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**London Luton Airport Expansion Development Consent
Order 202x**

**5.01 ENVIRONMENTAL STATEMENT CHAPTER 2: SITE AND
SURROUNDINGS**

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2 SITE AND SURROUNDINGS

2.1 Introduction

- 2.1.1 This chapter presents a description of the sites where aspects of the Proposed Development (as described in **Chapter 4** of this Environmental Statement (ES) **[TR020001/APP/5.01]**) will be located, a description of existing airport infrastructure and related developments, and a summary of the surrounding environment.
- 2.1.2 **Figure 2.1** of this ES **[TR020001/APP/5.03]** identifies the Order Limits, sufficient to identify the land required for the Proposed Development. This includes a total area of approximately 471 hectares (ha).
- 2.1.3 The land on which the whole Proposed Development will be constructed is the Application Site. For the purposes of assessment, the Proposed Development is split into four distinct geographical components:
- a. the Main Application Site;
 - b. Off-site Car Parks;
 - c. Off-site Highways Interventions; and
 - d. Off-site Planting.
- 2.1.4 The Main Application Site, Off-site Car Parks, Off-site Highways Intervention boundaries and locations for Off-site Planting are shown in **Figure 2.2** of this ES **[TR020001/APP/5.03]**.

2.2 The site and surroundings

Main Application Site

- 2.2.1 The Main Application Site is located approximately 45 kilometres (km) north west of London in the south east of England. It is located to the east of Luton town centre and lies within the administrative boundaries of Luton Borough Council (LBC), as well as Central Bedfordshire Council and North Hertfordshire District Council as shown on **Figure 1.1** of this ES **[TR020001/APP/5.03]**.
- 2.2.2 The Main Application Site encompasses approximately 428 ha to the east of the airport, across Luton and North Hertfordshire. The key features and constraints on and in the vicinity of the site are discussed below and shown on **Figure 2.2** of this ES **[TR020001/APP/5.03]**.
- 2.2.3 The airport is located on a raised platform at the north eastern end of the Chiltern Hills. Land to the north and west of the Main Application Site is predominantly residential and mixed industrial, and rural with arable fields to the east and south.
- 2.2.4 Wigmore Valley Park is located within the boundary of the Main Application Site, directly east of the airport, as shown on **Figure 2.2** of this ES **[TR020001/APP/5.03]**. It provides open space and recreational facilities including Wigmore Valley Park Pavilion, which is currently vacant and in need of

refurbishment, and children’s play facilities including a skate park. Wigmore Valley Park is designated as an Area of Local Landscape Value and parts of the park are designated as a County Wildlife Site (CWS).

- 2.2.5 A closed historical landfill is located in the north of the Main Application Site partly beneath and adjacent to the existing eastern boundary of the airport, which forms part of Wigmore Valley Park. This landfill site was operated by Luton Borough Council (LBC) between 1937 and 1978. Part of the Proposed Development would be constructed over the disused landfill.
- 2.2.6 The east of the Main Application Site is largely agricultural with arable fields and hedgerow boundaries with scattered trees. This area crosses the LBC and Hertfordshire County Council (HCC) administrative boundaries which also marks the Green Belt boundary to the east of LBC. The Main Application Site is bordered by Darley Road to the north and intersected by Winch Hill Lane, a rural road running through the area of Winch Hill in the east of the Main Application Site.
- 2.2.7 There is a network of Public Rights of Way in this area including the Chiltern Way which follows approximately the alignment of Darley Road. There is a ridge with a band of woodland running approximately north west to south east through this area, and Winch Hill Wood, a block of ancient woodland, in the south east.
- 2.2.8 **Table 2.1** identifies the approximate area of existing land uses in the Main Application Site.

Table 2.1: Main Application Site land use and approximate area

Land use	Approximate area
Previously developed	250
Wigmore Valley Park	41.6ha (District Urban Park and Garden and Natural and Semi-Natural Greenspace)
Landfill (beneath developed and park areas)	53ha (EA record) or 40ha (measured ground investigation)
Dairy Borne Scarp CWS	6.6ha
Non-agricultural fields (set aside for Green Horizons Park (formerly known as New Century Park), and other habitat.	47ha
Agricultural land (including other habitats and field margins)	92ha

- 2.2.9 There is one occupied residential property, Winch Hill House, within the Order Limits in the Main Application Site. Winch Hill Cottages, isolated barns, and some properties at Wandon End are close to, but outside of, the Order Limits.
- 2.2.10 Winch Hill Farmhouse, a disused ex-Grade II listed building in a dilapidated state, was located in the far east of the Main Application Site. Listed building consent for the demolition of Winch Hill Farmhouse (18/03263/LBC) was

granted by North Hertfordshire District Council on 8 March 2019 and demolition took place in 2019.

- 2.2.11 Archaeological records suggest historical human activity in this area with a possible Roman building in the field to the east of Wigmore Valley Park.
- 2.2.12 Luton town centre is approximately 2.5km to the west of the airport. The town has a population of approximately 218,000 people and was traditionally dominated by manufacturing (Vauxhall Motors and others). The area is now strongly supported by service industries, including the airport.
- 2.2.13 The Main Application Site is approximately 4km from Junction 10 of the M1 motorway. The A1081 connects the M1 to the airport. The A505 passes through Luton connecting the town to Dunstable in the west and Hitchin in the north east.
- 2.2.14 The Midland Mainline railway line passes to the west of the airport. This is serviced by Thameslink and East Midlands Railway trains which connect Luton Airport Parkway railway station, located approximately 1.5km from the airport, with London and midlands urban areas such as Nottingham, Leicester, Corby and Kettering. Luton Airport Parkway railway station will be directly connected to the airport via the Luton Direct Air-Rail Transit (Luton DART) system which is currently under the final stages of construction and commissioning. Further details on the Luton DART are provided in **Section 2.4** of this ES.
- 2.2.15 Luton Airport Business Park is located to the west and north west of the airport.
- 2.2.16 The River Lea flows to the south in a valley directly at the western end of the airport. This is an Environment Agency designated Main River.
- 2.2.17 Someries Castle, a scheduled monument, lies approximately 250m south of the Main Application Site boundary. This fortified manor house is regarded as one of the first brick-built buildings in England.
- 2.2.18 Luton Hoo Registered Park and Garden (RPG) (Grade II*) is located approximately 300m south west of the airport at its closest point. This RPG contains several listed structures including the Luton Hoo Hotel and terraced wall garden (Grade I); stables (Grade II*); boathouse, bridge, lodges and garden centre (Grade II). The airfield is located on a raised platform, however only part of the control tower and the top of airport buildings are visible from Luton Hoo RPG.

Off-site Car Parks

- 2.2.19 The two locations for the Off-site Car Parks to be delivered as part of the Proposed Development are to the south west of the airport, adjacent to either side of the Midland Mainline. This land is owned by the Applicant and refers to car parks that are proposed, and will be controlled, by the Applicant or the airport operator.
- 2.2.20 The larger of the two sites is located to the north of the Midland Mainline and is currently a trailer park, generally used as parking for Heavy Good Vehicles. The smaller site, which is located to the south of Midland Mainline, is a disused area

of hardstanding which was previously used as a car park. The sites are located in a commercial area dominated by existing transport infrastructure; bordered by Parkway Road and the A1081 to the south, New Airport Way and the A1081 to the east, Kimpton Road and industrial units to the north. The Midland Mainline railway passes between the two sites. Each site contains a border of trees and scrub.

2.2.21 These sites are partially located in the airport's Public Safety Zone (PSZ), an area at the end of runways within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing, as shown in **Figure 15.3** of this ES [TR020001/APP/5.03]. The development of long stay and employee car parking (where the minimum stay is expected to be in excess of six hours) in this zone is permitted.

2.2.22 Off-site Car Parks are shown in **Figure 2.2** of this ES [TR020001/APP/5.03]. The areas of the sites where southern and northern off-site car parks would be located are 1ha and 2.4ha respectively. The existing sites are 110m Above Ordnance Datum (AOD) and 128m AOD respectively.

Off-site highways interventions

2.2.23 The Proposed Development would include several sites where highway improvements would be required to facilitate the increasing airport capacity. The location and nature of these interventions has been determined by detailed traffic modelling. These interventions are described in individual Work Numbers (Work No.) in **Chapter 4** of this ES [TR020001/APP/5.01], including the proposed timing and approximate area of the work, and locations shown in **Figures 4.1 to 4.3** of this ES [TR020001/APP/5.03]. In total an area of approximately 24ha is included within the Order Limits for off-site highway interventions. These Off-site Highway Interventions exclude the proposed Airport Access Road, which is considered as part of the Main Application Site.

2.2.24 As improvements to existing highway infrastructure, each location is urban and has been subject to previous development and disturbance. The proposed works would be essentially 'road works' and would be restricted to existing highway boundaries and no buildings are directly impacted as a result of proposed highway improvements.

2.2.25 The proposed works at M1 Junction 10 would include minor slip roads widening within the highway boundary, widening of the circulatory system to provide an additional lane within the existing roundabout, and changes to white lines and signals, and space for an adjacent temporary construction compound. The total area of the works would be around 7.7ha. As these works are below the area threshold described in Section 22 of the Planning Act 2008 (Ref 2.1) and are not likely to result in significant environmental effects in their own right, it is considered that these proposed works do not constitute a Nationally Significant Infrastructure Project (NSIP) in their own right.

Off-site planting

- 2.2.26 The Proposed Development would include sites where off-site planting is required to mitigate likely effects identified through the EIA process. These are shown on **Figure 2.2** of this ES [TR020001/APP/5.03] and would consist of agricultural field margins both to the north east and south of the Main Application Site.
- 2.2.27 The Order Limits include areas for access and maintenance of the proposed 7km of hedgerows, however the areas will remain in normal agricultural use and are therefore not lost. In total, an approximate area of 16ha is included in the Order Limits for delivery and maintenance of off-site planting.

2.3 Current airport infrastructure

- 2.3.1 Current operations are dominated by 'low cost' commercial operations using International Civil Aviation Organisation (ICAO) Code C aircraft¹; typically, Airbus A319/320/321 and Boeing B737 aircraft together with occasional cargo aircraft. Smaller business aviation/private jets accounted for approximately 25% of the annual movements in 2019 as the airport is one of the most important for business aviation serving London. Whilst the runway is capable of accommodating larger ICAO Code E aircraft such as B787 and A330/350 aircraft, such movements are currently limited due to lower local demand for long haul services in the short term.
- 2.3.2 In 2019, the airport operated flights to approximately 90 destinations, with most passengers flying on commercial scheduled and charter services. In 2019, there were approximately 141,500 aircraft movements (around 460 per typical busy day), of which around 113,100 were by commercial passenger aircraft. The majority of flights are to international destinations, while around 8% are domestic flights.
- 2.3.3 Scheduled service operators include easyJet, Ryanair and Wizz Air. Business and private operators are serviced by facilities operated by Harrods and Signature Flight Support.
- 2.3.4 The London Luton Airport Cargo Centre provides freighter operations, handling approximately 28,000 tonnes of cargo each year (Ref. 2.2).
- 2.3.5 The airport and its associated business park also accommodate a range of aircraft and airport production and maintenance businesses. All are located to the north of the runway and generally to the north west of the passenger terminal area. These are characterised by a range of hangars and supporting facilities dating from the original pre-World War II manufacturing facilities to modern structures.
- 2.3.6 The existing airfield consists of a single runway with associated taxiways, stands and aprons. It has a single commercial passenger terminal, with supporting hangars, maintenance facilities, and airport related offices and separate terminal facilities for business aviation operations. The airport also has

¹ Code [x] aircraft - International Civil Aviation Organisation aircraft categorisation based on size.

a number of car parks (short, mid- and long stay). These elements are described further below, numbered (x) with a corresponding location shown in **Figure 2.3** of this ES [TR020001/APP/5.03].

- 2.3.7 The current airport infrastructure remains characterised by progressive development from its pre-World War II opening to its most recent expansion project consented in 2014 and still under construction, further information on current airport projects is provided in **Section 2.4**.
- 2.3.8 The terminal and aprons have a somewhat unusual 'island' layout, with landside access to the terminal being from the A1081, to New Airport Way, to Airport Way passing under the taxiway to a bus station, drop off area, taxi area and short stay car park on the runway side of the terminal building. Mid and long stay surface parking are provided at the western and eastern fringes of the terminal zone. Hangars and support buildings are generally located around Percival Way.
- 2.3.9 Connection to the national rail network at Luton Airport Parkway railway station will be provided by the Luton DART described further in **Section 2.4** of this chapter. Local bus, regional coach and taxi facilities are located adjacent to the terminal in the 'island' site.
- 2.3.10 The compact nature of the airport infrastructure effectively limits the operation largely to short haul airlines favouring Boeing 737 and Airbus A319/320/321 aircraft, with a small number of passenger aircraft and cargo aircraft movements by larger aircraft. The predominance of 'low cost' operations at the airport is reflected in the majority of flights originating from and bound for European destinations and, hence, characterised by the busy early morning and early evening peaks and to a lesser extent during early afternoon reflecting the large number of aircraft based at the airport and their patterns of operation. In these busy periods, stand availability and efficiency around the taxiway system are key considerations.
- 2.3.11 With passenger growth experienced up to 2020, the airport is increasingly constrained in these busy hours by a lack of aircraft stands and passenger processing space resulting from both the original airport layout and the physically restrictive nature of historic terminal expansion.
- 2.3.12 The global coronavirus pandemic impacted the aviation industry with greatly reduced passenger numbers and flights during 2020 and 2021. The industry is recovering, however the operating characteristics of the airport, including flight numbers, in 2019 is considered the most recent, representative year when the airport was operating at, or near consented capacity for existing and consented infrastructure.

Runway infrastructure (1)

- 2.3.13 The airport has a single runway, running conventionally roughly east to west (as prevailing winds are south westerly in the UK), with a length of 2,162m and width of 46m at an elevation of 160m AOD.

- 2.3.14 The runway is equipped with an Instrument Landing System (ILS) rated to Category IIIB, allowing the airport to continue operating in conditions of poor visibility.

Taxiway infrastructure (2)

- 2.3.15 The runway is served by a parallel northern taxiway linked to a circulatory taxiway arrangement around the 'island' terminal site. A link at the western end of the runway was completed as part of the works consented in 2014 and a similar link is planned at the eastern end. These, together with a new taxiway Foxtrot parallel to taxiway Delta, were consented as part of the 18 mppa permission in 2014 (Project Curium). However, none of these new links extend to the full length of the runway.

Apron areas (3)

- 2.3.16 In 2019, there were up to 43 stands available for commercial passenger aircraft use in peak periods, with the remaining apron areas used for business aviation and cargo activity. Many of these stands are located on the north western side of the terminal building, away from the runway and connected to it by a 'U' shaped set of taxiways and aprons that together encircle the terminal. There is also a cul-de-sac between two piers to the east of the terminal and additional stands to the south of the terminal. In addition, there are aircraft parking areas used primarily for business aviation aircraft and two stands for cargo aircraft adjacent to the cargo centre at the time of writing.

Terminal building and forecourt (4)

- 2.3.17 The airport has a single, two storey passenger terminal building which has been expanded and rearranged several times. The ground floor features a main hall equipped with check-in desks, a separate security screening hall, as well as retail facilities, service counters and the arrivals facilities. After the security screening hall, escalators lead to the departures lounge on the upper floor, with more retail facilities and direct access to the departure gates.
- 2.3.18 The forecourt has been rearranged progressively to serve the terminal expansion and until recently the drop off and collection zone was located in the surface parking area adjacent to the terminal. This zone has been relocated within the second multi-storey car park complex which has been recently constructed.

Cargo (5)

- 2.3.19 The airport has just one cargo handling facility in the furthest north east corner of the north apron.

Aircraft maintenance

- 2.3.20 The north western side of the U-shaped apron is encircled by a continuous line of hangars (6) and other buildings (7), as the airport is a major maintenance base for several airlines including TUI Airways, and easyJet. There are also substantial maintenance facilities associated with the two business aviation companies.

Landside facilities

- 2.3.21 The airport has a conventional range of facilities in the landside terminal area including bus, coach and taxi stands (8). A range of supporting facilities are located around the airport boundary, as well as airline offices.
- 2.3.22 At present, aviation fuel is delivered by road tankers to the two existing fuel storage facilities (9) and then dispensed into fuel bowsers which transport the fuel to the aircraft. The increased capacity at the airport would require a larger fuel storage facility than currently available to meet the increased fuel demand. The current site does not have the space required to accommodate the growth required but will remain in operation to serve the existing terminal.
- 2.3.23 A range of hotels are located in the landside area near the airport and the access road leading to the terminal area.

Airside facilities

- 2.3.24 The airfield benefits from conventional major airport navigational aids as well as an air traffic control tower (10) commissioned in the mid 1990s. The airfield fire station (11) is located adjacent to both the parallel taxiway and taxiway Alpha. A fire training ground (12) is also located on the east side of the airport. An Engine Run-up Bay (ERUB) (13) is located to the south east of the existing terminal off taxiway Alpha to allow aircraft to test engines. This facility is surrounded by earth bunds to act as noise barriers on three sides with the south face open to allow aircraft access and egress to the taxiway.

Airport road network

- 2.3.25 The airport is around 4km north east of Junction 10 of the M1 motorway, which runs south to London, connecting to the M25, and to the north. The majority of vehicles accessing the airport do so from the M1 and Luton via New Airport Way (the A1081). From the Percival Way roundabout, Percival Way and President Way go north around the airport, providing access to various facilities around the airport business park to the north of the airport and the long stay car park (14) to the eastern edge of the terminal area boundary.
- 2.3.26 Airport Way, from the Percival Way roundabout, passes through the taxiway tunnel to serve the short stay car parks, drop off and collection zone and terminal. The local transport network is shown on **Figure 18.1** of this ES [TR020001/APP/5.03].
- 2.3.27 In recent years, improvement works between Junction 10 of the M1 and the airport have been carried out, improving journey times between the M1 and the airport.

Car parks

- 2.3.28 There are two multi-storey short stay car parks (15) adjacent to the terminal (including the recently completed multi-storey car park), together with mid-stay (16) and long stay (14) surface level on airport car parks. These are located to the west and east of the terminal respectively and linked to the terminal by

shuttle buses. Pre-booked off airport parking is also available from several independent operators.

Public transport

- 2.3.29 Local buses connect the airport with Luton town centre. Conventional bus services also operate, connecting the airport with towns and cities in the region and parts of north London.
- 2.3.30 Direct coach services to London include the 757 operated by Green Line Coaches and the A1 operated by National Express which operate competing services to and from Victoria Coach Station. EasyBus services provide a connection to Liverpool Street station. A range of longer distance National Express services link the airport to Stansted, Heathrow and Gatwick Airports as well as destinations in the Midlands and north of England.
- 2.3.31 Luton Airport Parkway railway station links both the East Midlands Railway St. Pancras to Nottingham service as well as the extensive Thameslink service from the counties south of London, via the capital, to Bedford. Daytime rail services are frequent with an hourly service overnight. A shuttle bus link between the airport and Luton Airport Parkway railway station operates 24 hours a day, every 10 minutes from 5am to 12am and between 12am to 5am, it is timed to meet each overnight train service.

Drainage and water

Water supply

- 2.3.32 The public water supply assets serving the Main Application Site and surrounding area are owned and operated by Affinity Water. There is a private network of water supply assets operated by Veolia Water within the airport.
- 2.3.33 Water consumption per annum was approximately 130,000m³ in 2018-2019.

Discharges

- 2.3.34 The airport currently manages surface water via a combination of discharge to public combined sewers and a number of infiltration based systems, including multiple soakaways.
- 2.3.35 A first flush system is implemented at multiple areas across the airport designed to direct the most heavily polluted runoff (such as runoff from de-icing activities) to the Thames Water combined sewer network for treatment at East Hyde Sewage Treatment Works.
- 2.3.36 All existing soakaways and discharges to the Thames Water network are permitted by the appropriate Environmental Permits and trade effluent consents.
- 2.3.37 Foul water is currently discharged to the public foul water network owned and operated by Thames Water. This is collected via the airport's own private foul water pipe network operated by Veolia Water.

- 2.3.38 There are two Thames Water attenuation basins located on Eaton Green Road. One basin is located to the east of the car hire centre within the airport and within the boundary of the Main Application Site (17). The second basin is located opposite the roundabout at Eaton Green Road and Wigmore Lane and outside of the boundary of the Main Application Site (18).
- 2.3.39 Contaminated run-off from the fire training ground is collected in an isolated system and tankered off-site for treatment.
- 2.3.40 Further information describing the existing water and drainage networks serving the airport are provided in the Drainage Design Statement provided as **Appendix 20.4** of this ES [TR020001/APP/5.02].

Energy

- 2.3.41 The airport's electrical energy is currently supplied via existing UK Power Networks (UKPN) supply cables which connect to the airport's main intake substation. The existing High Voltage (HV) supply network on the airport is formed from different HV rings, connecting a series of local HV substations, which then supply the Low Voltage (LV) network. Other energy sources include natural gas boilers (11 no.) and gas oil generators (15 no. mobile and immobile) on site.
- 2.3.42 In 2019 the airport is reported to have consumed approximately 44,579 Megawatt hours per annum (combined electricity and gas) (Ref. 2.3).

Waste treatment

- 2.3.43 The airport is currently responsible for the disposal of operational hazardous and non-hazardous waste. All non-hazardous operational waste is sent for recycling or energy recovery, with no non-hazardous operational waste consigned directly to landfill.
- 2.3.44 The airport also operates a 'pay-by-weight' system whereby concessionaires are charged for waste generated, where general waste is charged at the highest rate to encourage recycling.
- 2.3.45 In 2019 the airport generated a total of 2,471 tonnes of non-hazardous operational commercial and industrial waste. 60% of airport operational waste was sent to recycling facilities, with the remaining 40% sent to an energy recovery facility off site.

2.4 Existing airport related developments

- 2.4.1 A number of airport related developments are currently at various stages of planning and delivery at the airport. These developments and their potential relationship and interaction with the Proposed Development are briefly described in this chapter; where possible the footprint of each development is shown on **Figure 2.4** of this ES [TR020001/APP/5.03]. These include:
- a. Project Curium;
 - b. Variation of condition application to accommodate 19 mppa and to amend the day and night noise contours (21/00031/VARCON);

- c. Luton DART;
- d. Reuse and placement of spoil from Luton DART and Project Curium under a separate planning consent; and
- e. Enterprise Zone:
 - i. Bartlett Square; and
 - ii. Green Horizons Park (formerly known as New Century Park).

Project Curium

- 2.4.2 Project Curium involves extensions to the passenger terminal, construction of additional aircraft stands and new taxiways, improvements to transport links (including new car parking facilities and remodelling of the bus and coach interchange) to increase the capacity of the airport from 12 mppa to 18 mppa.
- 2.4.3 Planning permission was granted in 2014 for works to accommodate passenger capacity up to 18 mppa, by as early as 2021 (subject to demand) (LBC ref: 12/01400/FUL).
- 2.4.4 Project Curium comprised the following planned works:
- a. the dualling of Airport Way from the roundabout at the junction with the A1081 to the Central Terminal Area;
 - b. improvements to the layout of the Central Terminal Area for public and private transport;
 - c. expansion of the passenger terminal (Terminal 1);
 - d. provision of additional aircraft stands to provide up to a total of 48 Code C stands for commercial passenger aircraft along with apron areas for business aviation and cargo aircraft;
 - e. a new passenger boarding pier; and
 - f. new taxiway infrastructure to support a runway aircraft movement rate of 40 movements per hour.
- 2.4.5 Most, but not all, of these enhancements have been completed with some apron works to complete the original provision aircraft stands. A final section of extended taxiway at the eastern end of the runway is also to be completed.
- 2.4.6 It was intended that these works will be completed no later than 2026 but there have been some further adjustments to the final form of the airfield, and that adjusted airfield forms the future baseline for the Proposed Development. It is these modified works that are expected to be in place no later than 2026.
- 2.4.7 An additional multi-storey car park has been built on the existing airport. Further information on Project Curium and the operational features of the airport prior to the Proposed Development commencing are provided in Section 8 of the **Need Case** submitted as part of the application for development consent [TR020001/APP/7.04].
- 2.4.8 When Project Curium is complete, the Proposed Development would tie into the final apron and taxiway works. The final elements of Project Curium are

expected to be delivered before or in parallel with the early elements of the Proposed Development.

Application to accommodate 19 mppa

- 2.4.9 London Luton Airport Operations Limited (LLAOL), the current operator of the airport, has submitted an application (21/00031/VARCON) to LBC for a variation of Conditions 8 (passenger throughput cap), 10 (noise contours), 22 (car parking management), 24 (travel plan) and 28 (approved plans and documents) to Planning Permission 15/00950/VARCON (dated 13th October 2017). This application seeks to accommodate 19 mppa and to amend the day and night noise contours currently consented.
- 2.4.10 There are no physical or infrastructure changes associated with these proposed variations that would seek to change the external appearance, height, scale, mass, or layout of elements associated with Project Curium.
- 2.4.11 On 1 December 2021, LBC resolved to grant permission for the current airport operator (LLAOL) to grow the airport up to 19 mppa, from its previous permitted cap of 18 mppa. Since then, the application has been called-in (6 April 2022) and referred to the Secretary of State for determination instead of being dealt with by the local planning authority. The inquiry to consider the called-in application opened on Tuesday 27 September 2022 and ran until Friday 18 November 2022. At the time of submission of this application for development consent, the outcome of the inquiry is still unknown.
- 2.4.12 All of the assessment work reported in this ES has been undertaken using a 'baseline' of 18 mppa. Nonetheless, in anticipation of LLAOL's 19 mppa planning application, this ES includes a sensitivity analysis of the implications of the permitted cap increasing. This is described in **Chapter 5** and reported in the aspect assessment **Chapters 6 to 20** of this ES [TR020001/APP/5.01].

Luton Direct Air-Rail Transit (Luton DART)

- 2.4.13 Luton Rising was granted planning permission in 2017 (LBC ref: 17/00283/FUL) for the construction of an approximately 2km twin track cable-driven system between Luton Airport Parkway railway station and the airport's Central Terminal.
- 2.4.14 The Luton DART comprises a terminal connected to Luton Airport Parkway railway station, tracks mounted on a viaduct adjacent to the Midland Mainline railway, which join a bridge over the A1081 (Airport Way) road, leading to a cut, trough and tunnel within the airport, terminating at another terminal in the Central Terminal Area (CTA). The new two storey terminal constructed adjacent to Luton Airport Parkway railway station provides a connecting bridge link between the two stations.
- 2.4.15 Construction for the project started in 2018, was completed in 2022, and is undergoing commissioning before commercial services commence in 2023. Therefore, the Luton DART is assumed to be present in the future baseline considered in this EIA and considered operational before the Proposed Development commences.

- 2.4.16 The Proposed Development will provide an extension to the Luton DART, altering the previous operational parameters by extending the tunnel and tracks, increasing the system cable length and tension, modifying existing stations to allow for an additional car unit, and relocating the maintenance service zone to the new station. No additional work on the Luton DART project is required west of Terminal 1 as a result of the Proposed Development.

Spoil reuse and placement from the Luton DART and Project Curium

- 2.4.17 Planning permission was granted in 2018 (LBC ref: 17/02219/FUL) for the movement, reuse and placement of spoil material generated from Project Curium and Luton DART.

- 2.4.18 The spoil from the Luton DART and Project Curium has been used to re-profile slopes around the airport to improve essential maintenance operations for the airport, and to prevent large volumes of construction traffic movements on the public network. Up to 331,400m³ of spoil material could be moved and placed permanently on six sites within the airport and the airside perimeter road at the eastern end of the airport will be diverted.

- 2.4.19 Project Curium is still under construction, therefore this project is still in progress.

Enterprise Zone

- 2.4.20 The Luton Rising has plans to develop a combined office and hotel development, and a business park within Luton Airport Enterprise Zone (designated in 2015). These developments, known respectively as Bartlett Square and Green Horizons Park, seek to provide employment generation for the local community. Together they constitute approximately 83,500m² of commercial space sited within the Enterprise Zone. The two schemes are described further in the following sections.

Bartlett Square

- 2.4.21 Bartlett Square, formerly known as Stirling Place, is located to the east of the Luton Airport Parkway railway station, adjacent to the Luton DART terminal which is under construction. A planning application for a hotel with a capacity for 172 rooms, incorporating Hart House, one six storey office building, and a multi-storey car park, with an outline application for another nine storey office building with commercial space was submitted by the Luton Rising on 21 February 2018 (LBC ref: 18/00271/EIA). LBC granted planning permission for Bartlett Square on 16 January 2020.
- 2.4.22 A further planning application for the provision of pedestrian access to the Luton DART station and a small area of public realm was submitted in July 2021 (LBC Ref: 21/01082/FUL). This was approved on 4 November 2021, with construction commencing in mid-2022.
- 2.4.23 There is no direct link between Bartlett Square and the Proposed Development and it is assumed that these permissions will be implemented as consented.

Green Horizons Park

- 2.4.24 The Green Horizons Park (GHP) development is the planning permission formerly known as New Century Park (NCP) and includes high quality mixed-use business park to the east of the airport, and the construction of a new access road (referred to in the planning application as Century Park Access Road (CPAR)) connected to Airport Way to the west of the airport.
- 2.4.25 The planning application (LBC ref: 17/02300/EIA) comprises office space (Class B1), warehouse and industrial space (Class B2 and B8), mixed employment space (Class B1/B2/B8), a hotel (Class C1), café space (Class A3); energy recovery centre (sui generis), internal access roads, car parking, landscaping and associated works including earthworks, utility diversions, sustainable drainage systems, tree removal and tree protection.
- 2.4.26 An outline application was submitted by Luton Rising in December 2017. In Spring 2019, LBC resolved to grant planning permission, subject to completion of legal agreements. On 29 June 2021, the Section 106 agreement was completed and the application for Green Horizons Park was approved.
- 2.4.27 Improvements to Wigmore Valley Park as part of the Green Horizons Park proposals include refurbishment and extension to the Wigmore Valley Park Pavilion building.
- 2.4.28 The Proposed Development supersedes much of the development consented as Green Horizons Park LBC ref: 17/02300/EIA, the key changes and relationship with the Proposed Development are summarised below from **paragraph 2.4.28**.
- 2.4.29 The draft Development Consent Order **[TR020001/APP/2.01]**, submitted with the application, makes provision for managing the interface for the implementation of Green Horizons Park and the Proposed Development. Following the decision of the Supreme Court in the judgment of Hillside Parks Ltd v Snowdonia National Park Authority [2022] UKSC 30 specific drafting has been included in the draft DCO to deal with any inconsistency between the Green Horizons Park permission and the Proposed Development to ensure that the Green Horizons Park planning permission does not become unimplementable.

Airport Access Road

- 2.4.30 The Airport Access Road is the new road providing access to the east of the airport (formerly named CPAR) has been re-designed to accommodate the proposed growth in airport capacity and is included in full in the Proposed Development.
- 2.4.31 The programme for delivering the infrastructure for the Proposed Development in response to the latest passenger demand forecasts means that the access road is not required in full until the construction of the new terminal in assessment Phase 2a of the Proposed Development, with completion in assessment Phase 2b.

2.4.32 Therefore, consent to construct the new road providing access to the east of the airport is now being sought as part of the Proposed Development in this application for development consent, not implemented under the Green Horizons Park planning permission unless the Proposed Development does not proceed, in which case CPAR would still be permitted under the extant planning permission. The road will be delivered in three parts as considered in the three assessment phases of the Proposed Development as described in **Chapter 4** of this ES [TR020001/APP/5.01].

Elements of Green Horizons Park superseded by the Proposed Development

2.4.33 The following aspects of the Green Horizons Park development would not be delivered if the DCO is granted, as the areas where they were proposed would be directly replaced by aspects of the Proposed Development in those locations:

- a. the Office/Industrial Quarter and car park located in the current area of Wigmore Valley Park;
- b. proposed footpaths;
- c. the combined Green Horizons Park and car park 02;
- d. the long term car park; and
- e. the light industrial quarter.

2.4.34 The proposed provision of replacement open space in Green Horizons Park would be excavated and occupied by works consented through the DCO; therefore, replacement open space would be provided as part of the Proposed Development further to the east, as shown in **Figure 4.1** of this ES [TR020001/APP/5.03]. If the Proposed Development does not proceed, these elements of Green Horizons Park could still be delivered under the extant planning permission.

Elements of Green Horizons Park delivered through extant Green Horizons Park planning permission

2.4.35 The children's play area and improvements to Wigmore Park Pavilion in the north of Wigmore Valley Park will continue to be delivered through and as consented by the Green Horizons Park permission and are expected to be implemented before construction starts for the Proposed Development. Construction works, including earthworks to provide visual screening to the south, and improvements to the remaining open space to the east of the Green Horizons Park works, would be implemented through the Proposed Development in assessment Phase 1, as described in **Chapter 4** of this ES [TR020001/APP/5.01].

2.4.36 Three other areas of the Green Horizons Park development will continue to be delivered through that planning permission, as the Proposed Development is constructed. These are shown on **Figure 2.4** of this ES [TR020001/APP/5.03] and include the areas labelled as follows:

- a. Area A - The Office Quarter comprising five office buildings and a Multi Storey Car Park (MSCP);
- b. Area B - An area containing the Tidy tip with new access provided as part of NCP, hotel, and Landside operations building (vehicles maintenance and storage, replacement for London Luton Airport Technical Services building); and
- c. Area C - The GHP Light industrial quarter (this area is safeguarded for Green Horizons Park development and not directly affected by the Proposed Development).

2.4.37 The exact footprint and orientation of these structures and detailed layout of the areas they are located within, has been amended to accommodate the Proposed Development. The changes to these aspects of GHP would be described in the detailed designed stages for the GHP development and submitted to LBC for approval through the discharge of appropriate planning conditions applied to that permission.

2.4.38 How these Green Horizons Park works relate to the surrounding Proposed Development works (as described in **Chapter 4** of this ES [TR020001/APP/5.01] and shown in **Figure 4.1 to 4.3** of this ES [TR020001/APP/5.03]) are described here:

- a. Assessment Phase 1: No Green Horizons Park works proceed. Area (A) is occupied by Work No. 4l(01) (Car Park 6) and Work No. 4m(01) (Car Park 7) and Area (b) is part occupied by Work No. 6b.01 Airport Public Roads;
- b. Assessment Phase 2a: Car Park No. 6 is adjusted (Work No. 4l(02)) to accommodate one of the Green Horizons Park office buildings. The new road providing access to the east of the airport is constructed (Work No. 6a(02)) as part of the application for development consent, and the new access to the Tidy tip as part of Green Horizons Park. The Hotel and Landside operations buildings are constructed as part of Green Horizons Park to the south of the new access road, in a reconfigured layout to accommodate the Proposed Development. These aspects of the Green Horizons Park development are expected to be constructed after Work No. 6a(02) is complete; and
- c. Assessment Phase 2b: The remaining four offices of the Green Horizons Park office quarter are constructed at an altered alignment to that shown in the Green Horizons Park planning application, to accommodate the Proposed Development. The surface car parking previously provided as part of Green Horizons Park is now occupied by the Proposed Development, therefore, the Green Horizons Park proposal will be amended to provide a MSCP in the south east of the office quarter where Car Park 6 was, as car parking is provided elsewhere in the Proposed Development.

2.4.39 As the remaining elements of the Green Horizons Park development will be implemented during the construction of the Proposed Development, the potential influence on the likely environmental effects of the Proposed

Development are considered and reported in **Chapter 21 Cumulative Effects Assessment of this ES [TR020001/APP/5.01]**.

GLOSSARY AND ABBREVIATIONS

Term	Definition
am	Ante meridiem
AOD	Above Ordnance Datum
CPAR	Century Park Access Road
CTA	Central Terminal Area
CWS	County Wildlife Site
Luton DART	Luton Direct Air-Rail Transit
ES	Environmental Statement
GHP	Green Horizons Park
ha	Hectare
HCC	Hertfordshire County Council
ICAO	International Civil Aviation Organisation
ILS	Instrument Landing System
km	Kilometre
LBC	Luton Borough Council
m	Metre
m ²	Metre squared
m ³	Metre cubed
mppa	Million passengers per annum
NCP	New Century Park, planning permission (LBC ref: 17/02300/EIA) now known as Green Horizons Park
NSIP	Nationally Significant Infrastructure Project
PSZ	Public Safety Zone
Q1-4	Quarter 1-4
RPG	Registered Park and Garden
TDOZ	Temporary Drop Off Zone
UKPN	UK Power Networks

REFERENCES

Ref. 2.1 Planning Act 2008, Chapter 29, available at <https://www.legislation.gov.uk/> [accessed 16/09/22]

Ref. 2.2 London Luton Airport (2021) LLA Corporate Website: LLA Cargo Centre.

Ref. 2.3 London Luton Airport (2020) Sustainability Report 2019 Available on LLA Corporate Website