

Tritax Symmetry Limited

Symmetry Park, Oxford North

Environmental Statement

Non-Technical Summary

March 2022



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1. Introduction

- 1.1. This Non-Technical Summary of the Symmetry Park Oxford North Environmental Statement has been prepared by Savills on behalf of Tritax Symmetry Limited and Siemens Healthineers (SH), 'the Applicants'.
- 1.2. This document is a summary of the Environmental Impact Assessment (EIA) undertaken as part of the planning application process for the proposed development at Symmetry Park, Oxford North. The main Environmental Statement and the supporting appendices contain detailed information on the project and each of the environmental topics considered.
- 1.3. The Application Site is located north of the A41, next to Junction 9 of the M40.



Figure 1. Site location

- 1.4. The application is to seek planning permission for the development of a new facility to be used by Siemens Healthineers, a business currently based in Eynsham, Oxfordshire. Siemens Healthineers is working with development partner, Tritax Symmetry, who would be responsible for securing planning permission and the construction. The proposal is for the development of a research, development and production facility to produce superconducting magnets. Its purpose is to accommodate the current and future requirements of Siemens Healthineers, the world's leading designer and manufacturer of magnets used for MRI scanning systems.
- 1.5. The Application Site comprises 19.35 hectares (ha) of land. This can be seen within the red line boundaries on Figure 2 (prepared by Stephen George + Partners Architects).

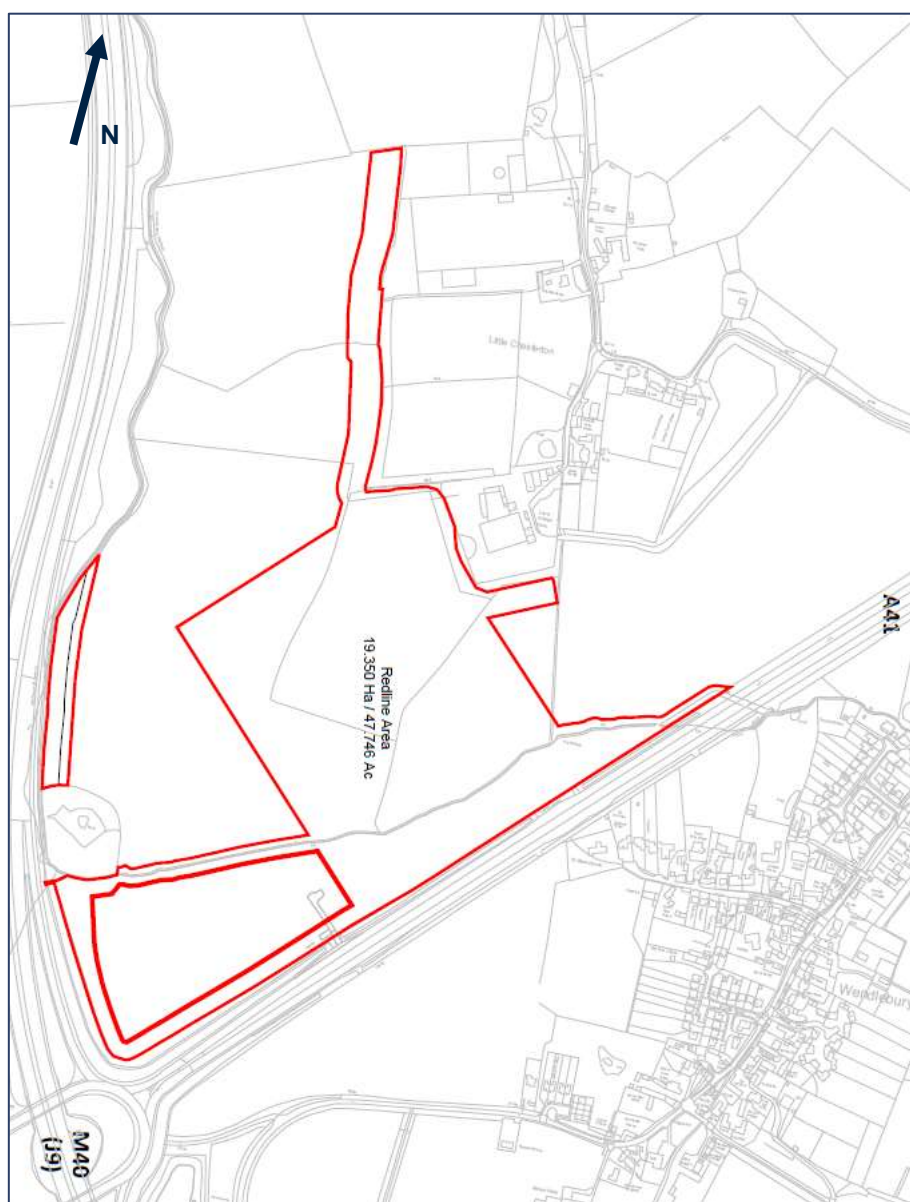


Figure 2. Planning application boundary (red line) (SGP dwg.131009)

The need for the development and choice of location

- 1.6. Siemens Healthineers has outgrown its existing facilities at Eynsham and has undertaken a search for locating a new research and production facility. The extent of the site search was agreed with Cherwell District Council through pre-application discussions. It searched for land comprising existing or allocated employment sites within Banbury, Bicester and Kidlington, and the rural areas.
- 1.7. The analysis concluded that there is no allocated employment site of a strategic scale and no other site committed for employment within Banbury, Bicester or Kidlington that can accommodate the requirements of SH. A further assessment of the urban areas of Banbury, Bicester and Kidlington was undertaken to identify land that lies vacant, or awaits redevelopment and is of a suitable scale to accommodate the SH Operation. In addition a search for potential sites within the rural area that may be suitable and available has been undertaken by a review of the Cherwell Housing and Economic Land Availability Assessment (HELAA) (February 2018). The rural employment sites that the Council considers suitable for employment use are not of a scale required to accommodate the SH operation. The Application Site is the only site that has the capacity to accommodate the scale of its operation and be delivered within its operational timeframe to manufacture magnets and continue its research and development work.

Environmental Impact Assessment

- 1.8. Environmental Impact Assessment (EIA) is a process that formally considers the construction and operational aspects of a proposal that may have significant effects on the environment. The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to mitigate adverse effects: information that is taken into account in the planning decision.
- 1.9. The ES has been prepared in accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the 'EIA Regulations'). This document is the Non-Technical Summary (NTS), which provides a summary of the main findings of the ES, including the significant environmental effects, mitigation and residual effects predicted to result from the Proposed Development.
- 1.10. In August 2021, a request was made to the Council for its EIA scoping opinion. The purpose of this was to identify what the Council considers to be the main environmental issues associated with the Proposed Development. The Council consulted with statutory consultees and issued a formal EIA scoping opinion in September 2021. A summary of the assessment undertaken for the issues scoped into the assessment is provided in this NTS.
- 1.11. Subsequently, when the Council is deciding whether to grant planning permission, it can do so in the full knowledge of any significant effects predicted, and take this into account in the decision making process. EIA is a procedure, rather than a requirement to demonstrate no adverse effects. In cases where an assessment predicts that adverse effects could occur, planning legislation does not direct that permission should therefore be refused.

2. The Application Site

- 2.1. The boundary of the Site fronts the A41 road and extends across several open fields that are currently in agricultural use. Generally, ground levels fall from north to southeast. The eastern extent of the Site is defined by field boundaries and hedgerows, the Grange Farm Industrial Estate, and Lower Grange Farm. The Wendlebury Brook defines the western edge of the Site, flowing from north to south towards a small area of woodland, where its course then changes to flow east across the Site, before passing under the A41.
- 2.2. Footpath 161/4/20 traverses the Site and crosses the A41 to the village of Wendlebury. At present there are no formal crossing points, but there is a pedestrian refuge area provided in the central reserve of the A41.

Local context

- 2.3. The Site is located approximately 4 km south-west of Bicester in Oxfordshire, adjacent to the A41 and M40 at Junction 9. The A41 provides direct access to Bicester and the M40 provides access to London to the south-east and Birmingham to the north-west.
- 2.4. The surrounding landscape is generally low-lying agricultural land, dissected by major vehicular corridors, each being lined with native mature tree and hedgerow cover, which restricts views towards the Site.
- 2.5. The Site is served by the S5 Bus Route that provides:
- Four buses per hour Monday to Friday;
 - Four buses per hour on Saturdays;
 - Two buses per hour on Sundays;
 - One service after midnight Monday-Thursdays and four on Fridays (midnight to 3am);
 - Bus stops in close proximity to Bicester North Railway Station, which enables combined bus-rail trips;
 - A journey time to Bicester of 10-15 minutes, and to Oxford between 25 and 30 minutes.
- 2.6. The Site is well located to the National Cycle Network, with Route 51 to the northwest identified as a lightly trafficked route with good connectivity to Bicester.
- 2.7. The town centre of Bicester contains an Air Quality Management Area, which is situated approximately 3.45 km from the Site at the closest point.
- 2.8. There are a number of Grade II listed buildings within Wendlebury, including the church of St Giles, on the southern side of the A41 to the south-east of the Site. To the north-east of the Site in Chesterton there are a number of Grade II listed buildings and two Grade II* listed buildings - the Manor Farm House and the Church of St Mary. The Alchester Roman Site Scheduled Monument is located 0.9 km to the north-west. The Site is not considered to form a part of the setting of any of these heritage assets.
- 2.9. The closest ecology designation is the Wendlebury Meads and Mansmor Closes SSSI, some 2 km south of the Site.
- 2.10. To the north-west (approximately 965 m), RAF Weston-on-the-Green is a grass airfield that is currently used for parachute training, a gliding school and a sky diving centre.

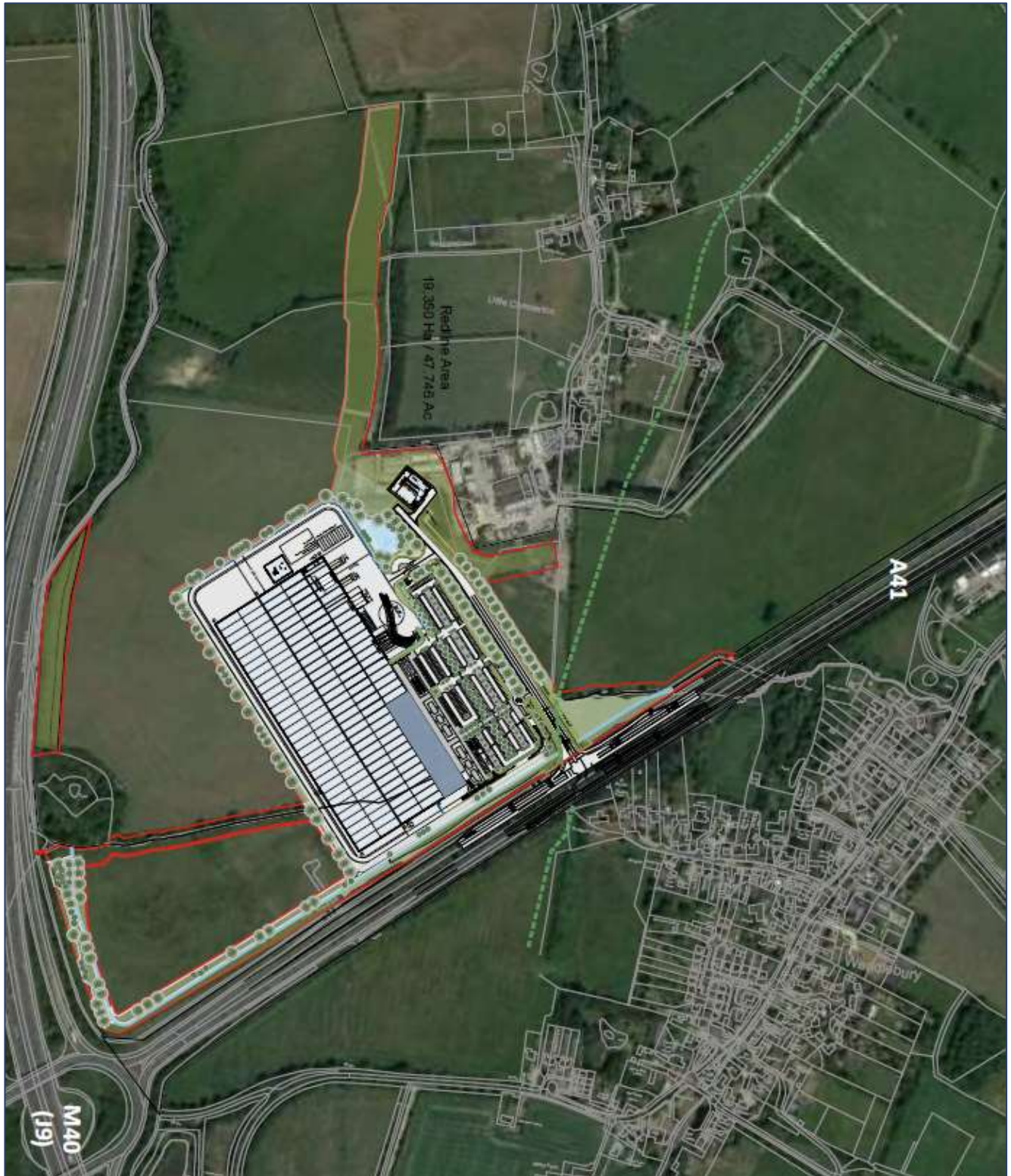


Figure 3. Local context (SGP dwg.131004-P7)

3. The Proposed Development

- 3.1. The development proposed is for a new high-quality combined research, development and production facility, to produce superconducting magnets for medical devices used in MRI systems. The building has two production halls and a spine, which serves the length of the production hall. From here goods loading, innovation centre, plant and personnel can serve both production spaces. A number of external buildings required to support the production process are situated on the north-west side of the facility.



Figure 4. Plan of proposed buildings (SGP dwg.131001-V)

- 3.2. Existing boundary hedgerows and trees will be retained where possible and be reinforced with additional planting, with landscaped bunds and native tree planting on the boundary of the Site closest to neighbouring properties and the footpath. This is designed to fragment views of the Proposed Development for receptors in close proximity to the north-eastern and eastern boundaries. The proposal also requires the removal of some modern agricultural buildings located within the north-east part of the Site. Additional structural landscaping to the western boundary will enhance the landscape corridor along the M40 and provide visual screening from the M40 and the wider context to the west.
- 3.3. The development also proposes to re-align a section of the Wendlebury Brook approximately 450m in length. A number of different options for the new channel have been modelled to find the optimum solution, which does not increase flood risk, maintains the flood storage capacity of the Site, and preserves the overall movement of water within the surrounding area. There would be a 10m buffer strip on each side of the Wendlebury Brook to allow access for maintenance of the watercourse, whilst also accommodating flood water. The majority of rainwater falling on landscaped areas around the buildings will soak into the ground. Any surface water runoff would be directed to the drainage system located around the perimeter of the buildings.
- 3.4. The surface water drainage strategy reduces the peak discharge rate of runoff from the site. As a consequence, at times of heavy rainfall the volume of water leaving the Site will be significantly less than that draining within it. This water would be held in the attenuation storage provided. The size of the attenuation storage has been calculated such that the Proposed Development has the capacity to accommodate the 100 year rainfall event, including a 40% increase in rainfall intensity that is predicted to occur as a result of climate change.
- 3.5. Access to the Site will be achieved via the creation of a new signalised junction on the A41, which runs south-west to north-east and connects the M40 with the town of Bicester in the east.
- 3.6. The junction will comprise a four-lane approach in the northbound direction and a three-lane approach in the southbound direction, providing a dedicated right turning lane for vehicles wishing to access the Site. The signalised junction will be in the form of a toucan crossing for pedestrians and cyclists, who will not need to dismount. It makes provision for the continued use of public footpath 161/4/20, albeit provides a safe alternative crossing point.
- 3.7. The EIA has assessed:
 - Demolition of agricultural buildings;
 - New signal-controlled access from the A41;
 - Employment floorspace (Use Class B2);
 - Loading bays, service yard, waste management area;
 - Facilities management building;
 - Security gatehouse;
 - A building for use as an energy centre;
 - Parking for electric cars, accessible parking, bicycles, cars and motorcycles;
 - Landscaping including landscape mounds;
 - Re-alignment of Wendlebury Brook within the Proposed Development area; and,
 - Sustainable drainage.

Construction

- 3.8. The construction work will be managed in accordance with a Construction and Environment Management Plans, secured via planning condition to control and minimise the impacts of the work, including the effects of noise, dust, vibration and traffic.

Delivery

- 3.9. It is intended that the development would be constructed in two phases. The first phase production hall is due to become operational in 2024, while the second is due to become operational in 2030, subject to projected demand. When complete and fully operational, the facility would support approximately 1,345 jobs, including third party and visitor jobs.

Design evolution

- 3.10. A series of environmental baseline studies informed a constraints plan for the Site, which has informed the evolution of the design. As part of the design process careful consideration has been given to:
- creating a comprehensive flood management and surface water drainage strategy;
 - ensuring that site levels to respond to the existing topography and that these tie into the surface water drainage strategy;
 - landscape treatment to minimise the impact of the development on the surrounding area in visual terms, and also to connect into wider Green Infrastructure corridor proposals;
 - integrate landscape and drainage features to create a sustainable and robust strategy that also enhances biodiversity;
 - provide an access strategy that does not impact on the surrounding network, and does not prejudice delivery of future highways projects;
 - designing the building mass, form and overall height to minimise the visual impact.

The facility is positioned on the site to provide a functional route for access around the buildings within the constraints of the site boundary and to orientate the principle elevation of the building towards the site approach. The roof design aims to provide daylight in occupied areas; improve the wellbeing of occupants through a visual connection to the external conditions including time of day and weather; and is orientated to maximise north light to the production areas, minimising solar gains and the use of artificial light.

Surface water drainage

- 3.11. The majority of rainwater falling on landscaped areas will soak into the ground. Any surface water runoff would be directed to the drainage system located around the perimeter of the buildings and through contouring of the hardstanding areas.
- 3.12. The Surface Water Drainage Strategy ensures that a sustainable drainage solution can be achieved which reduces the surface water runoff from the site. As a consequence of limiting surface runoff, at times of heavy rainfall the volume of water leaving the Site will be significantly less than that draining within it. In order to prevent this water backing up in the system and causing flooding, attenuation storage will be provided. The size of this attenuation storage has been calculated such that the Proposed Development has the capacity to accommodate a 100 year rainfall event, including a 40% increase in rainfall intensity that is predicted to occur as a result of climate change.

Cycle parking

- 3.13. Cycle parking will be provided at a level that is consistent with both emerging policy requirements and expected demands. This equates to provision for 80 secure cycle parking spaces and 15 motorcycle bays. Both are located in areas that benefit from good levels of surveillance and within a short walk of the main entrance.

Vehicle parking

- 3.14. In respect of parking, the number of car parking spaces takes into account the staff shift changes, when the greatest demand for parking will occur (expected between 14:00 and 15:00). The provision is policy compliant and includes appropriate provision for disabled users, i.e. tactile paving and disabled spaces.
- 3.15. Electric Vehicle parking spaces will be provided at a level of 25% to meet current CDC policy expectations. The blue badge and EV spaces are located in close proximity to the main site entrance.
- 3.16. Access to the staff car park will be subject to a barrier control system that will restrict unauthorised use. A rejection area has been accommodated within the layout to enable unauthorised vehicles to turn around.

Climate Change and Energy Use

- 3.17. In terms of planning, addressing climate change is one of the core land use planning principles which the National Planning Policy Framework expects to underpin both plan-making and decision-taking. It recognises that planning plays a key role in minimising vulnerability, providing resilience and managing the risks associated with climate change.
- 3.18. An effective approach to reducing greenhouse gas emissions from new development is the use of efficient designs and insulation products to achieve high levels of thermal efficiency – the ‘fabric first’ approach. The facility will incorporate solar photovoltaic (PV) on the roof.
- 3.19. For the Proposed Development, the focus of the design would limit the energy consumption and carbon dioxide (CO₂) emissions through optimising the building performance together with energy efficiency measures following the steps of the energy hierarchy:
- Using less energy / demand reduction;
 - Supplying energy efficiently; and,
 - Using renewable energy / low carbon technology.
- 3.20. Climate change and sustainability mitigation and adaptation considerations have been considered to promote sustainable transport, management of surface water drainage, and planting and landscape measures resilient to predicted climate change.
- 3.21. Construction of the building will be delivered to net zero carbon in construction to accord with the UK Green Building Council’s definition.

Control of construction activities

- 3.22. The principal management control is a Construction Environmental Management Plan. A framework for this has been submitted with the planning application and will be expanded with more detail to control construction activities on site. It sets out how the works would be constructed and implemented to ensure the protection of local amenity, highway operation and the environment. Trees that are identified for retention that lie within or adjoining the working area would be physically safeguarded using tree protection

fencing and guarding to avoid harm to the trees. The detail of the Construction Environmental Management Plan would be agreed with the Council prior to commencement of works at the Site and the appointed contractor would be required to comply with the Construction Environmental Management Plan.

Cumulative assessment

- 3.23. A number of developments with planning consent, along with relevant allocations in the Local Plan have been considered for potential cumulative effects in the assessment. Most are located in the vicinity of Bicester, but the closest project to the Site is a new Great Wolf Lodge leisure resort to the south of the A4095. The Council also requested that two planning application proposals further to the north be considered: the Oxfordshire Rail Freight Interchange, and the logistics and office space development proposed by Albion Land either side of the A43, to the north of M40 J10.
- 3.24. Each of the topic assessments in the ES consider which of the above have the potential for cumulative effects when the construction and/or operational phases could be concurrent, and where there are sensitive receptors common to both developments.

The following sections provide a non-technical summary of the environmental assessments undertaken for the Proposed Development.

4. Assessment

Transport

- 4.1. The assessment of the transport-related environmental impacts associated with the Proposed Development uses formal guidance provided by the Institute of Environmental Management and Assessment (IEMA), supported by a general qualitative assessment of the impacts on other sustainable travel modes - walking, cycling, and public transport.
- 4.2. As mentioned above, the assessment has established that a range of additional mitigation measures would be required to manage and limit the effects of the Proposed Development during construction, and several enhancements have also been identified for the completed scheme.

Construction Traffic

- 4.3. During the construction phase, it is proposed that the effects of construction vehicles will be managed by a Construction Traffic Management Plan (CTMP). The CTMP will include a range of measures, defining temporary construction vehicle access and limiting lane closures / vehicle movements during peak travel hours. The greatest change in traffic during the construction will be on the A41, to the west of the proposed Site access, with daily flows increasing by less than one per cent, and HGVs increasing by approximately five per cent. This represents the 'worst-case' scenario, i.e., should all construction activities take place at the same time. The significance of transport effects from construction activities is assessed as negligible.

Traffic from operation of the Proposed Development

- 4.4. The assessment has considered the effects in the year 2024, when the development would first be operational, and also in 2031, when the assessment takes into account expected traffic growth in the area from both background traffic growth and from other planned developments.
- 4.5. This assessment of the development indicate that predicted traffic flows range from a 0% to 3.8% increase in 2024 and 0% to 5.2% in 2031. In addition to this, HGV flows are expected to increase by between 0%

and 2.4% in 2024 and 0% to 1.6% in 2031.

- 4.6. The increases in traffic associated with the Proposed Development do not exceed either of the tests that are referred to in the IEMA guidance and indicates that the effect of the Proposed Development will be negligible.
- 4.7. Alongside this, in terms of pedestrian and cyclist amenity, the dedicated crossing facilities will enhance access to/from Wendlebury for people wishing to access the footpath network and bus stops located on the A41. Furthermore, in relation to safety, the proposed access will act as a speed restraint as vehicles stop for the traffic signalling control sequencing.
- 4.8. As part of the proposals, a Travel Plan will seek to encourage employees to travel by alternatives to the private car, to facilitate travel by bus, and by cycling. In addition, there are a number of electric vehicle parking spaces proposed. These measures will assist with reducing greenhouse gas emissions in line with the targets set by the government.
- 4.9. The transport impacts with cumulative effects of the major developments identified have been assessed as negligible on users of the pedestrian and cycle networks, those using public transport and upon the adjacent highway network.

Air quality

- 4.10. The Government has established a set of air quality standards and objectives to protect human health. The air quality assessment uses the standards when predicting whether effects might be significant, and using guidance published by the Institute of Air Quality Management.
- 4.11. Demolition and construction works have the potential to create dust and produce emissions from those activities, and from use of construction vehicles and machines. A qualitative assessment of the potential impacts of dust and emissions on local air quality has been carried out. Due to the nature of the works and the proximity to potential receptors, without any mitigation, the activities represent a low risk for dust soiling and health impact.
- 4.12. The Institute of Air Quality Management provides guidance on the best practice mitigation measures appropriate for such situations. With standard good practice management in place, the assessment finds that the residual effect from construction activities on site can be reduced to a negligible level, and would not be significant.
- 4.13. Given the short-term nature of the construction phase, there is predicted to be an insignificant effect on local air quality from construction-generated vehicle emissions. The potential for dust soiling to affect ecological habitats has also been considered, and found to represent a low risk, such that no significant impacts are predicted. In terms of the potential of climate change to influence the assessment, whilst drier summers would potentially influence the dust mitigation requirements during construction operations, this will not affect the overall conclusion regards the significance of effects.
- 4.14. Dispersion modelling was also undertaken to assess the potential impacts on existing receptors from road traffic emissions associated with the operation of the Proposed Development. The likely change in concentrations of nitrogen dioxide and particulate matter and the effect on local air quality is predicted to be negligible without the need for any mitigation. Local air quality would be well within the relevant health based air quality objectives set by the government, as such, mitigation will not be required.

Noise

- 4.15. The assessment has considered noise during both the construction and operation of the proposed development. The study area encompasses the Site itself and extends to representative receptor locations nearby at Church Lane, Grange Farmhouse, and Half Mile House. The approach to the baseline survey and the assessment was agreed in advance with the Environmental Health Officer at Cherwell District Council.
- 4.16. Likely significant noise effects will be temporary and short term, only occurring during the construction phase of the development. They will be controlled through a Construction Environmental Management Plan, to set out the best practice measures that will be used to reduce noise impacts during construction. These include the typical good practice recommendations of British Standard 8233, i.e., using quieter plant where possible, siting noisy plant away from noise sensitive receptors where possible, and ensuring all noise reduction measures are functioning.
- 4.17. Road traffic from the proposals may alter noise levels near the affected network. An assessment has used traffic flow data for the A41 to predict the change in noise levels associated with the Proposed Development. This found that due to the reduction in vehicle speed on the A41, the noise level from traffic will reduce at a distance of 10 metres from the carriageway edge of the A41. The effect is assessed as negligible, and mitigation for road traffic noise is not necessary. Nevertheless, use of the Travel Plan will contribute to managing the number of private car journeys associated with the development.
- 4.18. No significant effects have been identified associated with noise from operation of the Proposed Development affecting existing receptors during the daytime, or through the night.

Biodiversity

- 4.19. The assessment has been informed by desk studies and a series of detailed ecological surveys by EDP and has been undertaken using professional judgement and experience, and in accordance with industry standard guidance. This identified the Important Ecological Features (IEFs) taken forward for detailed assessment as: broad-leaved semi-natural woodland, species-poor hedgerow and trees, semi-improved grassland, wet ditches, birds, bats, Otter, Badger, Common Toad, reptiles, butterflies. Potential effects on Bowlers Copse, a Cherwell District Wildlife Site, has also been considered in the assessment.

Mitigation during demolition / construction

- 4.20. The Construction Environmental Management Plan will ensure appropriate management and operational systems are in place to avoid or minimise adverse pollution effects. This document will cross reference with the Ecological Construction Method Statement, submitted as part of the planning application, and where relevant, a detailed Arboricultural Method Statement that will set out measures to protect trees and hedgerows during the construction phase. Potential adverse effects on retained habitats relating to damage, deterioration or disturbance, will thus be avoided or reduced to insignificant levels.
- 4.21. The protection of animal species during construction will be ensured through the provisions of the Ecological Construction Method Statement. As a general measure, a suitably qualified ecologist will advise the Developer prior to any enabling works/vegetation clearance, to ensure that the identification and protection of the relevant species and their habitat is understood.
- 4.22. Subject to implementation of the mitigation measures outlined, residual effects anticipated for IEFs during the construction phase are not considered to be significant.

Effects of the Proposed Development

- 4.23. The design and layout of the Proposed Development has been refined through various iterations to ensure that potentially significant ecological effects are avoided or minimised, and to deliver biodiversity gains in accordance with local and national planning policy. To achieve this, the Proposed Development incorporates approximately 6.7 hectares of greenspace for biodiversity, so that approximately 35% of the total Site area will be managed specifically for biodiversity.
- 4.24. Aspects of the detailed design which are especially relevant and can be secured through a suitably worded planning condition are: lighting designed to avoid impacts on nocturnal wildlife where in close proximity to retained habitats; the surface water drainage system designed to maintain/improve water quality, maintain existing run-off rates and provide additional wetland habitat; and the soft landscape scheme designed to include new habitats of ecological value within the green infrastructure. New planting will enhance the connectivity between existing important habitats, in particular the woodland habitats on the western edge of the Site, thereby strengthening the integrity of the local ecological network. The establishment, maintenance and long-term management of the retained and created habitats will be delivered via a Landscape and Ecological Management Plan, which is provided as part of the planning application.
- 4.25. When considering the mitigation proposed, all potential effects upon IEFs are not considered to be significant. Furthermore, habitat creation, restoration and long-term management will result in beneficial effects on the local woodland habitat resource, and to native scrub and grassland habitats.

Landscape and visual effects

- 4.26. A desktop and field study informed the assessment of landscape and visual effects for the Proposed Development. The studies showed which landscape and visual effects could be assessed in the context of the Site and wider area, which led to the primary landscape effects being identified and mitigation designed to minimise those effects.
- 4.27. The potential effects on the Clay Vale landscape was assessed and found that the Proposed Development would not cause any significant effects after mitigation. The Site was found to be well contained within the wider landscape due to field boundary trees and hedgerows and the two major roads (M40 and A41) and associated urban infrastructure.
- 4.28. The topography in the area is predominantly flat, low lying and contains a mix of rural and urban uses which restrict views of the Site. Due to the restricted views from public areas it is considered that there would be limited long-term impact on visual amenity.
- 4.29. Due to the proximity to the Site, there are significant impacts predicted for users of the Public Right of Way (161/14/20) and a minor road at Little Chesterton.
- 4.30. Overall there are a low number of significant landscape and visual effects due to the well contained nature of the Site and the strategic planting incorporated into the Proposed Development.

Heritage

- 4.31. The Archaeological and Heritage desk study established that there are no designated heritage assets within the Site, and that there are a small number of non-designated heritage assets within the Site that are in degraded condition and are of low or negligible sensitivity. Of these non-designated sites, the ridge and furrow earthworks and the historic boundary between Chesterton and Wendlebury will be removed by the

Proposed Development which will result in a minor and negligible effect respectively, both not significant.

- 4.32. A geophysical survey has identified anomalies that trial trenching has demonstrated represent the buried remains of Mid - Late Iron Age settlement enclosures, ditches, pits and cremations possibly of the Bronze Age. Some of these features extend into or are located within the Site. The assessment also identified potential for the Site to contain previously unrecorded archaeological features including a very low potential for the course of a possible Roman road although no evidence for this was found by the trial trenching. Potential effects on unrecorded archaeological remains will be mitigated by archaeological recording, which would result in a moderate adverse effect in the worst case scenario, which is if sensitive heritage assets are subject to a large magnitude of change.
- 4.33. Following appropriate mitigation through archaeological recording most potential effects are considered to be of no more than minor significance and not significant. A moderate adverse effect to the Iron Age settlement enclosure ditches, pits and the cremations would be significant in EIA terms, but would comprise less than substantial harm to a non-designated asset (NPPF paragraph 202).

Hydrology, flood risk and drainage

- 4.34. This assessment has considered the potential impacts on the waterbodies at or near the Site from the Proposed Development. The principal risks during construction are considered to be the risk from excess fine sediment, hydrocarbons, chemicals polluting waterbodies and increase in surface water runoff volumes.
- 4.35. A Flood Risk Assessment (FRA) has been prepared to inform the chapter. The FRA uses a hydraulic model of the Wendlebury Brook and Gagle Brook to assess the flood risk of the Site and the impact of the Proposed Development on flood risk. The site is unlikely to flood except in extreme conditions. The primary, but unlikely, flood risk posed to the Site is from river flooding from Wendlebury Brook, however the site has no history of flooding.
- 4.36. The Environment Agency's flood map indicates that the majority of the site is located within Flood Zone 1 and therefore has a 'low probability' of fluvial flooding, with less than a 1 in 1000 annual probability. However, a small proportion of the site, to the east on the left bank of the Wendlebury Brook, is located within Flood Zone 2 and therefore has a 'medium' probability of fluvial flooding, with between a 1 in 100 and 1 in 1000 annual probability of river flooding in any year. These areas are located immediately adjacent to the Wendlebury Brook. Given the position of the proposed development and the limited extent of the potential fluvial flooding it has been concluded that fluvial flooding poses a low flood risk.
- 4.37. A Surface Water Drainage Strategy is proposed as part of the Proposed Development, which takes into account a 40% increase in rainfall intensity due to climate change during the next 100 years. This will ensure that a sustainable drainage solution will be achieved which reduces the peak discharge rate to manage the surface water runoff from the Site, as well as providing water quality benefits.
- 4.38. The findings of this assessment have demonstrated that the development would not result in any significant residual adverse impacts on surface waters, groundwater or flood risk.

Ground conditions and soils

- 4.39. The ground conditions chapter identified existing soil and ground conditions, evaluates the potential for contamination and assesses the potential effects on ground conditions during construction and operation.

- 4.40. The previous land use at the Site has been agricultural land for at least the last 100 years. A Preliminary Risk Assessment and Conceptual Site Model confirmed that there is potential for contaminants at a localised level in the field in the south and outbuildings in the north. A detailed ground investigation is required to confirm the findings which will inform the need for remedial action. The risk to controlled waters and human health is considered to be low.
- 4.41. Minor temporary construction effects were identified which will be mitigated in the Construction Environmental Management Plan (CEMP). No significant residual effects remain after mitigation during both the construction and operation phases.

Climate change

- 4.42. The proposed development will result in carbon emissions during construction. However, the development will use the methodology 'Net Zero Carbon in Construction' outlined in the UKGBC's net zero framework. Consequently, carbon emissions will be reduced as much as feasibly possible, and following this, if there are any residual construction related carbon emissions, these will be offset through the funding of verified and accredited offset schemes, in line with principals set out in UKGBC's net zero framework. Therefore, the residual construction impact is considered to be negligible, and not significant.
- 4.43. The proposed development will result in carbon emissions during operation through both operational energy use and transport, although the operational transport impacts are considered to be negligible. Whilst it is likely that additional mitigation may result in the development reducing the carbon emissions, the extent to which this will be achieved cannot be specified until the details have been designed. Therefore, the residual operational energy impact is considered to remain as a minor significant effect at this stage.

Socio-economic effects

- 4.44. The socio-economic effects chapter assesses the effects of the proposed development on employment during the construction and operational stages, and value generated as a result of new economic activity.
- 4.45. Employment and economic activity will be generated during the construction phase of the proposed development. The total cost of the construction has been estimated to be around £80 million, which correlates to producing approximately 670 construction jobs. This is considered to be a significant beneficial effect on employment at the Cherwell District level and on economic output at the Oxford scale. A construction stage apprenticeship scheme would help to secure a greater proportion of the beneficial impact of construction stage job creation locally.
- 4.46. Operational employment is predicted to increase by 1,216 across the Oxfordshire area, with 571 of those estimated to be within Cherwell district. This is considered to be a significant beneficial effect.
- 4.47. As a result of the predicted impacts being positive, there is no mitigation proposed for the proposed development relating to socio-economic effects.

5. Interaction of effects on receptors

- 5.1. The potential for effects caused by a combination of impacts from the Proposed Development on a particular receptor, acting together, may cause a more significant impact collectively than individually, or potentially, a combination of beneficial and adverse effects may be experienced at a particular location. For interaction between effects to be possible, there would need to be an identifiable residual effect from one

or more environmental aspects after considering the mitigation proposed.

- 5.2. From the limited range of potential effects identified, it is considered that the only likely interaction effect might occur for the closest residential receptor groups that are identified in the visual assessment and have line-of-sight with the development site, may also experience temporary effects associated with dust during construction. This would be a temporary situation that would cease upon completion of the construction activities.
- 5.3. These are aspects that are managed through the implementation of mitigation measures set out in a draft CEMP. With such measures in place, temporary effects on receptors from these acting together are not predicted to result in an interaction effect that would require any additional measures.

6. Conclusion

- 6.1. The assessment has considered how the environment would be affected by the Proposed Development. Whilst mitigation measures are included in the scheme design, or have been identified to minimise adverse environmental effects, some residual effects identified as significant in the EIA are likely to remain.
- 6.2. Landscape and visual effects assessed as significant are likely. These are short-term residual effects in relation to landscape character, and long-term residual effects for landscape features on-site, for people using paths and roads in close proximity to the development, and some residential receptors in Little Chesterton.
- 6.3. Subject to confirmation of further archaeological evaluation on-site, there is also the potential for significant residual effects on previously unrecorded assets, if present.
- 6.4. Carbon emissions associated with operation of the Proposed Development, if they cannot be avoided or off-set, are assessed as a minor adverse effect.
- 6.5. The creation of jobs both during the construction and operational phase, and the increased economic activity at various scales are all considered to be beneficial residual effects that are assessed as significant.

The Environmental Statement has been submitted in support of a planning application to Cherwell District Council. Prior to making a planning decision, the Council will consult with statutory advisors and non-statutory bodies, inviting comments on the proposals. Members of the general public are also welcome to make comments on the application during this time. When the Council is deciding whether to grant planning permission, it can do so in the full knowledge of any significant effects predicted, and take this into account in the decision making process.

The Environmental Statement can be viewed at: <https://planningregister.cherwell.gov.uk/>

A copy of the ES on a USB Flash Drive is available at a charge of £25.00. Enquiries in respect of these, or printed copies of the Non-technical Summary, ES or Appendices should be made to Savills – wimborneplanning@savills.com