsham districts.
- 4.1.4 There is currently no service during the evenings or on Sundays, and a more limited service operates during peak hours and on Saturdays.

4.2 Opportunities

- 4.2.1 The street network within the development will be designed to allow buses to travel through to/from Burgess Hill and onto the planned employment areas at 'The Hub', Northern Arc and Science and Technology Park via the A2300, but to discourage 'through' traffic along residential streets by the geometric design and/or a bus gate.
- 4.2.2 The bus services currently operating along the A273 to the east of the site could enter the development to provide a more frequent and comprehensive connection to key employment, leisure and retail facilities in the area.
- 4.2.3 It is expected that additional journeys on these services could be provided, including buses earlier in the morning, later in the evening and at weekends which would also provide wider benefit to existing residents in the town. Potential route diversions are shown in **Figure 4.1**.



Figure 4.1: Potential Bus Services





4.3 Evaluation and Viability

4.3.1 The potential trip generation by bus has been derived the TRICS 7.4.1 database and mode share determined from 2011 census TTW data for MSOAs Mid Sussex 012 and Mid Sussex 014. This indicates that a minimum of 2% of development trips could travel by bus based upon 2011 census TTW. The resultant trips by bus are summarised **Table 4.2** below.

Table 4.2: Potential Bus Trips

Potential Trip Generation (1,500 homes)				
		Arrive	Depart	Two-Way
Minimum	AM Peak	10	20	30
Bus Trips	PM Peak	20	20	30
	Daily	120	130	250

4.3.2 Based on the 2011 census TTW data, the current mode share for bus use in the area is relatively low at only 2%. However, as set out in **Section 5**, rail usage is much greater at 14%. It is likely that people travelling from the development to the Burgess Hill railway station would predominantly travel by bus, resulting in a much greater number of residents of the development using the potential bus services than summarised in **Table 4.2**.

- 4.4.1 The site is currently well served by bus during the weekday off-peak period, with three buses per hour which offer a good level of service in comparison to some other locations around Burgess Hill.
- 4.4.2 This site offers an opportunity for a significant enhancement of public transport services in western Burgess Hill by building on the network already in place. It is therefore in a good position to deliver commercially viable services, which are financially sustainable in the longer term.



5 Rail

5.1 Existing Conditions

5.1.1 Burgess Hill currently benefits from two railway stations, at Burgess Hill and Wivelsfield. The level of service at each station is set out in **Tables 5.1** and **5.2** below. The frequencies are minimum off-peak service levels. In the peak periods the number of rail services are significantly enhanced – between Burgess Hill and London in the AM peak period there are up to eight trains per hour and seven from Wivelsfield. Gatwick Express services also call at these stations during the peak periods.

Table 5.1: Existing Rail Services at Burgess Hill

Operator	Route	Frequency		
Operator	Route	Mon – Sat Daytime	Evening & Sunday	
Thameslink	Brighton – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – London Blackfriars – St Pancras International – Luton Airport Parkway – Luton – Bedford	30 mins	30 mins	
Heath	Brighton – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – London Bridge	60 mins	No service	
Southern	Littlehampton – Worthing – Hove – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	60 mins	60 mins	
Southern	Brighton – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	60 mins	60 mins	

5.1.2 Burgess Hill is served by three Thameslink trains per hour between Brighton and London Bridge/Bedford serving a number of key destinations and interchanges such as Gatwick Airport, St Pancras International and Luton Airport Parkway. In addition, Southern services operate twice per hour between destinations on the south coast such as Littlehampton and Brighton to central London termini.



Table 5.2: Existing Rail Services at Wivelsfield

Operator	Douto	Frequency	
Operator	Route	Mon – Sat Daytime	Evening & Sunday
Thameslink	Brighton – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – London Blackfriars – St Pancras International – Luton Airport Parkway – Luton – Bedford	30 mins	No service
Southern	Eastbourne – Lewes – Haywards Heath – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	60 mins	60 mins
Southern	hern Brighton – Burgess Hill – Haywards Heath – Gatwick Airport – Fast	No service	60 mins

5.1.3 Wivelsfield lies to the north of a major railway junction and therefore has a slightly different service pattern. Two Thameslink trains between Brighton and Bedford call as at Burgess Hill, but the one Southern service per hour operates to/from Eastbourne rather than Littlehampton. There are only Southern trains to Brighton on a Sunday, to compensate for the lack of Thameslink services.

5.2 Opportunities

- 5.2.1 Burgess Hill is very well served by the railway network with up to three train operating companies providing frequent main line connections between Brighton, Gatwick Airport, central London, Luton Airport and Bedford. As a result, it is considered to be a key location for development.
- 5.2.2 Improved bus services provide access these services without the need to use the car. Parking is very limited at Burgess Hill railway station and unavailable at Wivelsfield railway station.
- 5.2.3 As described in **Section 3**, enhancement of the bus service offer to the west of Burgess Hill will provide frequent bus services earlier in the morning, later in the evening and at weekends to allow connections to these frequent rail services.

5.3 Evaluation and Viability

5.3.1 The potential trip generation by rail has been derived the TRICS 7.4.1 database and mode share determined from 2011 census TTW data for MSOAs Mid Sussex 012 and Mid Sussex 014. This indicates that approximately 14% of trips would use rail, based upon current 2011 census TTW data. The resultant rail trips are shown in **Table 5.3** below.



Table 5.3: Potential Rail Trips

Potential Trip Generation (1,500 homes)					
Arrive Depart Two-Way					
Minimum	AM Peak	40	160	200	
Rail Trips	PM Peak	120	80	200	
	Daily	830	890	1720	

- 5.4.1 Burgess Hill is located on the mainlines to a number of regionally and nationally important destinations. Two stations, at Burgess Hill and Wivelsfield, provide up to eight trains per hour at peak periods and five trains per hour during off-peak hours on the Brighton Main Line with direct links to two international airports, central London, the south coast and St Pancras International Eurostar station.
- 5.4.2 Bus services and cycle routes will provide good connections to the railway stations.



6 Highway

6.1 Existing Conditions

- 6.1.1 The site is located adjacent to the A273 which runs around the west of Burgess Hill and also just south of the A2300 which provides connection to the A23, a strategic road to Brighton in the south and Crawley, Gatwick Airport and London to the north. The A273 provides connections into and around Burgess Hill and towards Haywards Heath.
- 6.1.2 On-site observations and a review of available on-line traffic data shows that the A2300 (particularly the A2300/A273 junction) suffers from congestion during peak periods. Delays occur when travelling into Burgess Hill in the morning and some congestion can also occur in the evening.
- 6.1.3 Some town centre roads, including the B2036, Junction Road and Queen Elizabeth Avenue suffer from delays during peak periods.
- 6.1.4 The A273, to the east of the site from the Coulstock Road roundabout to the B2036 operates relatively efficiently during peak times.
- 6.1.5 £17m has been secured (of the estimated £23m total cost) to fund the dualling of the A2300, subject to Department for Transport approval of a Full Business Case submission (planned in Spring 2018) and confirmation of funding from other sources including developer contribution.

Traffic surveys

- 6.1.6 Manual classified turning counts and queue surveys were carried out in November 2016 for four junctions on the local highway network.
- 6.1.7 Automatic traffic counters recorded vehicle speed and volume on the local highway network for a week in November 2016.
- 6.1.8 Further manual classified turning count surveys have been provided by WSCC for an additional four junctions on the local highway network which were undertaken in October 2015.
- 6.1.9 **Figure 6.1** shows the location of the surveys.



Figure 6.1: Traffic Surveys





6.2 Opportunities

- 6.2.1 The site offers the opportunity to deliver two vehicle access points, one from the roundabout on the A273 Jane Murray Way at Coulstock roundabout and the other Cuckfield Road for access to the A3200. See **Drawing 37111-001-SK004B**.
- 6.2.2 This offers the opportunity to minimise traffic impact on the A2300/A273 roundabout which suffers from delays in the morning and evening peak periods.
- 6.2.3 **Drawing 37111-001-SK005** shows potential concept access junction arrangements at these locations. A fourth arm could be delivered at the A273/Coulstock Road roundabout and a priority T-junction could be delivered to access the site from Cuckfield Road.
- 6.2.4 This development can contribute to the dualling of the A2300 and would deliver other local highway improvements to accommodate development traffic. The A2300 dualling scheme is expected to relieve congestion on the A2300 which is a key route for accessing the development.
- 6.2.5 The Northern Arc development masterplan proposals include a spine road through the development with a new roundabout onto the A2300 north west of the existing A2300/A237 roundabout. This could potentially reduce traffic at the congested A2300/A273 roundabout or minimise any growth in traffic at this junction.

6.3 Evaluation and Viability

6.3.1 The potential trip generation by car has been derived the TRICS 7.4.1 database and mode share determined from 2011 census TTW data for MSOAs Mid Sussex 012 and Mid Sussex 014. This indicates that approximately 64% of trips might travel by car based upon 2011 census TTW data. The resultant vehicle trips are summarised below in **Table 6.1**.

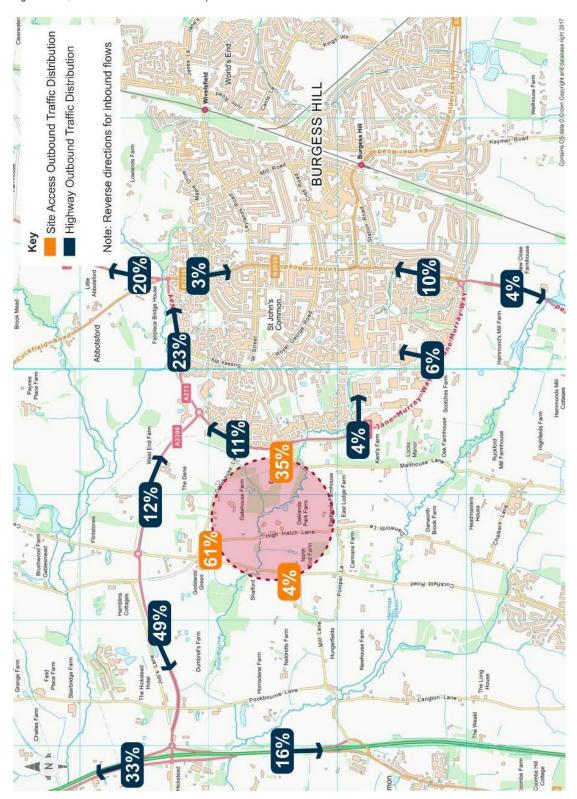
Table 6.1: Potential Vehicle Trips

Potential Trip Generation (1,500 homes)					
Arrive Depart Two-Way					
Vehicle Trips	AM Peak	200	730	930	
	PM Peak	570	340	910	
	Daily	3800	4060	7860	

6.3.2 A development of 1,500 homes could generate approximately 930 two car trips in the morning and evening peak hours. TTW data for the selected MSOAs (Mid Sussex 012 and Mid Sussex 014) has been analysed to understand potential distribution of traffic from the development. This has been manually assigned to the local highway network, based on road hierarchy and average speed data. The potential traffic impact generated by a development of 1,500 homes is illustrated in **Figure 6.2**.



Figure 6.2: 1,500 Homes Potential Traffic Impact



6.3.3 As shown in **Figure 6.2**, almost 50% of traffic is likely to route towards the A23, 33% northbound and 16% southbound. Capacity enhancements will likely be necessary at the Cuckfield Road/A2300 roundabout and A23/A2300 junction, some of which could be delivered by the dualling of the A2300.



- 6.3.4 Approximately 25% of traffic is likely to route southbound on the A273, most of which is travelling to Braybon Business Park and the town centre. The junctions on the A273 south of the A2300 operate relatively well in peak periods and it is envisaged that relatively low scale capacity enhancements would be required, such as increasing flare lengths on approaches to the roundabouts.
- 6.3.5 Approximately 25% of traffic is expected to route northbound on the A273 towards Isaac's Lane which provides connection to Haywards Heath. The Northern Arc spine road could relieve some peak period congestion at the A273/B2036 junction, however it is likely that further capacity enhancements would be required, which may be delivered as part of the A2300 dualling scheme, but the details are not currently available at time of writing.

- 6.4.1 The development benefits from two potential primary vehicular access points onto the highway network, one from the roundabout on the A273 Jane Murray Way at Coulstock Road and the other on Cuckfield Road for access to the A2300. This offers the opportunity to minimise traffic impact on the A2300/A273 roundabout, which suffers from delays in the morning and evening peak periods.
- 6.4.2 Some key routes into and through Burgess Hill suffer from peak period delays particularly the A2300 and A2300/A273 junction. The A2300 dualling scheme is proposed to help relieve this and accommodate planned development. The majority of traffic generated by the development (almost 50%) is likely to travel to the A23 via the A2300.

