

Welwyn Hatfield Borough Council

Employment Sites Selection – Background Paper 2016

Appendices A-D

June 2016

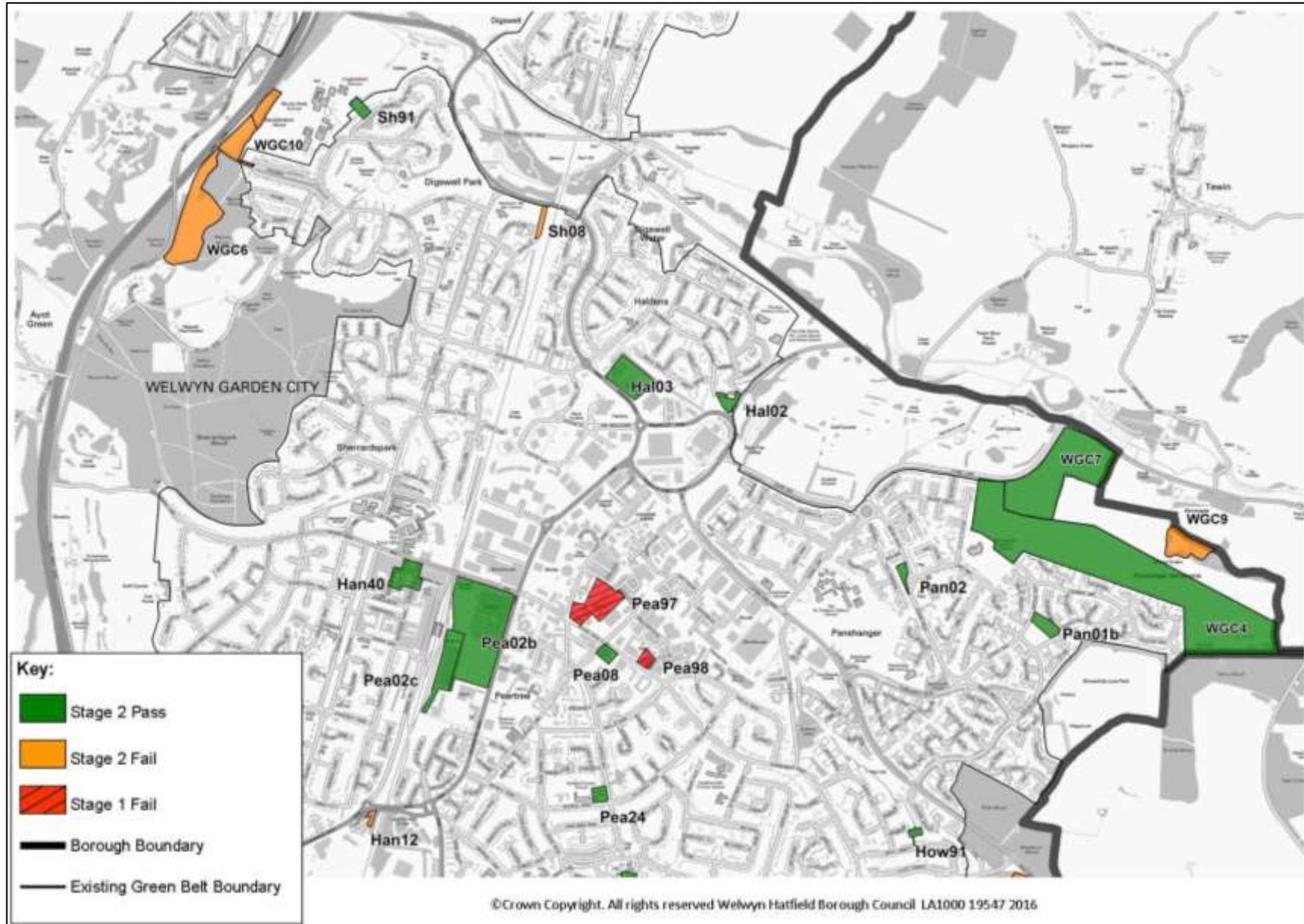
Appendix A

Welwyn Garden City Employment Sites - Maps and Background Tables

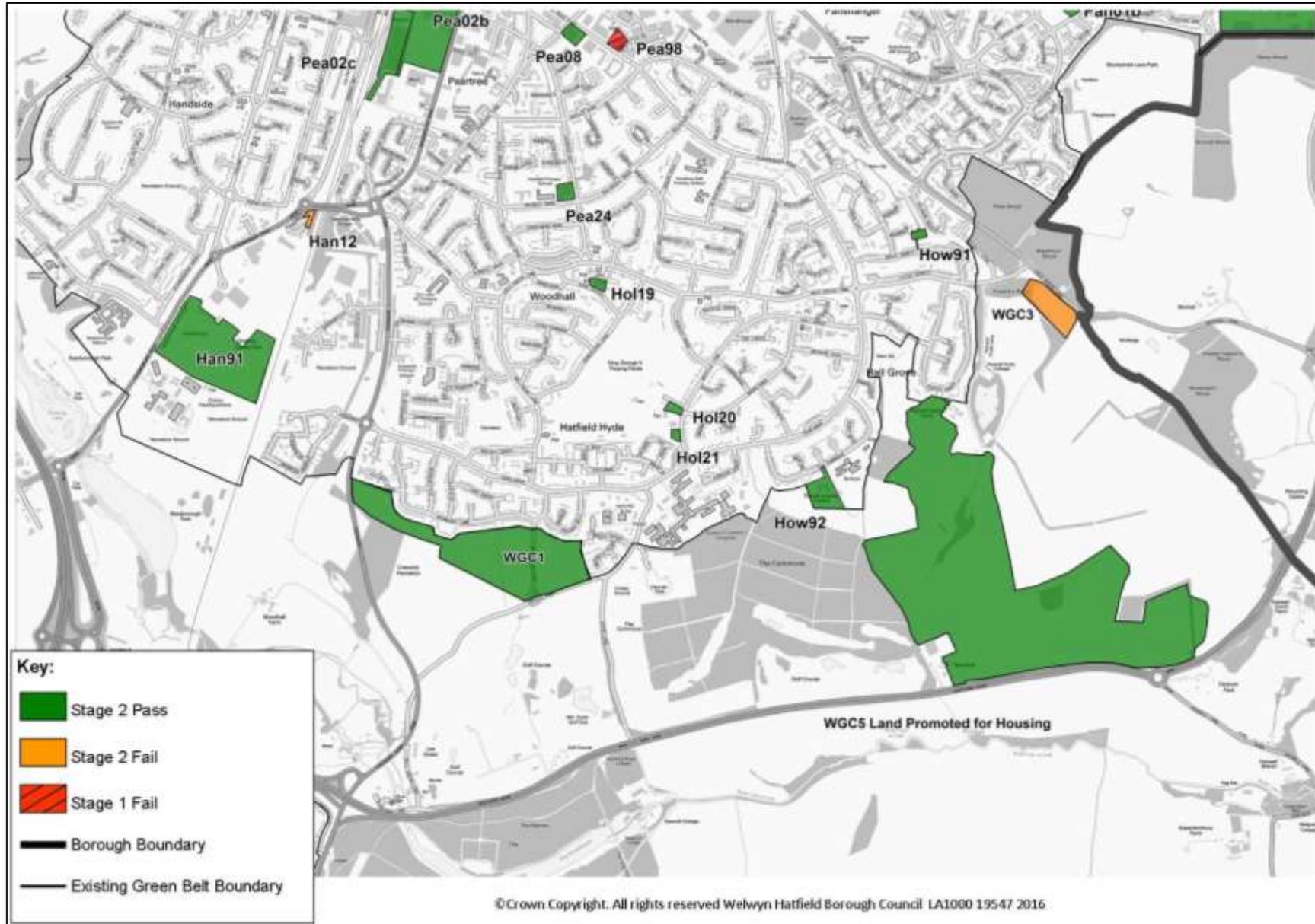
The maps on the following pages illustrate all of the sites considered within the HELAA.

For the purposes of this Sites Selection Background Paper, only sites that passed the Stage 2 HELAA Assessment have been considered.

Welwyn Garden City North HELAA Results Map



Welwyn Garden City South HELAA Results Map



Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
Pea02b	<p>Urban/Green Belt: Urban</p> <p>PDL/Greenfield: PDL</p> <p>Achievable: Yes</p> <p>Estimated capacity: 850 dwellings; 572m² of A1 floor space; 1,928m² of A3/A4 floor space; 6,370m² of B1 floor space; 2,554m² of C1 hotel floor space; 2,241m² of D1 community use floorspace; 703m² of D2 leisure floor space</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Waste water infrastructure upgrades Noise from the adjacent railway, as well as noise from adjacent commercial uses Potential for contaminated land which would require remediation The presence of major Grade II listed buildings within the site, although the planning application process has established that these will not necessarily be adversely affected by well-designed higher density development <p>Delivery timescales: 0-5 years/6-10 years</p>	<p>Contribution to National Purposes: <i>N/A for urban sites</i></p> <p>Contribution to Local Purpose: <i>N/A for urban sites</i></p> <p>Physical and visual openness: <i>N/A for urban sites</i></p> <p>Potential for Cumulative Impact <i>N/A for urban sites</i></p>	<p>Existing <i>N/A for urban sites</i></p> <p>Proposed: <i>N/A for urban sites</i></p> <p>Comments: <i>N/A for urban sites</i></p> <p>Conclusion: <i>N/A for urban sites</i></p>	<p>Significant positives (++) Total: 10</p> <p>4.2: Reduction of greenhouse gas emissions from transport; and</p> <p>4.3: helping to avoid/reduce air pollution: Site is within walking distance of an Employment Area/WGC Railway Station. It is within 400m of thirty-three bus stops.</p> <p>4.4: Protection/enhancement of open space and landscape character: Site is PDL.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site would provide capacity for at least 5% of the OAN Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.1: Ensuring the supply, location and quality of business/employment sites reflects the needs of local businesses and encourages a mixed economy: Site is located within an Employment Area and part of a wider area of land (Broadwater Road West) which is allocated for mixed use and subject to an adopted SPD masterplan.</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 2</p> <p>4.5: Conservation/enhancement of the borough's character, historic environment, and heritage/cultural assets: Site is within 250m of a Conservation Area and in proximity to Listed Buildings. Mitigation: Development of site should conform to Local Plan policies and Broadwater Road West SPD related to the protection of heritage assets and good design.</p> <p>4.6: Protection/enhancement of biodiversity and geodiversity: Site is within 250m of a Local Wildlife Site. Mitigation: Development of site should conform to Local Plan policies related to the protection/enhancement of biodiversity and good design.</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1</p>	<p>Advantages: This site forms part of the Broadwater Road SPD area, the borough's largest regeneration opportunity. The site provides one of relatively few opportunities within the borough to provide new and modern office space, and will enable the reinvigoration of a significant area of derelict land at the gateway to Welwyn Garden City town centre whilst providing a secure future for the vulnerable listed buildings within the site.</p> <p>Disadvantages: None</p>
Summary	<ul style="list-style-type: none"> Site will be deliverable within 0-10 years. This is attributed moderate weight in favour of the site. Development of the site would have no impact on Green Belt purposes or boundaries. This is attributed significant weight in favour of the site. The site has more than three times as many significant positives as significant negatives. This is attributed significant weight in favour of the site. The site is within Flood Zone 1 and passes the sequential test Strategic advantage: It is a rare opportunity to provide needed new employment floorspace within the borough. Whilst there are some development constraints, the SPD process considered approaches to resolve these. This is attributed significant weight in favour of the site <p>This site is part of one of the borough's key regeneration areas and the SPD establishes the acceptability of a mixed-use scheme. The site offers one of few opportunities to provide a significant amount of new employment floor space. Therefore, it is considered that the site should be considered for allocation alongside other Welwyn Garden City sites.</p>					
Policy implication	Consider removing the site (and the wider Broadwater Road West SPD area) from Employment Area EA1, as this would be a residential-led redevelopment and only small discrete parts of the SPD area would remain in an employment use.					

Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
Pea02c	<p>Urban/Green Belt: Urban</p> <p>PDL/Greenfield: PDL</p> <p>Achievable: Yes</p> <p>Estimated capacity: 171 dwellings, plus 11,300m² of B1 floorspace in accordance with the Broadwater Road West SPD</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Waste water infrastructure upgrades Noise from the adjacent railway, as well as noise from adjacent commercial uses Potential for contaminated land which would require remediation The presence of major Grade II listed buildings adjacent to the site, although the planning process for adjacent site Pea02b has established that these will not be adversely affected by well-designed higher density development <p>Delivery timescales: 11-15 years – the current lease on the site is until 2024</p>	<p>Contribution to National Purposes: <i>N/A for urban sites</i></p> <p>Contribution to Local Purpose: <i>N/A for urban sites</i></p> <p>Physical and visual openness: <i>N/A for urban sites</i></p> <p>Potential for Cumulative Impact <i>N/A for urban sites</i></p>	<p>Existing <i>N/A for urban sites</i></p> <p>Proposed: <i>N/A for urban sites</i></p> <p>Comments: <i>N/A for urban sites</i></p> <p>Conclusion: <i>N/A for urban sites</i></p>	<p>Significant positives (++) Total: 9</p> <p>4.2: Reduction of greenhouse gas emissions from transport; and</p> <p>4.3: helping to avoid/reduce air pollution: Site is within walking distance of an Employment Area/WGC Railway Station. It is within 400m of thirty-three bus stops.</p> <p>4.4: Protection/enhancement of open space and landscape character: Site is PDL.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.1: Ensuring the supply, location and quality of business/employment sites reflects the needs of local businesses/encourages a mixed economy: Site is located within an Employment Area and part of a wider area of land (Broadwater Road West) which is allocated for mixed use and subject to an adopted SPD masterplan. Site could provide 5% or more of required employment floor space in the borough</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 2</p> <p>4.5: Conservation/enhancement of the borough's character, historic environment, and heritage/cultural assets: Site is within 250m of a Conservation Area and in proximity to Listed Buildings. Mitigation: Development of site should conform to Local Plan policies and Broadwater Road West SPD related to the protection of heritage assets and good design.</p> <p>4.6: Protection/enhancement of biodiversity and geodiversity: Site is within 250m of a Local Wildlife Site. Mitigation: Development of site should conform to Local Plan policies related to the protection/enhancement of biodiversity and good design.</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1</p>	<p>Advantages: This site forms part of the Broadwater Road SPD area, the borough's largest regeneration opportunity. The site provides one of relatively few opportunities within the borough to provide new and modern office space, whereas the current warehouse use on the site does not form an attractive gateway to the town from the adjacent railway station and is challenging to access.</p> <p>Disadvantages: None</p>
Summary	<ul style="list-style-type: none"> Site will be deliverable within 11-15 years. This is attributed minor weight in favour of the site. Development of the site would have no impact on Green Belt purposes or boundaries. This is attributed significant weight in favour of the site. The site has more than three times as many significant positives as significant negatives. This is attributed significant weight in favour of the site. The site is within Flood Zone 1 and passes the sequential test. Strategic advantage: It is a rare opportunity to provide needed new employment floorspace within the borough. Whilst there are some development constraints, the SPD process considered approaches to resolve these. This is attributed significant weight in favour of the site. <p>This site is part of one of the borough's key regeneration areas and the SPD establishes the acceptability of a mixed-use scheme. The site offers one of few opportunities to provide a significant amount of new employment floor space. Therefore, it is considered that the site should be considered for allocation alongside other Welwyn Garden City sites.</p>					
Policy implication	Consider removing the site (and the wider Broadwater Road West SPD area) from Employment Area EA1, as the development would involve a large amount of residential floorspace in addition to employment and only small discrete parts of the SPD area would remain in an employment use.					

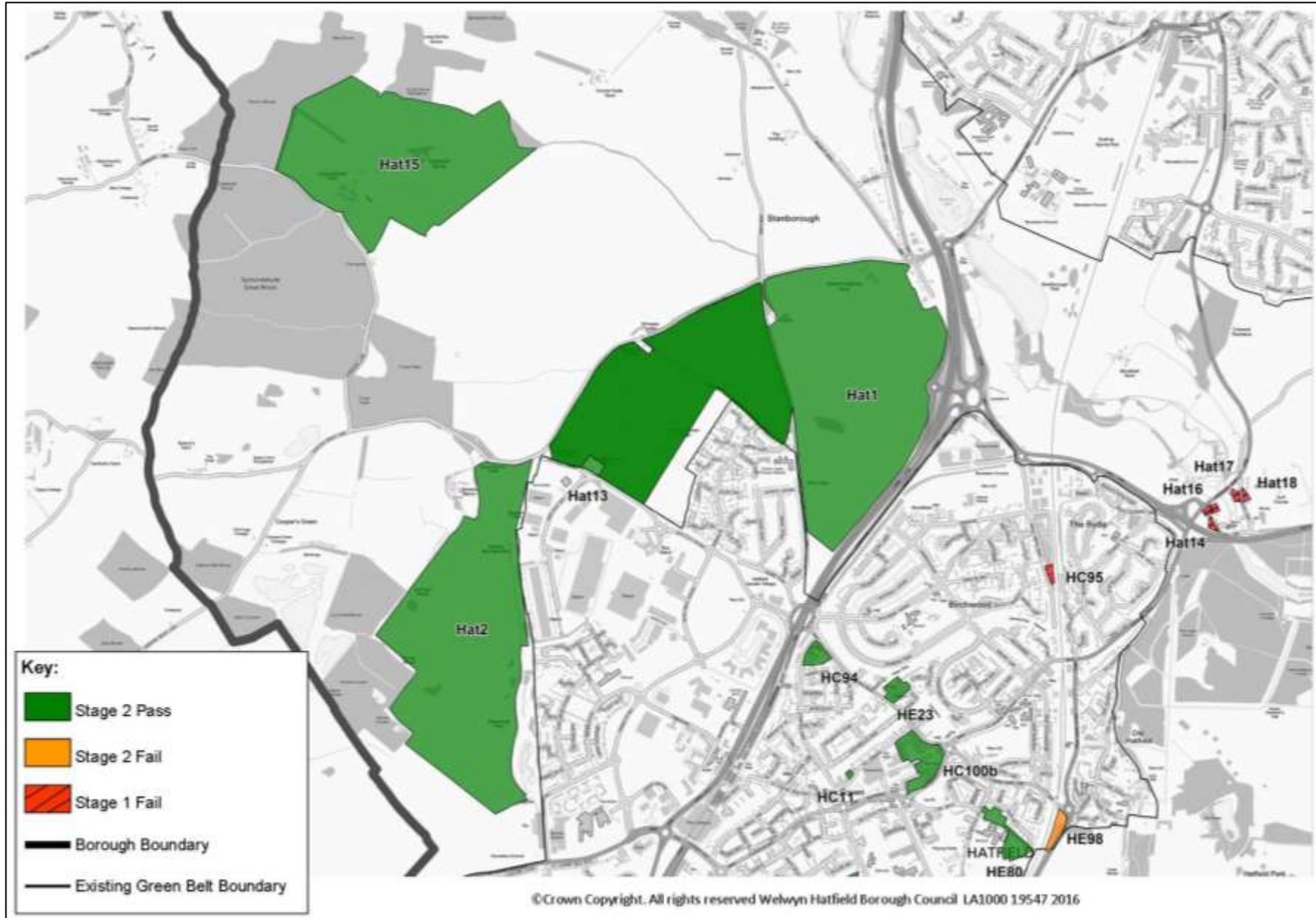
Appendix B

Hatfield Employment Sites - Maps and Background Tables

The maps on the following pages illustrate all of the sites considered within the HELAA.

For the purposes of this Sites Selection Background Paper, only sites that passed the Stage 2 HELAA Assessment have been considered.

Hatfield North HELAA Results Map



Hatfield South HELAA Results Map



Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
Hat1/13	<p>Urban/Green Belt: Green Belt</p> <p>PDL/Greenfield: Hat 1 Greenfield with limited PDL Hat 13 PDL</p> <p>Achievable: Some uncertainty due to viability once infrastructure costs (especially transport, education and sewerage infrastructure have been factored in).</p> <p>Estimated capacity: 1650 dwellings, 13,900sqm of B1 floor space</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Highways impact Mitigate air and noise pollution from A1(M) and Hatfield Avenue Setting of one listed building <p>Delivery timescales: 6-10/11-15</p>	<p>Contribution to National Purposes:</p> <p>Significant for preventing neighbouring towns from merging; contributes to the gap between Hatfield and Welwyn Garden City which is relatively development-free but contains Stanborough and Mill Green. Would reduce the shortest distance between Hatfield and Welwyn Garden City. The visual perception of the gap from in and around the site is mixed due to clear views to the north and north west but Welwyn Garden City is not visible</p> <p>Contribution to Local Purpose:</p> <p>Significant; the site forms the gap between Hatfield and Stanborough would have the effect of extending Hatfield to the north. The visual perception of the gap from in and around the site is strong due to clear views to the north and north west</p> <p>Physical and visual openness: Physical Openness High, Visual openness High; limited built development covering a very small proportion of the site</p> <p>Potential for Cumulative Impact</p> <p>Site is connected to Hatfield and forms a group with Hat 2. The motorway and Stanborough Park/ River Lea provides a clear separation between Welwyn Garden City and Hatfield .</p>	<p>Existing Hatfield Avenue, Great Braitch Lane, Green Lanes – unclassified roads (moderate), A1(M)/A1001 (strong), property boundaries west of Hatfield Garden Village (moderate)</p> <p>Proposed: Coopers Green Lane (moderate), A1(M) (strong)</p> <p>Comments: The part of the development site east of Green Lanes could have extensive green areas (incl school playing fields) in its northern and eastern parts, therefore Green Belt boundary could be somewhere within this parcel to south of Coopers Green Lane in order to retain a green gap between Hat 1 and Stanborough.</p> <p>Conclusion: New Green Belt boundary along Coopers Green Lane and A1(M) would potentially be stronger than existing boundary. However in the interest of retaining a gap between the developed area of Hat 1 and Stanborough the boundary could be drawn within the parcel east of Green Lanes, however this would be weaker than the existing in that area.</p>	<p>Significant positives (++) Total: 9</p> <p>4.2: Reduction of greenhouse gas emissions from transport; and</p> <p>4.3: helping to avoid/reduce air pollution: Site is within walking distance of three Major Employment Areas. It is within 400m of seven bus stops.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site would provide capacity for at least 5% of the OAN. Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.1: Ensuring the supply, location and quality of business/employment sites reflects the needs of local businesses/encourages a mixed economy: Site could provide 5% or more of required employment floor space in the borough.</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 3</p> <p>4.4: Protection/enhancement of open space and landscape character, retaining local distinctiveness: The WHBC Green Belt Review indicates the site contributes significantly to maintaining settlement pattern. Mitigation: The scale, layout and design of development should seek to reduce significant effects on settlement pattern and local distinctiveness.</p> <p>4.5: Conservation/enhancement of the borough's character, historic environment, and heritage/cultural assets: Site is in proximity to Listed Buildings and an AAS (Area of Archaeological Significance) is located within the site. Mitigation: Development of site should conform to Local Plan policies related to the protection of heritage assets and good design.</p> <p>4.10: Promotion of conservation and sustainable use of productive agricultural land: Site is located within Grade 2 land. Mitigation: Effect is difficult to mitigate as it affects approximately 50% of the site.</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1. An ordinary watercourse is present in the centre of the site which may present fluvial flood risk; however, it was not possible to model it in the SFRA. A sequential approach to layout that restricts development to Flood Zone 1 within the site is feasible. Therefore, the site passes the Sequential Test and the Exception Test does not need to be applied at this stage.</p> <p>Surface water flow route runs broadly north-south through the western area of the site, with areas of pooling also indicated. A sequential approach to layout and the use of sustainable drainage systems (SuDS) could be used to suitably manage surface water flood risk to, within and from the site.</p>	<p>Advantages:</p> <p>Provides a secondary school site to meet needs from wider Hatfield area, also a new primary school and an expanded primary school (or two new primary schools) to meet the needs of the development site.</p> <p>The largest site proposed for allocation and therefore a major contribution to housing numbers.</p> <p>Would provide a neighbourhood centre and community facilities</p> <p>Would provide additional nearby facilities for Hat 15 (Symondshyde Village), such as health facilities and a larger neighbourhood centre, if that site were to be allocated.</p> <p>Disadvantages: None.</p>
Summary	<ul style="list-style-type: none"> HELAA: Mitigation is required for highways impact, air and noise pollution from Hatfield Avenue and A1 (M), and the setting of one listed building. Delivery is anticipated within the 6-10 year period and to continue into the 11-15 year period, this is attributed minor to moderate weight in favour of the site. GB Study: Site makes a significant contribution to one national purpose and to the local purpose and has a high level of physical and visual openness. This is attributed moderate weight against the site. GB Boundary: New boundary would be of moderate strength (part minor road, part property boundary), similar overall to existing; this is accorded moderate weight in favour of the site. A fragile gap exists between Hatfield and Stanborough. Development of this site would significantly reduce this gap, hence this is attributed moderate weight against the site. SA: Overall the site has two to three times more double positives than double negatives and this is attributed as moderate weight in favour of the site. Flood risk: development restricted to Flood Zone 1. Site passes the sequential test. Site can make provision for a secondary school, new primary schools, small-scale employment, community facilities and a larger neighbourhood centre. It would also contribute to the Green Corridor and some of the community infrastructure would also serve site Hat 15 if the latter is developed. Overall this is attributed significant weight in favour of the site. <p>The site could form a sustainable extension to the town of Hatfield as it is of sufficient size to provide a secondary school, primary schools community facilities and a neighbourhood centre, is accessible to major Employment Areas, and can be linked to the rest of the town by public transport and walking/cycle routes. Moderate weight against the development of the site arises from adverse effect on one national Green Belt purpose and the local Green Belt purpose, also through loss of openness and intrusion into a fragile gap. This is however outweighed by the substantial contribution to housing numbers and considerable strategic advantages in terms of infrastructure provision offered by the development of the site. Overall the site should be considered for allocation alongside other Hatfield sites.</p>					
Policy implication	<p>If allocated for housing, the majority of the site to be removed from the Green Belt and the boundary re-drawn so as to retain a gap between the developed area of the site and Stanborough.</p> <p>New UOL designation required for existing informal recreation land west of Hatfield Garden Village between Hatfield Avenue and Green Lanes within Hat 1.</p>					

Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
Hat11 (Scenario 2)	<p>Urban/Green Belt: Green Belt</p> <p>PDL/Greenfield: Greenfield</p> <p>Achievable: Yes</p> <p>Estimated capacity: Limited to the equivalent of 300 dwellings (restriction on capacity is due to single point of access) HELAA methodology indicates a starting point of 25,000m² – 46, 875m² of B use class.</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Highway junction upgrades Mitigate impact on adjacent wildlife site and site ecology Mitigate air and noise pollution from A1/Southway Mitigate potential impact on Water End SSSI Easement for public rights of way Wastewater infrastructure upgrades <p>Delivery timescales: 0-10 years</p>	<p>Contribution to National Purposes: Significant in safeguarding the countryside</p> <p>Contribution to Local Purpose: Significant contributes to the narrow gap between Hatfield and Welham Green which contains the former central resource library and former school. Contributes to the visual perception of the gap as it is partially elevated and open and would form an irregular outcrop to Hatfield beyond the A1001.</p> <p>Physical and visual openness: Physical Openness High and Visual openness High, elevated some open views over the surrounding landscape especially in the south central areas.</p> <p>Potential for Cumulative Impact Forms a group with WeG8, WeG9 and GTLAA05 NB. WeG9/GTLAA failed Stage 1 of the HELAA.</p>	<p>Existing South Way A Road (Strong)</p> <p>Proposed: Established tree belt/hedgerow with minor gaps (moderate) Ridgeline through the middle of the site (moderate)</p> <p>Conclusion: The proposed new Green Belt boundaries consisting of established tree belts/hedgerows and ridgeline would be weaker than the existing boundary; however clearly defined and defensible boundaries could be formed.</p> <p>Fragile Gap: The site lies between Hatfield and Welham Green. Whilst the gap between them has to a degree been compromised by Travellers Lane Industrial Estate, the area of land which Hat11 sits within constitutes a significant area of open land between the two settlements which serves as a gap between them. Development of this site would encroach into this gap.</p>	<p>Significant positives (++) Total: 4 4.2: Reduction of greenhouse gas emissions from transport; and 4.3: helping to avoid/reduce air pollution: Site is within walking distance of a residential area. It is within 400m of twelve bus stops.</p> <p>6.1: Ensuring the supply, location and quality of business/employment sites reflects the needs of local businesses/encourages a mixed economy: Site could provide 5% or more of required employment floor space in the borough.</p> <p>Significant negatives (--) Total: 3 4.4: Protection/enhancement of open space and landscape character, retaining local distinctiveness: Site has high landscape sensitivity. The WHBC Green Belt Review indicates the site contributes significantly to maintaining settlement pattern. Mitigation: The scale, layout and design of development should seek to reduce significant effects on landscape character and settlement pattern/ local distinctiveness.</p> <p>4.6: Protection/enhancement of biodiversity and geodiversity: Site is adjacent to a Local Wildlife Site. Mitigation: Development of site should conform to Local Plan policies in relation to the protection/enhancement of biodiversity and good design.</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1</p>	<p>Advantages: Presents one of few opportunities available to make provision of additional employment land to support jobs growth.</p> <p>Disadvantages: None</p>
Summary	<ul style="list-style-type: none"> HELAA: Delivery is estimated to be 0-10 years, and potentially within 0-5 years. This is attributed moderate weight in favour of the site. GB Study: Site makes a significant contribution to one national Green Belt purpose and to the local purpose, and has high level of physical and visual openness. This is attributed moderate weight against the site. GB Boundary: New Green Belt boundaries would be predominantly weaker than the existing boundaries, but would be clearly defined. This is attributed moderate weight against the site. The steeply sloping embankment rising up on the southern side of South Way also creates a very strong visual and perceptual barrier between South Hatfield and the land north of Welham Green. The site resides between Hatfield and Welham Green. Whilst the gap between them has to a degree been compromised by Travellers Lane Industrial Estate, the area of land which Hat11 sits within constitutes a significant area of open land between the two settlements which serves as a gap between them. Extending the green belt boundaries as proposed would encroach into this gap. This is attributed significant weight against the site. SA: The site is a location accessible to public transport, although this would require improvements to pedestrian links. Potential impact on ecology, although this is capable of mitigation, as noted in the HELAA. Therefore, this is attributed moderate weight in favour of the site. Strategic advantage: Presents one of few opportunities to make provision of employment land in the borough, although the exact quantum if unknown and likely to be relatively small in scale. This is attributed moderate weight in favour of the site. <p>On balance, the weakening of a strong Green Belt boundary and developing land beyond South Way, which is a very strong barrier between Hatfield and the site/land beyond South Way, and harm to the Green Belt is considered to outweigh the opportunity to provide Employment Land and the other sustainability benefits development of the site would bring. The site should not be considered for allocation in the round alongside other sites being promoted for employment land use in the borough.</p>					

Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
Hat11 (Scenario 3) 12.5ha	<p>Urban/Green Belt: Green Belt</p> <p>PDL/Greenfield: Greenfield</p> <p>Achievable: Yes</p> <p>Estimated capacity: Residential and employment use of no greater than the equivalent of 300 dwellings (restriction on capacity is due to single point of access)</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Highway junction upgrades Mitigate impact on adjacent wildlife site and site ecology Mitigate air and noise pollution from A1/Southway, and any future waste operations at New Barnfield Mitigate potential impact on Water End SSSI Easement for public rights of way Wastewater infrastructure upgrades <p>Delivery timescales: 0-10</p>	<p>Contribution to National Purposes: Significant in safeguarding the countryside</p> <p>Contribution to Local Purpose: Significant contributes to the narrow gap between Hatfield and Welham Green which contains the former central resource library and former school. Contributes to the visual perception of the gap as it is partially elevated and open and would form an irregular outcrop to Hatfield beyond the A1001.</p> <p>Physical and visual openness: Physical Openness high and Visual openness High, elevated some open views over the surrounding landscape especially in the south central areas.</p> <p>Potential for Cumulative Impact Forms a group with WeG8, WeG9/ GTLAA05 NB. WeG9/GTLAA failed Stage 1 of the HELAA</p>	<p>Existing South Way A Road (Strong)</p> <p>Proposed: Established tree belt/hedgerow with minor gaps (moderate) Fragmented hedgerow (weak)</p> <p>Conclusion: The proposed new Green Belt boundaries consisting of established tree belts/hedgerows and a fragmented hedgerow would be weaker than the existing boundary.</p> <p>Fragile Gap: The site lies between Hatfield and Welham Green. Whilst the gap between them has to a degree been compromised by Travellers Lane Industrial Estate, the area of land which Hat11 sits within constitutes a significant area of open land between the two settlements which serves as a gap between them. Development of this site would significantly reduce this gap.</p>	<p>Significant positives (++) Total: 7 4.2 Reduction of greenhouse gas emissions from transport; and 4.3: helping to avoid/reduce air pollution: Site is within walking distance of an Employment Area. It is within 400m of eight bus stops.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 3 4.4: Protection/enhancement of open space and landscape character, retaining local distinctiveness: Site has high landscape sensitivity. The WHBC Green Belt Review indicates the site contributes significantly to maintaining settlement pattern. Mitigation: The scale, layout and design of development should seek to reduce significant effects on landscape character and settlement pattern/ local distinctiveness.</p> <p>4.6: Protection/enhancement of biodiversity and geodiversity: Site is adjacent to a Local Wildlife Site and within 250m of another. Mitigation: Development of site should conform to Local Plan policies in relation to the protection/enhancement of biodiversity and good design.</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1</p>	<p>Advantages: Presents one of few opportunities available to make provision of additional employment land to support jobs growth.</p> <p>Disadvantages: None</p>
Summary	<ul style="list-style-type: none"> HELAA: Delivery is estimated to be 0-10 years and potentially within 0-5 years. This is attributed moderate weight in favour of the site. GB Study: Site makes a significant contribution to one national Green Belt purpose and to the local purpose, and has high level of physical and visual openness. This is attributed moderate weight against the site. GB Boundary: New Green Belt boundaries would be predominantly weaker than the existing boundaries, but would be clearly defined. This is attributed moderate weight against the site. The steeply sloping embankment rising up on the southern side of South Way also creates a very strong visual and perceptual barrier between South Hatfield and the land north of Welham Green. The site resides between Hatfield and Welham Green. Whilst the gap between them has to a degree been compromised by Travellers Lane Industrial Estate, the area of land which Hat11 sits within constitutes a significant area of open land between the two settlements which serves as a gap between them. Extending the green belt boundaries as proposed would encroach into this gap. This is attributed significant weight against the site. SA: The site is a location accessible to public transport and an Employment Area, although this would require improvements to pedestrian links. Potential impact on ecology, although this is capable of mitigation, as noted in the HELAA. Therefore, this is attributed moderate weight in favour of the site. Strategic advantage: Presents one of few opportunities to make provision of employment land in the borough, although the exact quantum if unknown and likely to be relatively small in scale. This is attributed moderate weight in favour of the site. <p>On balance, whilst the site could provide employment floor space which would be an additional benefit over and above the benefits of Scenario 1 for this site, this is not considered to outweigh the weakening of a strong Green Belt boundary and developing land beyond South Way, which is a very strong visual and physical barrier between Hatfield and the site/land beyond South Way, and the adverse impacts upon the purposes of the Green Belt. The site should not be considered for allocation alongside other Hatfield sites.</p>					

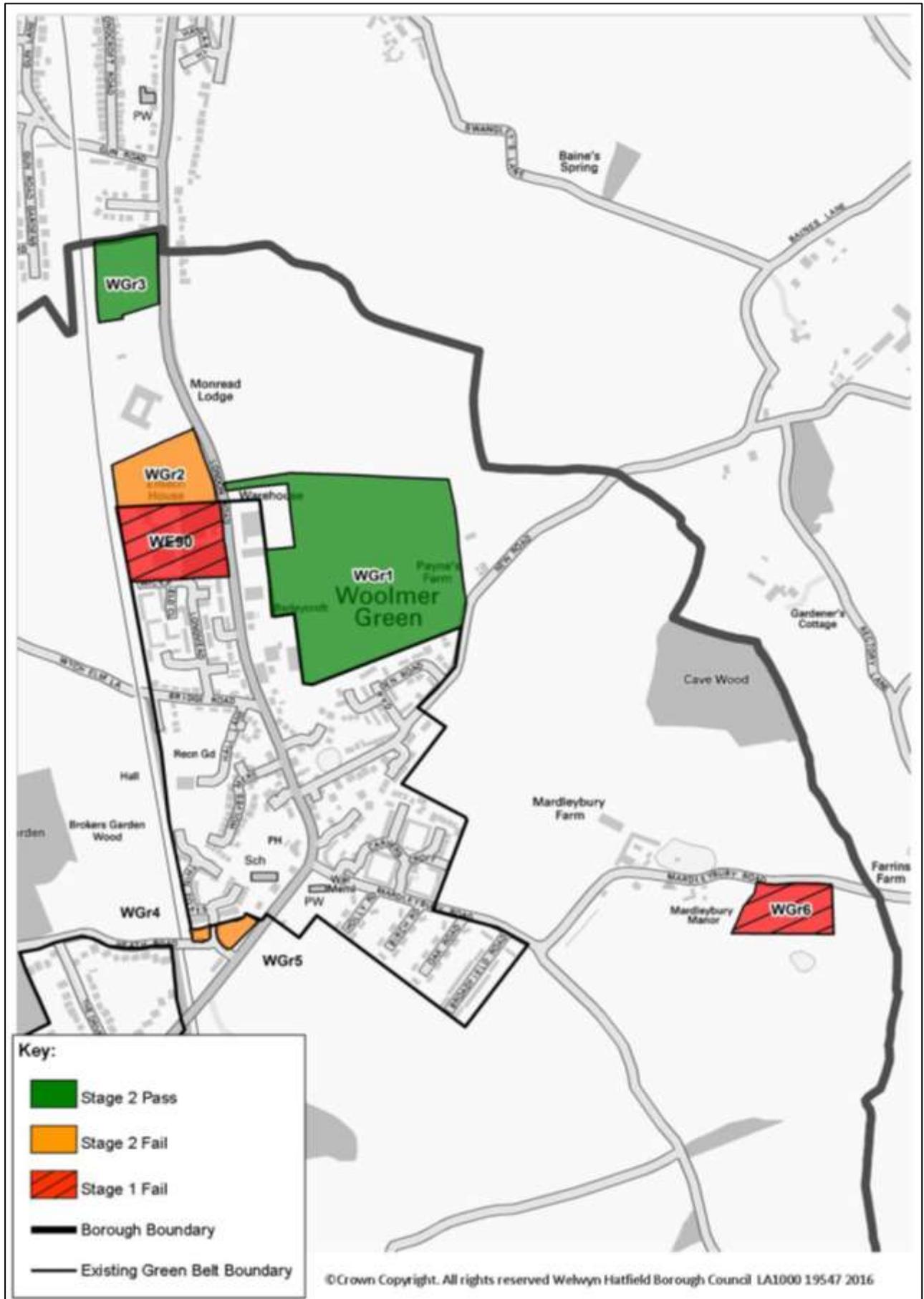
Appendix C

Woolmer Green Employment Sites - Maps and Background Tables

The map on the following page illustrates all of the sites considered within the HELAA.

For the purposes of this Sites Selection Background Paper, only sites that passed the Stage 2 HELAA Assessment have been considered.

Woolmer Green HELAA Results Map



Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
WGr1	<p>Urban/Green Belt: Green Belt</p> <p>PDL/Greenfield: Greenfield</p> <p>Achievable: Yes</p> <p>Estimated capacity: 150 dwellings</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> • Within 30m of a Grade II Listed building (Payne's farmhouse), but should be possible to develop the site without causing unacceptable harm to the significance of the farmhouse. Proposed landscape buffer to mitigate impact. • Not in an ASS but moderate potential for pre-historic remains and low to medium potential for medieval and post – medieval remains. • Layout would need to ensure satisfactory residential environment for future occupants addressing potential noise impact from adjoining industrial uses. • Waste water upgrades <p>Delivery timescales: 0-5/6-10 years</p>	<p>Contribution to National Purposes:</p> <p>Significant in safeguarding the countryside from encroachment, forms part of the wider countryside.</p> <p>Partial for checking unrestricted sprawl of large built up areas of Stevenage.</p> <p>Partial in preventing neighbouring towns from merging. Has a impact on the gap to Knebworth and contributes to the gap between Welwyn Garden City and Stevenage, also contributes to the visual perception of the gap but this is limited due to the overall scale of the gap</p> <p>Contribution to Local Purpose: Partially reduces the visual perception of the separation of settlements between Woolmer Green and Knebworth.</p> <p>Physical and visual openness: Physical and Visual openness is High Generally open with views to the surrounding landscape.</p> <p>Potential for Cumulative Impact The site is connected to Woolmer Green and forms a group with WGr2 and WGr3</p>	<p>Existing: The existing green belt boundary comprises of the settlement boundary and is strong.</p> <p>Proposed: There would be no definable physical boundary to the north, where the boundary would go across an open field. (Weak).</p> <p>To the east, the boundary would consist of an established hedgerow, alongside a private access track. (Moderate).</p> <p>Development would be constrained to the southern part of the site to form a landscape buffer to the north; this is to allow for the provision of a strategic landscape buffer to the north of the site below the ridge of the gently rising landform, to offset the impact of the development on the wider landscape. As a result the proposed new boundary would align well with the existing settlement boundary.</p>	<p>Significant positives (++) Total: 7 4.2: Reduction of greenhouse gas emissions from transport; and 4.3: helping to avoid/reduce air pollution: Site is within walking distance of two Employment Areas. It is within 400m of five bus stops.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 1 4.5: Conservation/enhancement of the borough's character, historic environment, and heritage/cultural assets: Site is adjacent to a Listed Building and between 250m-1km of another four. Mitigation: Conservation and enhancement in conformity with Local Plan policies</p>	<p>Sequential Test result: Pass – Site is within Flood Zone 1</p> <p>Surface water flow route runs north-south in the eastern area of the site, and ponds in the southern corner of the site. A sequential approach to layout and the use of sustainable drainage systems (SuDS) could be used to suitably manage surface water flood risk to, within and from the site.</p>	<p>Advantages: Site would on its own meet almost all of the proportionate need for housing in Woolmer Green. Potential exists to provide a farm shop which would provide a convenience shop for the village and increase its sustainability.</p> <p>Disadvantages: No strategic disadvantages.</p>
Summary	<p>HELAA: Deliverable within 0-10 years. (Moderate in favour)</p> <p>GB Study: Significant for one national purpose – safeguarding the countryside from encroachment. Partial for two other national purposes, preventing neighboring towns from merging and checking unrestricted sprawl. Forms a group with WGr2 and WGr3. (Moderate against).</p> <p>Green Belt Boundary: Proposed Green Belt boundary would be predominately weaker than existing and only clearly defined to the east (moderate weight against). Development of this site would marginally reduce the existing fragile gap between Woolmer Green and Knebworth. Impact would be minimized if northern edge of site was aligned with the existing northern edge of the settlement (and allowed for the need to achieve access). (minor against)</p> <p>Sustainability Appraisal: More than three times as many double positives than negatives (significant in favour).</p> <p>Flood Risk: Passes the sequential test</p> <p>Strategic Advantages/Disadvantages: Development would provide a small farm shop, which would provide a convenience shop for the village, which lacks this facility. (minor in favour)</p> <p>Conclusion: Potential adverse impacts on heritage assets can be overcome by suitable mitigation measures, as can potential impacts on residential amenity from noise arising from adjoining employment uses. On balance, the site's benefits are considered to outweigh the adverse impacts on the purposes of the Green Belt, which could be minimized by reducing the northern extent of the site to align with the northern edge of the existing settlement boundary and allow for access.</p> <p>The site should be considered for allocation</p>					
Policy implication	<p>Business units are not supported in principle as no further allocation of employment land is considered necessary in Woolmer Green. There is no convenience shop in Woolmer Green, so the provision of a small farm shop with ancillary café of no more than 280m2 is supported in principle to improve sustainability of the village and the farm enterprise. If the site is allocated for housing - the Green Belt boundary will need to be amended. However, other than allowing for access, the northern edge of the site should align with the northern edge of the existing settlement boundary in order to minimize the impact on this fragile gap.</p>					

Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential and Exception Test	Strategic advantages and disadvantages
WGr2 (emp)	<p>Green Belt/Urban Green Belt</p> <p>PDL/Greenfield: Greenfield</p> <p>Achievable: Yes</p> <p>Estimated capacity: 6,000m² to 11,250m² of employment floorspace, depending on precise mix of uses</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> Proximity of the railway and London Road (B197) mean that noise could be an issue for certain B class uses Possible contamination issues will need investigation and may need remediation Retention of trees could help preserve local ecology Waste water upgrades <p>Delivery timescales: 0-5/6-10 years</p>	<p>Contribution to National Purposes: Significant for safeguarding the countryside from development</p> <p>Contribution to Local Purpose: Significant Site contributes to the gap between Woolmer Green and Knebworth and contributes to the visual perception of the gap to the west of London Rd</p> <p>Physical and visual openness: Physical openness high, Visual Openness mixed enclosed by London road, edge of Woolmer Green, and railway embankment</p> <p>Potential for Cumulative Impact Connected to Woolmer Green and forms a group with WGr1 and WGr3</p>	<p>Boundary Conclusion</p> <p>Existing: Mixture of tree belt/hedgerow and fencing to southern boundary with Woolmer Green. (Moderate)</p> <p>New: Fragmented tree belt, forming the property boundary to Monread Lodge, but clearly defined. (Moderate/weak)</p> <p>General note: The site is located within the fragile gap between Woolmer Green and Knebworth, which is separated by less than 600m. Monread Lodge, a residential home, already introduces built development into this fragile gap.</p> <p>Proposed amended boundary will significantly reduce further the already fragile gap between Woolmer Green and Knebworth.</p>	<p>Significant positives (++) Total: 5 4.2: Reduction of greenhouse gas emissions from transport; and 4.3: helping to avoid/reduce air pollution: Site is within walking distance of a settlement. Within 400m of 2 bus stops.</p> <p>6.1: Ensuring the supply, location and quality of business/employment sites reflects the needs of local businesses and encourages a mixed economy: Site could provide 11,250 sqm of employment space.</p> <p>Significant negatives (--) Total: 1 4.4: Protection/enhancement of open space and landscape character, retaining local distinctiveness: The WHBC Green Belt Review indicates the site contributes significantly to maintaining settlement pattern. Mitigation: The scale, layout and design of development should seek to reduce significant effects on settlement pattern and local distinctiveness.</p>	<p>Sequential Test result: Pass - Site is within Flood Zone 1</p> <p>Surface water ponds in the centre of the site. The layout, design and the use of sustainable drainage systems (SuDS) could be used to suitably manage surface water flood risk to, within and from the site.</p>	<p>Advantages: None</p> <p>Disadvantages: None</p>
Summary	<p>HELAA: Deliverable within 0-10 years (moderate in favour)</p> <p>GB Study: Site makes a significant contribution to national green belt purpose of safeguarding the countryside from development. It also makes a significant contribution to the local purpose, by contributing significantly to the gap between Woolmer Green and Knebworth (moderate against).</p> <p>Green Belt Boundary: The amended Green Belt boundary would significantly reduce the fragile gap between the two settlements, which are separated by less than 600m (moderate weight against). The new Green Belt boundary would be partially weaker, but clearly defined (minor against)</p> <p>Sustainability Appraisal: More than three times double positives as negatives (significant in favour).</p> <p>Flood Risk: Site passes the sequential test.</p> <p>No strategic advantages/disadvantages</p> <p>Conclusion: Development of this site would significantly reduce the already fragile gap between settlements, resulting in a significant negative impact on settlement pattern and local distinctiveness. New Green Belt boundary would be weaker than existing. On balance, the significant harm to the Green Belt outweighs the benefits of the site. This site should NOT be considered for allocation.</p>					
Policy implication	No change to green belt boundary					

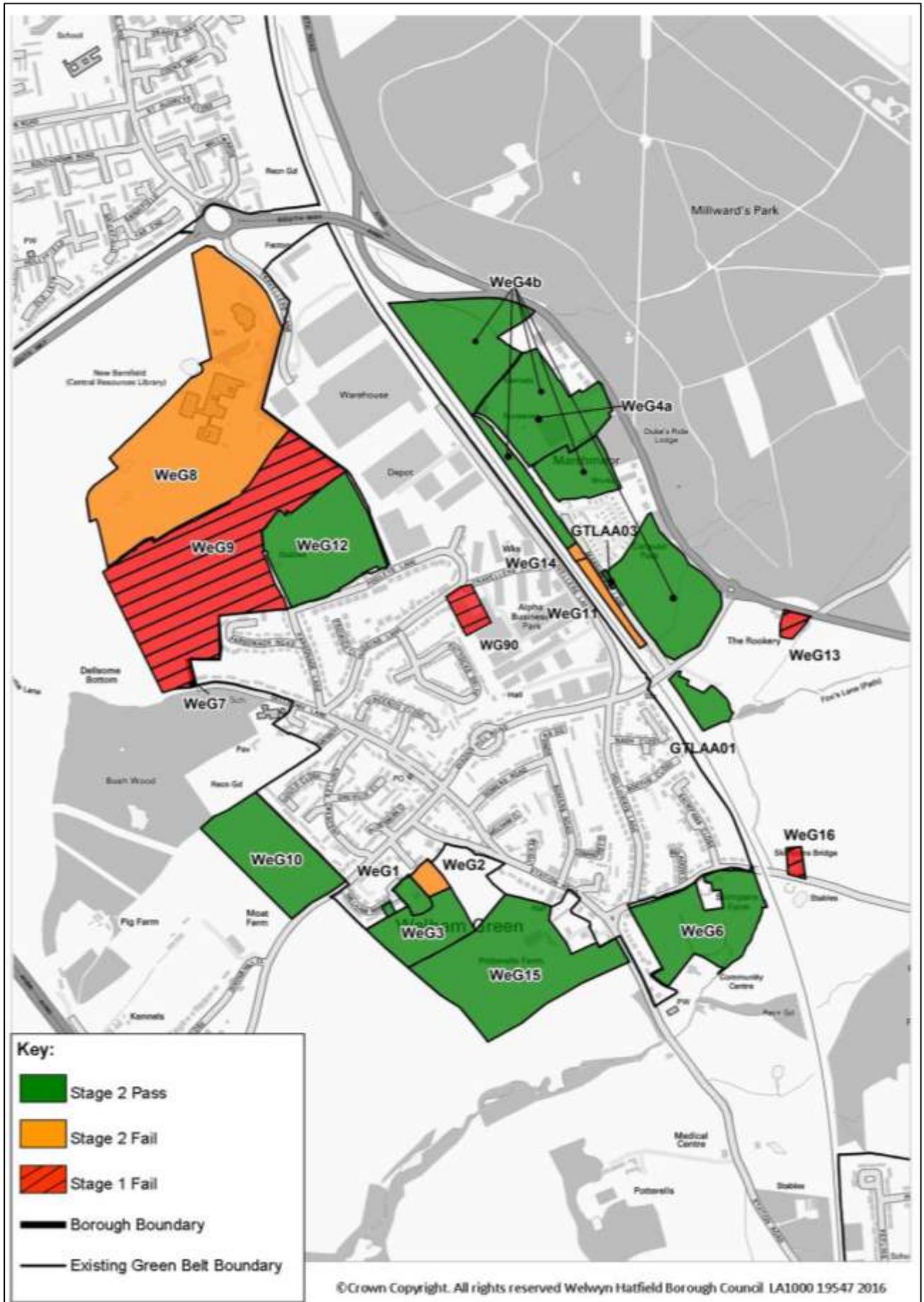
Appendix D

Welham Green Employment Sites - Maps and Background Tables

The map on the following page illustrates all of the sites considered within the HELAA.

For the purposes of this Sites Selection Background Paper, only sites that passed the Stage 2 HELAA Assessment have been considered.

Welham Green HELAA Results Map



Site ref	Housing & Employment Land Availability Assessment	Green Belt Study Review (Parts 1 and 2)	Green Belt Boundary Appraisal	Sustainability Appraisal	Flood Risk Sequential Test	Strategic advantages and disadvantages
WeG4b	<p>Urban/Green Belt: Green Belt</p> <p>PDL/Greenfield: Part PDL</p> <p>Achievable: Yes</p> <p>Estimated capacity: 40,500m² of B1 class 80 dwellings (area 5)</p> <p>Impacts/constraints requiring mitigation:</p> <ul style="list-style-type: none"> • Flood risk sequential approach to layout and surface water management • Improve pedestrian access across railway to and from Welham Green • Mitigate air and noise pollution from A1000 and railway • Buffer wildlife sites • Mitigate ecological impacts • Mitigate impact on Hatfield Park HPG • Mitigate potential impact on Water End SSSI • Mitigate impact on amenity of existing residential properties • Easement for public right of way • Wastewater infrastructure upgrades <p>Delivery timescales: 0-10 years</p>	<p>Contribution to National Purposes: Significant in safeguarding the countryside from encroachment</p> <p>Contribution to Local Purpose: Partial contributes to the gap from Hatfield to Welham Green and Brookmans Park makes a limited contribution to the visual perception of the gap.</p> <p>Physical and visual openness: Physical Openness High no development on site. Visual Openness Low enclosed by vegetation.</p> <p>Potential for Cumulative Impact Not connected to Welham Green Forms a group with WeG4a, and GTLAA03</p>	<p>Existing: Western edge of the railway line (Strong)</p> <p>Proposed: The site itself is bounded by the A1000 (strong), an ordinary watercourse (moderate), a number of property boundaries (moderate) and Dixons Hill Road, C Road (moderate). However, a wider area of land containing a number of residential properties and a mobile home site could be taken out of the Green Belt to create a more logical, clearly defined and defensible boundary. This would begin with the ordinary watercourse (moderate), property boundaries of the Cravenia property, the A1000 (strong) running broadly southeast, and Dixons Hill Road C Road (moderate) running from the junction with the A1000 to the railway line</p> <p>Conclusion: The proposed new Green Belt boundaries would be partially weaker than the existing boundaries, but could form clearly defined and defensible boundaries.</p> <p>(NB: WeG4a forms a parcel within WeG4b and is therefore considered here within the wider context of WeG4b)</p>	<p>Significant positives (++) Total: 7</p> <p>4.2: Reduction of greenhouse gas emissions from transport; and</p> <p>4.3: helping to avoid/reduce air pollution: Site is within walking distance of two Employment/Residential Areas and Welham Green Railway Station. It is within 400m of several bus stops.</p> <p>5.1: Provision of the right amount, type and tenure of housing to meet identified local needs: Site could deliver affordable housing and make provision for Lifetime Homes.</p> <p>6.1 Ensuring the supply, location and quality of employment/business sites reflects the need of local business and encourages a mixed economy: Site could provide 5% or more of required employment floor space in the borough</p> <p>6.6: Provision of training, skills development and lifelong learning: Site is within walking distance of education establishments.</p> <p>Significant negatives (--) Total: 2</p> <p>4.5: Conservation/enhancement of the borough's character, historic environment, and heritage/cultural assets: Site is adjacent to a Historic Park and Garden, although potential to improve the setting. Mitigation: Development of site should conform to Local Plan policies related to the protection of heritage assets and good design.</p> <p>4.6: Protection/enhancement of biodiversity and geodiversity: A Local Wildlife site is within the boundary of the site, and another is within 250m. Mitigation: Development of site should conform to Local Plan policies related to the protection/enhancement of biodiversity and good design.</p>	<p>Sequential Test result: Pass – 93.7% of the site falls within Flood Zone 1, with the remainder falling within Flood zones 2 and 3a/b. An ordinary watercourse also runs through the southern area of the site which may present a further fluvial flood risk; however, it was not possible to model it in the SFRA. A sequential approach to layout that restricts development to Flood Zone 1 within the site is feasible. Therefore, the site passes the Sequential Test and the Exception Test does not need to be applied at this stage.</p> <p>The southern area of the site is subject to significant surface water flood risk, with approximately 10% of the site affected by the 1 in 100 year extent. A sequential approach to layout and the use of sustainable drainage systems (SuDS) could be used to suitably manage surface water flood risk to, within and from the site.</p>	<p>Advantages: None</p> <p>Disadvantages: None</p>
Summary	<ul style="list-style-type: none"> • HELAA: The site could come forward within the first ten years of the plan period, potentially within the first five years. This is attributed moderate weight in favour of the site. • GB Study: Site makes a significant contribution to one national Green Belt purpose, and partial contribution to the local purpose, and has a high degree of openness. However, it must be noted that this assessment relates only to the southern area of the site (denoted as Area 4 within the HELAA). The remainder of the site constitutes areas of development (residential and commercial) as well as open countryside, with a large part of this area (Area 5: WeG4a) only making a limited or partial contribution to all purposes. Therefore, this is attributed only minor weight against the site (WeG4b). • GB Boundary: Boundaries would be partially weaker than the existing boundary, but could form clearly defined and defensible boundaries. This is attributed minor in favour of the site. • SA: The site has more than three times as many significant positives as significant negatives. This is attributed significant weight in favour of the site. • Flood Risk: Restricting development to Flood Zone 1 is feasible – site passes the sequential test. • Development of the site presents one of very few opportunities to make provision for employment land to meet the borough's needs for economic growth. This is attributed significant weight in favour of the site. • Strategic Advantages/Disadvantages: Significant opportunity to make provision for employment land to support jobs growth significant weight in favour. <p>On balance, the provision of much needed employment land and its other benefits are considered to outweigh the adverse impacts on the Green Belt. The site should be considered for allocation alongside other Welham Green sites, and other sites being promoted for employment land uses.</p>					
Policy implication	<p>If the site is allocated, the following would be required - amend Green Belt boundaries to align with those described above.</p>					