

Bioregional's response to application 21/04275/OUT – Part OS Parcel 8149 Adj Lords Lane And SE Of Hawkwell Farm Lords Lane Bicester

Application description: OUTLINE - with all matters reserved except for Access - Mixed Use Development of up to 3,100 dwellings (including extra care); residential and care accommodation(C2); mixed use local centre (comprising commercial, business and service uses, residential uses, C2 uses, local community uses (F2(a) and F2(b)), hot food takeaways, public house, wine bar); employment area (B2, B8, E(g)); learning and non-residential institutions (Class F1) including primary school (plus land to allow extension of existing Gagle Brook primary school); green Infrastructure including formal (including playing fields) and informal open space, allotments, landscape, biodiversity and amenity space; burial ground; play space (including Neaps/Leaps/MUGA); changing facilities; ground mounted photovoltaic arrays; sustainable drainage systems; movement network comprising new highway, cycle and pedestrian routes and access from highway network; car parking; infrastructure (including utilities); engineering works (including ground modelling); demolition

Bioregional have assessed a range of documents submitted with the application 21/04275/OUT against Policy Bicester 1 (North West Bicester Eco-Town) and Policies ESD 1-5 from the adopted Cherwell District Council Local Plan 2011-2031. A full table is provided below.

We would like to note that the red line boundary of the site does not wholly fall within the North West Bicester Eco-Town site allocation and the agreed masterplan from 2014 for the NW Bicester Eco Town. The Design and Access Statement (Hallam Land Management, December 2021) states that the "substantial majority" of the site is within the allocated land, therefore, we have applied this policy.

Key: Comments in a Red box – significant information outstanding; Amber box – some information outstanding, Green box – sufficient information provided.

Summary:

In general, some sustainability elements have been addressed to an appropriate level of detail in the documentation provided. Key items we believe to be outstanding include: Water Cycle Study; demonstration of net biodiversity gain; demonstration of residential water efficiency proposals; proposed overheating analysis details; waste management strategy; and sustainability credentials including BREEAM for non-residential spaces and standards equivalent to Code for Sustainable Homes Level 5. Where relevant, we have noted that some issues will need to be fully reviewed by other technical consultants.



For energy issues, we believe insufficient information has been provided. We would strongly recommend that the energy strategy documentation is revisited in order to demonstrate how the policy definition of net zero carbon has been met by this application, including calculations of emissions from the development, and how improvements against the baseline including passive design measures and the inclusion of renewable energy technologies has been calculated.

Response:

Policy Bicester 1 (North West Bicester Eco-Town)	Evidence/response	Reference	Compliance and next step
Has evidence been provided to confirm the Zero Carbon definition has been met?	Insufficient information has been provided for true zero carbon. A fabric first approach and Future Homes Standard standards are proposed. ASHPs are proposed for the dwellings. A solar farm is proposed – but will this provide energy for residential and non-residential spaces? The energy strategy for the non-residential is not clear.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	It is not clear in the supporting Energy Strategy (Appendix 13.1) how the zero-carbon definition proposed for this application meets the requirements of Policy BIC 1. The policy documentation is clear that development in NWB should be a zero-carbon development. This definition is based on all carbon emissions from all energy uses within buildings to be as a whole net zero or below over a one-year period. This includes both regulated and unregulated emissions. From the energy statement it is not clear if this definition of zero carbon has been considered. For example, have the unregulated emissions been included? Whilst there is mention of Zero Carbon within the planning documentation (notably in the DAS and Energy Statement) – however the



Energy Statement does not go into the detail of the of how this would be achieved. Whilst we acknowledge that this is due to the outline nature of the application, we do not believe that sufficient information has been provided for this issue. However, we would expect to see an indicative carbon balance to be presented that provides reassurance on the zero-carbon target to be met, this should include: Baseline carbon emissions for the development (based on indicative scheme) Proposed breakdown of compliance as per the energy hierarchy We would expect to see a commitment to build to certain fabric efficiency e.g. in line with the FHS consultation or beyond e.g. Energy Use intensity targets as per LETI guidelines – currently this is not clear. We would expect to see how the level of renewable energy that could be generated on site by the solar farm can contribute to the zero-carbon target. We would also expect to see further clarity around the topic of carbon offsetting. Whilst the provided energy statement does mention offsetting it is not clear what extent of offsetting would be required.



Employment			
Land Area	It is stated in the Planning Statement that	Hawkwell Village	Employment space in a local centre hub is
A minimum of 10 ha, comprising business premises	the total site is on 177 hectares of	Planning	proposed and the development includes an
focused at Howes Lane and Middleton Stoney Road,	agricultural land.	Statement, David	appropriate mix of use classes. See further
employment space in the local centre hubs and as part of		Lock Associates,	comments below on use classes.
mixed use development		December 2021	
Jobs Created	An employment area of 0.70hectares	Planning	The supporting planning statement indicates
At least 3,000 jobs (approximately 1,000 jobs on B use class	accommodating use classes E (g), B2 and	Statement, David	an employment area with a mix of use classes.
land on the site) within the plan period.	B8 is also proposed. Within the	Lock Associates,	We would recommend that the total number
	mixed use area and the employment	December 2021	of proposed jobs that this application would
It is anticipated that the business park at the South East	area, permission is sought for some 9,000		provide should be included in the planning
corner of the allocation will generate between 700 and	sq. metres of retail commercial and		statement/economic strategy.
1,000 jobs in use classes B1, B2 and B8 early in the Plan	community uses comprising:		
period	• "up to 2,490 sq. m (GEA) of commercial		We would suggest further detail of number of
	uses within Classes E(a) retail; E(b) food		jobs created by this application, and this
	and drink; E9(c) services and the		should be incorporated within an economic
	following sui generis uses hot food		strategy, this should be linked to other built
	takeaways, public house, wine bar";		and proposed applications to show how the
	• "up to 3,750 sq. m (GEA) employment		target of 3000 jobs can be achieved.
	uses with Use Classed E(g), B2 and B8"		
	Community uses, nurseries etc within		
	the use classes described above;		
	Residential uses as part of a mixed use		
	scheme within the mixed use area.		
Use classes	The provision of up to 2,490sqm (GEA) of	Planning	B1 Office is now E(g) use class. Up to 3,750 sq.
B1, with limited B2 and B8 uses	commercial uses within Classes E (a)	Statement, David	m (GEA) employment uses with E(g), B2 and
	retail; E(b) food and drink; E9(c) services	Lock Associates,	B8 use classes are proposed.
	and sui generis uses hot food takeaways,	December 2021	
	public house, wine bar will generate		
	spend and jobs.		
A Carbon Management Plan shall be produced to support	No information provided.	N/A	No information provided.
all applications for employment developments			



An economic strategy to be produced to support the planning applications for eco-town proposals demonstrating how access to work will be achieved and to deliver a minimum of one employment opportunity per new dwelling that is easily reached by walking, cycling and/or public transport	No information provided	N/A	No economic strategy could be located with the application
Mixed use local centre hubs to include employment (B1(a), A1, A2, A3, A4, A5, C1, D1 and D2)	It is confirmed in the Planning Statement that "A mixed use local centre is identified to the south of the site extending to 1.5 hectares accommodating commercial, business and service uses, within Classes E (a) retail; E (b) food and drink; E (c) services, the following sui generis uses; hot food takeaways, public house, wine bar, and local community uses (F2 (a) and F2 (b). An employment area of 0.70 hectares accommodating use classes E (g), B2 and B8 is also proposed. Within the mixed use area and the employment area, permission is sought for some 9,000 sq. metres of retail commercial and community uses comprising: • 'up to 2,490 sq. m (GEA) of commercial uses within Classes E(a) retail; E(b) food and drink; E9(c) services and the following sui generis uses hot food takeaways, public house, wine bar'; • 'up to 3,750 sq. m (GEA) employment uses with Use Classed E(g), B2 and B8'		 B1a (now Class Eg) – offices A1 (now Ea) - retail A2 (now Ec) - services A4 (now Eb) – public houses, wine bar A5 (now Eb) – hot food takeaway D1 (now Ef) – non-residential institutions (eg: nursery, health centre) It is not clear if the following is provided: A3 (now Ec) – restaurants, cafes? C1 (now Ed / F2 / sui generis) – hotels? D2 assembly and leisure? The extent of provision of each and whether this is sufficient/appropriate should be reviewed by others.



	 Community uses, nurseries etc within the use classes described above; Residential uses as part of a mixed use scheme within the mixed use area". 		
New non-residential buildings will be BREEAM Very Good with the capability of achieving BREEAM Excellent.	No information provided.	N/A	No detail of BREEAM standard can be found in supporting documents. We would recommend that a precommencement condition is set requesting that a BREEAM Design Stage assessment is provided, and a condition for post completion requests a BREEAM Post Construction certificate within 6 months of completion. The Sustainability Statement states that there is a document titled "ESS0274-BREEAM NC 2018 Pre-Assessment-20210827" which confirms the score for the proposed development, however this has not been
			provided.
Housing			
Number of homes – Up to 6,000 (3,293 to be delivered within the plan period)	The proposals include: 3,100 homes; a mixed-use local centre; a school site (with playing field extension to existing Gagle Brook Primary School); green space for sports, recreation, play area and a country park; allotments and community farm; burial ground; 4 LEAPs, 2 NEAPs and a MUGA; employment/business use area; retention and	Planning Statement, David Lock Associates, December 2021	The tenure breakdown could be provided to confirm estimated numbers of affordable, extra care and private homes. Final number of homes to be assessed by others.



	enhancement of hedgerows; green corridor and a primary street.		
Affordable Housing – 30%	The Planning Statement states that "up to 30% affordable housing" is proposed.	Planning Statement, David Lock Associates, December 2021	The Planning Statement does not confirm that the 30% target will be met as a minimum, as it states that "up to 30%" will be provided. Other consultees will provide more detailed comments e.g. CDC strategic housing team
Layout to achieve Building for Life 12 and Lifetime Homes standards	No information provided in the DAS or Planning Statement.	Planning Statement, David Lock Associates, December 2021	No mention of these standards. Considering the time of the policy writing we would suggest the use of Lifetime Homes could be conditioned.
Homes to be constructed to be capable of achieving a minimum of Level 5 of the Code for Sustainable Homes on completion of each phase of development, including being equipped to meet the water consumption requirement of Code Level 5	No mention of water consumption targets in the Energy Statement or the Water Resources section of the ES.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	We would recommend a condition is set to provide evidence to demonstrate the targets (litres/person/day) are set for flow rates/volumes in both residential and non-residential spaces. We would also recommend a condition is set to demonstrate these are achieved at completion.
The provision of extra care housing	No confirmation of number of extra care units proposed.	Planning Statement, David Lock Associates, December 2021	Extra Case Housing is mentioned to be provided. We are not placed to comment on this, but insight is needed on the demand for this provision or if alternative supported or affordable housing should be sought?
Have real time energy monitoring systems, real time public transport information and Superfast Broadband access, including next generation broadband where possible. Consideration should also be given to digital access to support assisted living and smart energy management systems	No information provided.	Planning Statement, David Lock Associates, December 2021 Energy Statement, Brookbanks	Confirmation of water and electricity metering, dedicated energy monitoring and performance platforms, public transport information boards, broadband access and other tenant IT infrastructure should be provided.



		Consulting Limited, no date, Revision 5	
Infrastructure needs		1110 0000) 11011010110	
Education – Sufficient secondary, primary and nursery school provision on site to meet projected needs. It is expected that four 2 Forms of Entry primary schools and one secondary school will be required. There should be a maximum walking distance of 800 metres from homes to the nearest primary school.	A site totalling 2.22 hectares is identified to accommodate a new 2FE primary school and a site of 0.88ha is shown as primary school playing field to serve as a future expansion for Gagle Brook primary school in the Exemplar development. Land for a secondary school is set aside within application 14/01641/OUT to serve the wider NE Bicester development. The secondary school is understood to be intended to deliver 8 forms of entry.	Planning Statement	Compliance to be assessed by others on the education requirements for this site.
Health – to provide for a 7 GP surgery to the south of the site and a dental surgery	N/a	N/a	We would welcome information on how residents can access new health facilities planned across the town – full compliance with this issue to be assessed by others.
Burial Ground – to provide a site of a minimum of 4 ha for a burial ground which does not pose risks to water quality (this may contribute to the Green Infrastructure requirements)	In excess of 40% of the site is to be established as green infrastructure through the provision of a range of green spaces including open green space, SuDS and drainage, country park, village green, existing woodland, burial ground etc	Planning Statement, David Lock Associates, December 2021	To be assessed by others it is acknowledged that a burial ground (4ha) is proposed.
Green infrastructure—40% of the total gross site area will comprise green space of which at least half will be publicly accessible and consist of a network of well-managed, high quality green/open spaces which are linked to the open countryside. This should include sports pitches, parks and recreation areas, play spaces, allotments, the required burial ground (possibly a woodland cemetery) and SUDS	In accordance with the Local Plan Policy 40% of the site is dedicated as green and blue infrastructure which will create a network of interconnected and varied habitats that will provide a substantial framework of green space and natural features.	Numerous documents reference the 40% provided for GI, including Appendix 8E GI Strategy	The Green Infrastructure strategy states that 40% of the site will be dedicated to green infrastructure, albeit it is noted that much of this site outside the allocated site boundary. The exact quantum has not been provided, but a breakdown of key spaces has been provided.



			A condition could be set to ensure this percentage is achieve at completion.
Planning applications shall include a range of types of green space and meet the requirements of Policy BSC11.	The ES states that 40% of the total gross site will be green space and at least half of this will be publicly accessible.	ES Chapter 8: Landscape and Visual Impact,	Using a rough estimation, the proposals include 35 hectares of publicly accessible outdoor space.
BSC11 requires development proposals to contribute to open space provision for outdoor recreation and meet the Local Standards of Provision minimum standards. This is 2.43 hectares of public outdoor recreation playing space per 1,000 population (and arrangement for long term maintenance).		David Lock Associates, December 2021	Again, using a rough estimation, the Planning Statement states there will be 3100 new dwellings and so estimating that there are 2.4 no. people per dwelling, this is a total of c.7500 residents.
			35 hectares /7.5 = 4.6 ha per 1000 population The outdoor space provided meets this threshold.
			Full compliance with this issue to be assessed by others (Policy BSC11 refers to play space, outdoor space and allotments).
Access and Movement – proposals to include appropriate crossings of the railway line to provide access and integration across the North West Bicester site. Changes and improvements to Howes Lane and Lords Lane to facilitate integration of new development with the town.	Internal residential streets will be designed in accordance with Manual for Streets (MfS) guidance.	Design and Access Statement, David Lock Associates, December 2021	It is noted that the application assumes that the Strategic Link Road/A4095 diversion will be in place in 2024 and argues that there is sufficient capacity in the local road network for the development to be occupied before the SLR is open.
			We are unsure if this realigned section has been agreed and has the necessary funding to proceed. It is important that this realigned part of the A4095 is completed so traffic can be distributed from the resultant development. If this is not delivered and



	1		
			additional development and trips are generated it could cause severe congestion impact to the area and wider town of Bicester. Restrictions should be made on the development before this connection is made.
			Confirmation of suitable public transport, connectivity and integration of the site to be approved by others.
Community facilities – to include facilities for leisure, health, social care, education, retail, arts, culture, library services, indoor and outdoor sport, play and voluntary services. The local centre hubs shall provide for a mix of uses that will include retail, employment, community and residential provision. Education, health care, community and indoor sports facilities will be encouraged to locate in local centres and opportunities for co-location will be welcomed. Provision will be proportionate to the size of the community they serve. Each neighbourhood of approximately 1,000 houses to include provision for community meeting space suitable for a range of community activities including provision for older people and young people. A site of 0.5 ha for a place of worship to be reserved for future use	A mixed-use local centre will include business and commercial space, community space, hot food takeaways, a public house and a wine bar. The DAS also notes the 15-minute neighbourhood principles will be applied.	Design and Access Statement, David Lock Associates, December 2021	See above.
The submission of proposals to support the setting up and operation of a financially viable Local Management Organisation by the new community to allow locally based long term ownership and management of facilities in perpetuity	The Statement of Community Involvement confirms the approach to and future community engagement.	Statement of Community Involvement, David Lock Associates, December 2021	The proposal do not have any mention of a community or local management organisation which should have a wide remit on the ownership structures and governance for the site.
			The LMO's role should assist in ensuring high sustainability standards are maintained, a



Utilities - Utilities and infrastructure which allow for zero carbon and water neutrality on the site and the consideration of sourcing waste heat from the Ardley Energy recovery facility. The approach shall be set out in an	Thames Water states that the current proposals indicate "that surface water will not be discharged to the public network" and that this is acceptable.	ES Chapter 11: Water Resources, David Lock Associates,	high-level of community engagement and monitoring of sustainability metrics. We also note concerns over engagement. It is unclear on the range of stakeholder engagement undertaken and how responses have been used to influence the design development No Water Cycle Study has been provided. We would recommend that it is in order to demonstrate policy compliance.
Energy Strategy and a Water Cycle Study. The Water Cycle Study shall cover water efficiency and demand management, water quality and how it will be protected and improved, WFD compliance, surface water management to avoid increasing flood risk and water services infrastructure improvement requirements and their delivery, having regard to the Environment Agency's guidance on Water Cycle Studies. Zero Carbon (see PPS definition) water neutral development is sought. Development proposals will demonstrate how these requirements will be met.	They also confirm that foul water network infrastructure can "accommodate the needs of this development proposal". A Water Cycle Study confirming that zero carbon water neutral development is proposed has not been provided.	December 2021	
Waste Infrastructure – The provision of facilities to reduce waste to include at least 1 bring site per 1,000 dwellings positioned in accessible locations. Provision for sustainable management of waste both during construction and in occupation shall be provided. A waste strategy with targets above national standards and which facilitates waste reduction shall accompany planning applications	No information provided.	Planning Statement, David Lock Associates, December 2021	An operational waste strategy with targets and confirmation of waste storage locations should be provided.
Monitoring			
Embodied impacts of construction to be monitored,	Environmental Protection consultation	ES Chapter 13	Whilst a CEMP is mentioned in the ES, this is a
managed and minimised (ET21)	feedback stated that a Construction	Climate Change	standard request to control development and



Sustainability metrics, including those on zero carbon, transport, water and waste to be agreed and monitored for learning, good governance and dissemination (ET22).	Environment Management Plan should be created to minimise and mitigate noise impacts from construction. The effects of construction are noted to be vehicular traffic, site preparation works, land clearance, and construction impacts on biodiversity and water and energy generation on site. They are all deemed to be of minor to moderate significance. The CEMP will be updated and reviewed throughout the construction phase in order to reflect current and emerging legislation throughout the build cycle. It has not been confirmed that BREEAM assessments of the non-residential spaces will achieve a Very Good rating (as a minimum, and that it may be possible to achieve an Excellent rating).	and Sustainability, David Lock Associates, December 2021 Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	doesn't cover embodied carbon or construction issues. It is noted that the Council's Environmental Protection Officer has requested a CEMP and this is supported. The embodied carbon of construction and local sourcing should also be secured and monitored. We recommend that BREEAM assessment scores are provided. These will address sustainability metrics for carbon, transport, water and waste. Could metrics for learning, good governance and dissemination be outlined now to ensure sustainability for the longer term? S106 could include regular monitoring of sustainability standards.
Design and place shaping			
High quality exemplary development and design standards including zero-carbon development, Code Level 5 for dwellings at a minimum and the use of low embodied carbon in construction materials, as well as promoting the use of locally sourced materials.	It is stated in the Energy Statement that "carbon sequestering strategies shall be implemented across the proposed development to contribute to offsetting any remaining carbon emissions".	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	Whilst the Energy Statement confirms measures for reducing carbon emissions during operation of the development, the policy requirement seeks confirmation that Code Level 5 is achieved, demonstrating that



	T.,, ., ., ., ., ., .,	T	
	Allowable solutions offsite (PVs and tree	Design and Access	low embodied carbon materials and locally
	planting) are also proposed where the	Statement, Hallam	sourced materials are used. This has not been
	carbon emissions cannot be fully offset	Land Management,	confirmed.
	on site.	December 2021	
			A target could be set for sourcing materials
	It is stated in the Design and Access		within a certain number of miles from site and
	Statement that details regarding		for using recycled materials and/or modular
	approach to being a low carbon		construction for material efficiency.
	development will be "outlined further in		,
	the reserved matters application".		
	the reserved matters application.		
	Although it is stated in the Energy		
	Statement that "the abandonment of the		
	Code for Sustainable Homes (CfSH) and		
	the Zero Carbon Homes, national		
	•		
	standards are now defined largely by the		
	UK Building Regulations", it is not confirmed that the residential		
	development will utilise "low embodied		
	carbon in construction materials, as well		
	as promoting the use of locally sourced		
	materials".		
All new buildings designed to incorporate best practice on	In the ES it is stated that "in order to	Energy Statement,	We would strongly encourage a commitment
tackling overheating, taking account of the latest UKCIP	prevent overheating, a comprehensive	Brookbanks	through a condition is used to ensure analysis
climate predictions	solar master planning scheme will be	Consulting Limited,	and compliance using CIBSE TM52 and CIBSE
	implemented across the site to maximise	no date, Revision 5	TM59 is provided. Insufficient information has
	opportunities for passive heating during		been provided to confirm that measures are in
	the winter and shading and cooling		place to mitigate overheating risk. We would
	across the site during the summer		encourage that this analysis looks at future
	monthsa carefully considered green		climate scenarios (eg: 2050 climate scenario)
	infrastructure network will also aid with		to ensure any development is adapting to
	passive cooling on the urban		future changes associated with climate
	,		change.
			onangs.



	environment and minimise any urban heat island effects".		
Proposals should enable residents to easily reduce their carbon footprint to a low level and live low carbon lifestyles	Treat island effects.	Design and Access Statement, Hallam Land Management, December 2021	As a key phase of the NW Bicester eco-town it is important that walking, cycling and public transport modes of transport are easy, safer, cheaper and more convenient than by private car. Currently our view is that the application still prioritises private car usage. - Car parking could be reduced on the site with more flexible car parking spaces It isn't clear what the cycling parking numbers are, but these should be provided for every home and should be positioned to be convenient for residents to use cycling as an obvious transport choice We would welcome secure and dry cycle storage at key facilities too e.g. local centre and school. The potential for EV Bike charge should also be explored - We would welcome further detail on the opportunity for car pool/car clubs - as a substantial development there is a strong case for EV car club to be developed, learning from the e-car scheme on Elmsbrook - We haven't seen mention of a TPC -
			which would be of benefit to



			encourage residents to explore alternative modes of transport - The incorporation of a mobility hub is
			welcomed, but more detailed is required on what this will contain.
Layout of development that enables a high degree of integration and connectivity between new and existing communities	Insufficient information provided.	Design and Access Statement, Hallam Land Management, December 2021	As described below, further detail is required on how this proposed development is connected sustainably to existing developments - notably only a proposed link to Elmsbrook, no link shown to Firethorn site in addition to how the walking and cycling routes will connect through to Bure Park and then wider Bicester.
A layout that maximises the potential for walkable neighbourhoods	It is stated in the Design and Access Statement that "a new footpath/ cycleway is intended to connect Himley Village to Hawkwell Village under the railway line". The site is proposed to connect to the National Cycle Network running through south Bicester. Plans show potential proposals for: • leisure pedestrian /cycle route • commuter / pedestrian route within road corridor • commuter /pedestrian route off road	Hawkswell Village Design and Access Statement, Hallam Land Management, December 2021	The concept of walking neighbourhoods and 15-min communities is mentioned within the application, however: There are no additional cycling or pedestrian routes into the site - except for the two proposed vehicle entrances shown on the plans. Filtered permeability through the site is really important to ensure walking and cycling is a genuine alternative to private car usage. We would suggest that the proposed route through to Elmsbrook is required to enable use of the local centre It is also unclear how close homes will be to the proposed local centre or other local centres to ensure a 15 min neighbourhood concept It is not clear if the commuter routes have separated routes for pedestrians, cyclists and cars?



		1	
New footpaths and cycleways should be provided that link with existing networks, the wider urban area and community facilities with a legible hierarchy of routes to encourage sustainable modes of travel	See above commentary on sustainable travel (including footpaths and cycleways).	Hawkswell Village Design and Access Statement, Hallam Land Management, December 2021	 Looking at the street hierarchies in the DAS, it looks like on some streets the footway/cycleway will be shared which may be busy/difficult for pedestrians with wheelchairs/pushchairs, etc. It is important that cross sections of transport corridors are agreed and are of sufficient size to incorporate hedgerows and SUDS systems It is unclear within the DAS where connections from the site will connect with existing routes within Bicester. For example how walking and cycling routes will connect over the A4095 to connect to existing routes such as Banbury Road and through Bure Park. Detail needs to be provided on infrastructure upgrades to ensure safe and direct access to the centre of Bicester and key facilities. There are still concerns over the very southern parts of Banbury and Buckingham Road where there are no safe or segregated cycling routes to the town centre and BV station.
			It should also be noted that key destinations such as Tesco superstore and major planned surgery on the Graven Hill site do not have direct routes to them by bike/walking and bus.
Infrastructure to support sustainable modes of transport	Please see comments above on	Hawkswell Village	Please see comments above on permeability
will be required including enhancement of footpath and cycle path connectivity with the town centre, employment	permeability and connection.	Design and Access Statement, Hallam	and connection.



and rail stations. Measures to ensure the integration of the development with the remainder of the town including measures to address movement across Howes Lane and Lords Lane.		Land Management, December 2021	
A layout which makes provision for and prioritises non-car modes and encourages a modal shift from car use to other forms of travel.	In line with the upcoming Part S of the Building Regulations, each dwelling shall be installed with EV charging points. Car parking will be provided in a combination of garages, driveways and parking courts, with visitor parking in the street design. It has not been noted where the EV charging points will be across these options for car parking, or how these options for car parking will encourage people to use public transport or walk/cycle.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	Would request further information to confirm if a modal shift to other forms of travel will be possible. Would request to see confirmation that the electric car charging points are in a suitable location and are prioritised over car parking spaces, if possible. There is not much information provided on EV charging - we would expect every home to have an EV charging point, on the ability to have one. With this in mind, we would suggest exploring the electrical capacity for this is taken into consideration. In addition and as above in previous comments, we would request further information to confirm if measures such as car club parking spaces have been considered?
A well designed approach to the urban edge, which relates development at the periphery to its rural setting and affords good access to the countryside, minimising the impact of development when viewed from the surrounding countryside	The Development Framework Plan shows that the primary infrastructure, employment/business space and primary school are located in the south corner, nearest to Bicester. The Green infrastructure and PV array are proposed for the furthest areas of the site from Bicester.	Development Framework Plan, David Lock Associates, November 2021	Full compliance with this policy requirement is to be assessed by others. However we do note that this propose development extends beyond the existing red line for NW Bicester location. This would push the development close to the boundary of the village of Bucknell. Which could have a significant impact on the impact of the village,



			both visually but also on the rural identity of the parish. Whilst the application dies refer to GI and the PV arrays to the northern edges, closest to Bucknell significantly more investigation is required to understand the mitigation of any proposed extension beyond the 2014 masterplan.
Development that respects the landscape setting and that demonstrates enhancement, restoration or creation of wildlife corridors to achieve a net gain in biodiversity	Insufficient information provided.	Hawkswell Village Design and Access Statement, David Lock Associates, December 2021	There are mentions of biodiversity net gain within the application documents, but we could not find the DEFRA metric that would calculate the minimum 10% net gain on site. The requirement to meet net gain is mentioned in the ES but no reference to the achievement is found. We would suggest that a Biodiversity Strategy is submitted, and the net gain achievement is demonstrated prior to commencement. In addition no reference is made on the offsite mitigation for farmland bird loss. This is part of the NWB SPD whereby off-site mitigation measures should be provided.
Consideration should be given to maintaining visual separation with outlying settlements. Connections with the wider landscape should be reinforced and opportunities for recreational use of the open countryside identified. Development proposals to be accompanied and influenced by a landscape/visual and heritage impact assessment	Insufficient information provided.	Hawkswell Village Design and Access Statement, David Lock Associates, December 2021	Again, this is covered in previous sections above, but there are concerns over coalescence of the proposed development and the parish of Bucknell. The proposed development extends beyond the red-line of NWB and the 2014 masterplan.



			Further investigation is required.
Careful consideration of open space and structural planting around the site to achieve an overall improvement in the landscape and visual impact of the site	The DAS states that the site will be "accessible, permeable and legible", connecting to Bicester and the wider	Hawkswell Village Design and Access Statement, David	How will this be achieved? Could examples be provided?
	landscape.	Lock Associates, December 2021	
No development in areas of flood risk and development set back from watercourses which would provide opportunity for green buffers. Proposals should include a Flood Risk Assessment.	The majority of the site is within Flood Zone 1, and is at low risk of fluvial flooding and also from other sources such as ground water, sewer and artificial water bodies. There are areas of Flood Zones 2 and 3 adjacent to the onsite watercourses.	Hawkswell Village Design and Access Statement, Hallam Land Management, December 2021 Environmental Statement Chapter 11: Water Resources, David Lock Associates, December 2021	In the absence of mitigation, the proposed development could potentially create or exacerbate off-site flooding risks to downstream areas and have major effects on the off-site areas or land-uses. This also applies to on-site flooding. If these are not managed properly there could be a moderate adverse effect. The drainage strategy includes: swales and ponds. Will permeable paving, petrol interceptors, catchpits, flow control devices and gullies and line drains be included?
Maximisation of the sustainable transport connectivity in and around the site	The Design and Access Statement states that Bicester North Railway Station is 2.3km from the site, which is a 10 minute cycle.	Hawkswell Village Design and Access Statement, David Lock Associates, December 2021	Will there be a shuttle bus to the station perhaps from the centre of the development for people working in the commercial spaces? Not everyone can cycle?
Consideration and mitigation of any noise impacts of the railway line.	ES chapter 7 identifies and describes the nature and significance of the effects likely to arise in relation to noise and vibration as a result of the development and is also accompanied by an Outline Acoustic Assessment.	ES and Planning Statement	It is acknowledged that there will be noise relating to the railway line, and that at this outline stage the exact positioning of buildings is not known. However, we strongly urge that homes, non-residential uses and public amenity are sited away from railway line to ensure minimal noise disturbances are felt.



			Additionally, people are less likely to spend
			time for social or exercise purposes in outdoor
			spaces affected by irritating noise levels. The
			noise risk shown in the map may also increase
			the overheating risk by reducing people's
			ability to open windows at night to ventilate
			their homes.
			We would also expect any noise assessment to focus on the realigned Howes Lane and the expected increase in traffic this new development will bring.
Good accessibility to public transport services should be	The Design and Access Statement states	Hawkswell Village	The inclusion of the high-quality bus route is
provided for, including the provision of a bus route through	that existing bus route E1 runs along	Design and Access	welcome - there is some concern over homes
the site with buses stopping at the railway stations and at	Charlotte Avenue, which is within walking	Statement, David	being over the 400m distance to the bus stop
new bus stops on the site.	distance and that "the majority of	Lock Associates,	- and also how these distances are calculated -
	dwellings will be within 400 metres of a	December 2021	if they are as the crow-flies this could mean that in reality, once designed and built, routes
	bus stop" (all dwellings are within 600 metres of a bus stop).		from homes could be well over this distance
	metres of a bus stop).		which will dramatically reduce patronage of
			the bus service.
			We would suggest a more detail analysis of
			distances to bus stops and also a density plan
			that enables higher proportion of homes to be
			closest to these nodes.
Contributions to improvements to the surrounding road	It is confirmed in the DAS that Bucknell	Hawkswell Village	Are traffic calming measures on Bucknell Road
networks, including mitigation measures for the local and	Road will be realigned and traffic calming	Design and Access	sufficient? Could that shift the traffic burden
strategic highway network, consistent with the	measures will be introduced to actively	Statement, David	onto other roads?
requirement of the Eco-Towns PPS to reduce reliance on	reduce traffic numbers.	Lock Associates,	
the private car, and to achieve a high level of accessibility		December 2021	Please see other boxes for comments on the
to public transport services, improvements to facilities for	It is stated in the ES that a Travel Plan will		measures for reducing reliance on the private
pedestrians and cyclists and the provision and	be created prior to construction.		car and public transport accessibility.



implementation of a Travel Plan to maximise connectivity		Chapter 13:	
with existing development.		Climate Change,	
with existing development.		Environmental	
		Statement, David	
		Lock Associates,	
		December 2021	
Provision of a Transport Assessment.	Transport Assessment has been provided	Jubb UK Transport	TA provided – to be fully assessed by others.
	as part of the application submission	Assessment as part	
		of the	
		Environmental	
		Statement	
Measures to prevent vehicular traffic adversely affecting	Insufficient information provided.	Jubb UK Transport	This will be picked up by OCC highways team
surrounding communities.		Assessment as part	and other consultees.
		of the	
		Environmental	However, we have concerns over the impact
		Statement	that this development could bring to the
			existing road network that with an assumption
			of the SLR being built - which we are aware
			does not currently have funding/timetable for.
			The consequence of this could then result in
			high levels of congestion through existing
			parts of Bicester and nearby villages/parishes
			such as Chesterton and Bucknell.
Significant green infrastructure provision, including new	Green infrastructure proposals include	Hawkswell Village	Design and Access Statement states that a
footpaths and cycleways, enhancing green modal	recreational playing fields, allotments,	Design and Access	community farm is a potential benefit – please
accessibility beyond the site to the town centre and	amenity space, outdoor play space.	Statement, David	can it be confirmed that this will be in the
Bicester Village Railway Station, and adjoining	, , , , , , , , , , , , , , , , , , , ,	Lock Associates,	design?
developments. Public open space to form a well connected	Garden squares/village parks will include	December 2021	
network of green areas suitable for formal and informal	lawns, herbaceous and shrub planting,		
recreation	trees, informal and formal play		
	opportunities, seating, insect hotels and		
	bird boxes. A centrally located village		
	Dira sones. A certainly located village	1	



Preservation and enhancement of habitats and species on site, particularly protected species and habitats and creation and management of new habitats to achieve an overall net gain in biodiversity including the creation of a local nature reserve and linkages with existing BAP habitats	green will be accessible and visible to residents and bounded by hedgerows. The space is large enough to be used for a range of events/activities (including community sports day/fair). It is stated in the DAS that green space proposals include "creation and management of new habitats to achieve an overall net gain in biodiversity including the creation of a local nature reserve and linkages with existing Biodiversity Action Plan (BAP) habitats".	ES Chapter 9 - Hallam Land Management Hawkswell Village Design and Access Statement, David Lock Associates, December 2021	Again, as per previous sections, we have seen no sign of DEFRA metric on achieving net gain on site. Whilst ES Chapter 9 provides the effects of the proposal on the ecology and nature conservation of the site, there is no support Biodiversity Strategy that brings together how these mitigation strategies will be incorporated and designed. Whilst we acknowledge the nature of the site as intensively managed farmland, we would value detail that explores how the hedgerows and water courses will retained, protected
	Biodiversity Action Plan (BAP) habitats".	Lock Associates,	Biodiversity Strategy that brings together how these mitigation strategies will be incorporated and designed.
			as intensively managed farmland, we would value detail that explores how the hedgerows
			In addition, a detailed mitigation strategy will be needed for the Great Crested Newts found on a pond within the sit boundaries.
Sensitive management of open space provision to secure recreation and health benefits alongside biodiversity gains.	Drought resistant planting is proposed.	ES Chapter 8: Landscape and Visual Effects, David Lock	Again, as per previous sections, we have seen no sign of DEFRA metric on achieving net gain on site.



		Associates, December 2021	Whilst ES Chapter 9 provides the effects of the proposal on the ecology and nature conservation of the site, there is no support Biodiversity Strategy that brings together how these mitigation strategies will be incorporated and designed.
A Landscape and Habitats Management Plan to be provided to manage habitats on site and to ensure this is integral to wider landscape management.	It is confirmed that a Landscape & Ecology Management Plan (LEMP) will be created and "will be agreed with CDC through a planning condition". The LEMP will ensure the establishment and the continued long-term management of the various landscape habitats within the site.	ES Chapter 8: Landscape and Visual Effects, David Lock Associates, December 2021	Sufficient information has been provided and conditions should be set to confirm a detailed landscape and habitat management plan/s is created and implemented.
Careful design of employment units on site to limit adverse visual impact and ensure compatibility with surrounding development	See above.	N/A	See above.
The provision of public art to enhance the quality of the place, legibility and identity	It is stated in the Design and Access Statement (p85) that cultural wellbeing projects could include "Encouraging environmentally sustainable behaviour – projects to encourage recycling, using sustainable routes through the development – artwork projects to encourage cycle and walking routes – and help with wayfinding and directing the flow of people through public areas".	Hawkwell Village Design and Access Statement, David Lock Associates, December 2021	Full compliance with this policy requirement to be assessed by others.
The retention and respect for important existing buildings and heritage assets with a layout to incorporate these and consideration of Grade II listed buildings outside the site	It is stated in the ES that "The relationship between the site and the village of Bucknell to the north of the site is such that there is considered to be no impact on the setting of the listed	ES Chapter 10: Historic Environment, David Lock Associates, December 2021	Full compliance to be determined by others.



	1	1	
	buildings within Bucknell and these are		
	therefore scoped out of the assessment".		
	There are no listed buildings on the site.		
	The Church of St Laurence and Home		
	Farmhouse are within 500m of the site's		
	eastern boundary. Both are of high value		
	but it is concluded that the development		
	"is considered to make a negligible		
	contribution to the significance" of the		
	farmhouse and church.		
Take account of the Council's Strategic Flood Risk	The site is not subject to any national,	ES Chapter 11:	Full compliance to be determined by others.
Assessment for the site	regional or local landscape or ecological	Water Resources,	ruil compliance to be determined by others.
Assessment for the site	,	David Lock	
	designations. The Environment Agency		
	Flood Map identifies the area of land	Associates,	
	immediately adjacent to the River Bure as	December 2021	
	falling within Flood Zones 2 and 3, with		
	the remaining majority of the site falling		
	within Flood Zone 1.		
	The flood map indicates that the		
	substantial majority of the site lies within		
	flood zone 1. No built development is		
	proposed within the very narrow areas of		
	the site along the stream tributaries		
	where there is a higher risk of flooding		
	potentially associated with flood zones 2		
	or 3.		
Provision of sustainable drainage in accordance with Police	See comments on SUDS measures.	N/A	See comments on SUDS measures.
Provision of sustainable drainage in accordance with Policy	See confinents on SODS measures.	IN/A	See confinents on SODS measures.
ESD 7: Sustainable Drainage Systems (SuDS), taking			
account of the recommendations of the Council's Strategic			
Flood Risk Assessment			



Demonstration of climate change mitigation and adaptation measures including exemplary demonstration of compliance with the requirements of policies ESD 1 – 5	See below.	N/A	See below.
An assessment of whether the site contains best and most versatile agricultural land, including a detailed survey where necessary.	The site is Grade 3 agricultural land.	Agricultural Land and Soils Statement, David Lock Associates, December 2021	Full compliance with this policy requirement to be assessed by others.
A soil management plan may be required to be submitted with planning applications.	The site is Grade 3 agricultural land. The Soil Report states that there is "no evidence that the site – allocated in very substantial part – will involve a significant loss of best and most versatile land". It is recommended hat a soil management plan is created in line with DEFRA guidance.	Agricultural Land and Soils Statement, David Lock Associates, December 2021	Full compliance with this policy requirement to be assessed by others.
Undertake a staged programme of archaeological investigation.	It is stated in ES Chapter 10 that the "substantial majority of the site and historical records suggest that the archaeological assets are unlikely to be of more than medium value".	ES Chapter 10: Historic Environment, David Lock Associates, December 2021	Full compliance with this policy requirement to be assessed by others. We would suggest engagement with OCC Archaeology team as the site is located in an area of archaeological interest as identified by a desk-based assessment. We would suggest a further programme of archaeological investigation and mitigation will need to be undertaken ahead of any development. This can be secured through a condition
Cherwell District Council Local Plan 2011-2031 ESD polices			
ESD 1: Mitigating and Adapting to Climate Change			
Delivering development that seeks to reduce the need to travel and which encourages sustainable travel options	See above	N/A	See above - covered in previous comments



including walking, cycling and public transport to reduce dependence on private cars			
Designing developments to reduce carbon emissions and use resources more efficiently, including water (see Policy ESD 3 Sustainable Construction)	It is stated in the Energy Statement that the proposals will be operationally zero carbon, meaning that carbon generated by the day-to-day operation of the building delivered will be off-set by a range of technology and enhancements, including the installation of photovoltaic arrays on the roofs. No confirmation has been provided for efficient use of potable water on site during operation.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	As stated above, we would recommend that conditions are set to ensure a suitable BREEAM rating is delivered. Following the proposed energy efficiency measures, the targeted reduction in carbon emissions for residential and non-residential spaces has not been estimated. A condition could be set to ensure that evidence is provided to demonstrate targeted reduction in carbon emissions is achieved at completion of the units. A condition to ensure efficient water consumption is suggested below.
Demonstration of design approaches that are resilient to climate change impacts including the use of passive solar design for heating and cooling	In the ES it is stated that "in order to prevent overheating, a comprehensive solar master planning scheme will be implemented across the site to maximise opportunities for passive heating during the winter and shading and cooling across the site during the summer monthsa carefully considered green infrastructure network will also aid with passive cooling on the urban environment and minimise any urban heat island effects".	ES Chapter 13 Climate Change and Sustainability, David Lock Associates, December 2021	It has not been confirmed that the cooling hierarchy has been considered to minimise cooling demand or if cooling is proposed anywhere on site. A condition could be set for this.
Minimising the risk of flooding and making use of sustainable drainage methods	See above	N/A	See above



Reducing the effects of development on the microclimate (through the provision of green infrastructure including open space and water, planting, and green roofs)	See above	N/A	See above			
ESD 2: Energy Hierarchy and Allowable Solutions						
Reducing energy use, in particular by the use of sustainable design and construction measures.	It is confirmed in the Energy Statement that the Future Homes Standard requirements will be followed. Passive measures will ensure the 10% improvement due to energy efficiency measures will be achieved. The proposed energy strategy includes individual air source heat pumps and rooftop PV panels for each dwelling. The "use of smart grids and low carbon energy storage solutions may provide an opportunity to manage demand and supply of PV in the future" and the applicant states that this will be explored in more detail.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	The Energy Hierarchy has been followed in the Energy Statement to demonstrate suitable energy efficiency measures and renewable technologies have been proposed as part of the design of the development. Further detail on the feasibility of renewable energy technologies would be recommended – this is requested below.			
Supplying energy efficiently and giving priority to decentralised energy supply.	See response to ESD 4.	N/A	See response to ESD 4.			
Making use of renewable energy.	Individual air source heat pumps are proposed for the dwellings. The Energy Statement states that wind turbines are not an option for the site. There will also be a ground mounted PV array covering 10 hectares of the north of the site. Battery storage for the homes is being considered.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	Renewable energy technologies are proposed – see below.			



Making use of allowable solutions.	It is stated in the Energy Statement that	Energy Statement,	We would recommend that the applicant is
<u>-</u> 	allowable solutions could allow the	Brookbanks	asked to provide information confirming
	remainder of carbon emissions to be	Consulting Limited,	allowable solutions proposed in order to
	offset and that liaison with Oxfordshire	no date, Revision 5	demonstrate policy compliance.
	County Council could be useful for this. It		
	is not clear if any solutions are proposed.		
ESD 3: Sustainable Construction			
All new development will be expected to incorporate	Fabric first approach and Future Homes	Energy Statement,	The proposed energy efficiency measures are
sustainable design and construction technology to achieve	Standard standards will be used for	Brookbanks	suitable however we would request further
zero carbon development through a combination of fabric	passive measures. The following details	Consulting Limited,	information for each stage of the Energy
energy efficiency, carbon compliance and allowable	have not been confirmed:	no date, Revision 5	Hierarchy and would recommend that this is
solutions in line with Government policy.	 proposed building fabric u-values 		requested via a condition.
	 proposed glazing u-values 		
The Zero Carbon in Eco-towns definition from the Eco	- targeted air permeability		The Energy Strategy is based upon an all-
Towns Planning Policy Statement (2009) states that "over a	 ventilation strategies 		electric heating solution using ASHPs. Carbon
year the net carbon dioxide emissions from all energy use	- hot water provision.		sequestering (tree planting) is suggested for
within the buildings on the eco-town development as a			the project to "offset any remaining carbon
whole are zero or below".	It is confirmed that air source heat pumps		emissions". It achieves zero carbon by using
	will meet the heat demands.		the assumption that the potential
			decarbonisation of the national grid "could
			reduce carbon emissions from the
			development by 50% and will ultimately
			deliver a Zero Carbon development by 2050".
			This does not demonstrate how the
			development will be zero carbon from the
			outset and relies heavily on the
			decarbonisation of the grid which is out of the
			control of the project.
			As mentioned previously in other comments
			we would seek clarity on the definition of zero
			carbon being sought and how this aligns with
			policy BIC1



Cherwell District is in an area of water stress and as such the Council will seek a higher level of water efficiency than required in the Building Regulations, with developments achieving a limit of 110 litres/person/day.	No mention of water consumption targets in the Energy Statement or the Water Resources section of the ES.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	We would recommend a condition is set to provide evidence to demonstrate the targets (litres/person/day) are set for flow rates/volumes in both residential and non-residential spaces. We would also recommend a condition is set to demonstrate these are achieved at completion.
All new non-residential development will be expected to meet at least BREEAM 'Very Good' with immediate effect, subject to review over the plan period to ensure the target remains relevant. The demonstration of the achievement of this standard should be set out in the Energy Statement.	See above	See above	See above
All development proposals will be encouraged to reflect high quality design and high environmental standards, demonstrating sustainable construction methods including but not limited to: - Minimising both energy demands and energy loss - Maximising passive solar lighting and natural ventilation - Maximising resource efficiency - Incorporating the use of recycled and energy efficient materials - Incorporating the use of locally sourced building materials - Reducing waste and pollution and making adequate provision for the recycling of waste - Making use of sustainable drainage methods - Reducing the impact on the external environment and maximising opportunities for cooling and shading (by the provision of open space and water, planting, and green roofs, for example); and	The Energy Statement does not go into sufficient detail to demonstrate that sustainable design and construction is integral to the proposals.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	 Further information should be provided as follows: Minimising energy demands and energy loss – what are targeted building fabric uvalues? and efficiency of ASHPs? Maximising passive solar and natural ventilation – what ventilation strategy is proposed for residential and nonresidential spaces? Locally-sourced, sustainable materials – see above Reducing waste during construction and providing waste facilities for operation – a Construction Site Waste Management Plan will be created Green roofs and cooling – see above Sustainable drainage – see above Embodied construction methods – see above



- Making use of the embodied energy within buildings wherever possible and re-using materials where proposals involve demolition or redevelopment.						
ESD 4: Decentralised Energy Systems						
Does the feasibility assessment indicate that decentralised energy systems are deliverable as part of the development?	It is stated in Chapter 13 of the ES Statement that "consideration has been given to sourcing waste heat from the Ardley Energy recovery facility. This is not a feasible or viable source of low carbon energy for the lifetime of the development".	Chapter 13: Climate Change, Environmental Statement, David Lock Associates, December 2021	Insufficient information has been provided with regards to utilising waste heat from the Ardley ERF. A heat network would be a good solution to providing heat across the site as there are mixed uses and demands.			
If yes, do decentralised energy systems form part of the proposed development? (As required by Policy ESD 4)	No – see above.	N/A	No – see above.			
ESD 5: Renewable Energy						
Does the feasibility assessment indicate that onsite renewable energy systems are deliverable as part of the development? Yes/No	No feasibility assessment of renewable energy technologies has been provided. Wind turbines are considered, but no analysis of options other than air source heat pumps and PV is provided.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	We would request to see confirmation of the renewable energy technologies considered (this could include solar thermal and ground source heat pumps and perhaps even a localised anaerobic digester to use food waste generated on site to heat community buildings, for example).			
If yes, does onsite renewable energy form part of the proposed development? (As required by Policy ESD 5) Yes/No	Individual air source heat pumps are proposed for the dwellings. The Energy Statement states that wind turbines are not an option for the site. There will also be a ground mounted PV array covering 10 hectares of the north of the site. Battery storage for the homes is being considered.	Energy Statement, Brookbanks Consulting Limited, no date, Revision 5	We would like to see evidence of potential output of a typical rooftop household PV array and also the potential output of the large PV array. A condition could be set to ensure that these measures are delivered in the buildings and demonstrated prior to occupation.			



Planning applications involving renewable energy development will be encouraged provided that there is no unacceptable adverse impact, including cumulative impact, on the following issues, which are considered to be of particular local significance in Cherwell: Landscape and biodiversity including designations, protected habitats and species, and Conservation Target Areas Visual impacts on local landscapes The historic environment including designated and non-designated assets and their settings The Green Belt, particularly visual impacts on openness Aviation activities Highways and access issues, and Residential amenity.

The PV panels will be installed on the roofs. It is not clear where the air source heat pumps will be installed.

Natural England's response confirms "that the proposed development will not have significant adverse impacts on statutorily protected nature conservation sites".

The Historic Environment Chapter of the ES states that a Heritage Impact Assessment (2021) has been undertaken in response to the LPA's formal Scoping Opinion in October 2021. The ES chapter confirms that the development will have negligible effects on the setting of Church of St Lawrence and Home Farmstead during operation. During construction the removal of non-designated archaeological remains would have moderate adverse effects and excavation evaluation is recommended as a mitigation measure. There are no designated heritage assets which would be directly impacted by the development. Energy Statement, Brookbanks Consulting Limited, no date, Revision 5

Natural England consultation feedback

ES Chapter 10: Historic Environment, David Lock Associates, December 2021 A condition could be set to request evidence to demonstrate the heat pumps will not have an unacceptable adverse impact on biodiversity, residential amenity or have a visual impact.

A condition could also be set for the archaeological excavation evaluation ahead of work starting on site.