



Brabazon at the Former Filton Airfield

Environmental Statement

Volume 1: Main Report

On behalf of YTL Developments (UK)

YTL Developments
YTL GROUP



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1. Introduction

1.1 Project Background

1.1.1 An Environmental Impact Assessment (EIA) has been managed by Stantec UK Ltd (Stantec) on behalf of YTL Developments (UK) Ltd ('the Applicant') in relation to an outline planning application for a mixed-use development (hereafter referred to as the 'Proposed Development') at Brabazon at the former Filton Airfield (hereafter referred to as 'the Site').

1.1.2 This Environmental Statement (ES) presents the findings of the EIA and identifies the likely significant environmental effects of the Proposed Development during construction and operation.

1.1.3 The Proposed Development description is as follows:

"Mixed use development on 141.94 hectares of land comprising: residential development for up to 6,500 dwellings; Student Accommodation (Sui Generis); Business Office and Research development (Use Class E); General Industry (Use Class B2); Hotels (Use Class C1); Extra Care Accommodation (Use Class C2); Education provision to include a Secondary School, Primary Schools, Children's Nurseries and further education buildings (Use Class E and F1); Community centres and uses inclusive of library, health (including GP and Dental facilities), and built sport facilities, (Use Class E, F1 and F2); Other E use class town centre uses up to inclusive of, public house and other drinking establishments, and hot food takeaway (Sui Generis) together with; supporting infrastructure and facilities including demolition, ground works and remediation, highways and parking inclusive of pedestrian and cycle routes, public transport inclusive of Metrobus route and rail station, utilities, landscaping, sustainable urban drainage, water basins and public open space. Outline application including access, with all other matters reserved."

1.1.4 The Site is located within the administrative authority of South Gloucestershire Council (SGC). The Site primarily comprises the former Filton Airfield and associated buildings and hangars covering 141.94 hectares (ha) and is located in north Bristol. The Site is bounded by the A38 (Gloucester Road) and Royal Mail sorting office to the east, the Charlton Hayes mixed-use development and Hayes Way / Merlin Road to the north (with the Cribbs Causeway Regional Shopping Centre beyond Merlin Road), the A4018 to the west and the Hallen Freight Line and Airbus Estate to the south. A Site Location Plan is provided in **Appendix A.1**.

1.2 Project History

1.2.1 There is an existing planning consent that covers the Site. An ES was prepared in 2014 and submitted by BAE Systems ('2014 ES') (Planning Application Reference PT14/3867/O) to support a planning application, for which the development description is as follows:

"Outline planning permission for provision of up to a maximum of 2,675 residential units, including affordable and live-work units, extra care housing, provision of two primary schools and one secondary school, library, children's nurseries and health centre. The application also includes provision of public open space, sports facilities, recreation and play provision, and allotments. With respect to employment uses the planning application is seeking consent for up to 24 hectares of flexible space for B1 (business), B2 (general industry) and B8 (storage and distribution) uses. Within a neighbourhood centre there will be 1.1 hectares of A1 floor space for a retail food store and 0.36 hectares for a pub. In addition, the neighbourhood centre includes 1.1 hectares as a mixed-use parcel that will include small retail units, health centre and chemist, with apartments above."

1.2.2 An ES Addendum to the 2014 ES was prepared in 2015 ('2015 ES Addendum') by BAE Systems. The 2015 ES Addendum comprised a Regulation 22 submission of further

information and changes to the masterplan required as a result of consultation and consultee feedback on the 2014 ES (related to assessments of air quality, cultural heritage, ecology and public rights of way).

- 1.2.3 The Applicant acquired the Site from BAE Systems in 2015.
- 1.2.4 A further ES Addendum to the 2014 ES was prepared in 2017 ('2017 ES Addendum'). The Applicant sought to amend the planning application (Planning Application Reference: PT14/3867/O) to include the concept of a linear park.
- 1.2.5 Planning permission was granted on 1st March 2018 based on the following description of development:
- "Mixed use development on 141.733 hectares of land comprising: residential development for up to 2,675 dwellings and apartments (comprising 2,635 x Use Class C3 and 40 x Live Work Units – Sui Generis); 24ha of stand-alone employment land (comprising up to 12ha Use Class B1a and a minimum of 12ha Use Class B1b/c, B2); 120 Bed Hotel up to 3,800 sqm (Use Class C1); Rail Station (0.45ha Use Class Sui Generis); Education provision to include a Secondary School (8.31ha), 2 no. Primary Schools (total 5ha) and 2 no. Children's Nurseries (total 0.8ha) (all Use Class D1); Community Centre incorporating Library, Built Sports facilities and Doctors surgery up to 3,400sqm (Use Classes D1 & D2); Dental Surgery up to 800sqm; (Use Class D1); 70 Bed Extra Care Facility up to 12,500sqm (Use Class C2); Shops/Financial Services/Food and Drink facilities up to 4,787sqm (Use Classes A1, A2, A3, A4 and A5) – comprising Retail Supermarket up to 2,787sqm gross maximum (Use Class A1); drinking establishment(s) up to 800sqm (Use Class A4); Business Offices up to 500sqm (Use Class B1) together with; supporting infrastructure and facilities including demolition, ground works and remediation, highways, utilities, landscaping, sustainable urban drainage system, wildlife water basins and public open space. Outline application including access, with all other matters reserved".*
- 1.2.6 The Applicant is also bringing forward the development of a 17,000-capacity arena to the south of the Site. In 2020, detailed planning consent was granted to develop the existing Brabazon Hangars into the 'YTL Arena' (Planning Application Reference 19/05500/P). Four planning applications have been submitted, as follows: for development of the YTL Arena itself (Planning Application Reference 19/05500/P), amendments to the existing highway and highway junction at Charlton Road and West Way (Planning Application Reference P19/16740/F), formation of a temporary car park (P19/16740/F) and construction of a new pedestrian bridge (Planning Application Reference P19/16742/F) (see **Section 5.11** for further detail).
- 1.2.7 Construction of the first phase of the extant planning consent commenced in 2020 ('Brabazon Phase 1') for 302 dwellings and associated infrastructure and landscaping and is under construction at the time of writing (Planning Application Reference PT18/5892/RM). Brabazon Phase 1 is located in the north of the Site, to the south of Hayes Way, with access to this plot from Blenheim Roundabout. Construction of Brabazon Phase 1 is anticipated to be completed by Q1 2024.
- 1.2.8 A planning application was submitted for Brabazon Park in December 2021 (Planning Application Reference P21/08021/RM) for the following:
- "Laying out of public open space to include provision of two Local Equipped Areas of Play (LEAP), a Neighbourhood Equipped Area of Play (NEAP), area for Youth Play and a Sports Zone, informal open space, landscaping, water feature/sustainable drainage system (SuD) and all associated works (to be read in conjunction with Outline permission PT14/3867/O)."*
- 1.2.9 A Section 73 (S73) application was submitted and approved in 2022 (the '2021 S73') (Planning Application Reference P21/02390/RVC) because the approved 2018 parameter plans did not make any allowance for the YTL Arena and associated planning applications

(four planning applications required to deliver the YTL Arena were submitted in 2019). Ensuring the Site could respond to the introduction of the YTL Arena and facilitating multi-modal access to it was the principal rationale behind the S73 planning application. The S73 did not change the description of development.

1.2.10 This ES supports a new outline planning application for *inter alia* an uplift in the number of residential units that the Proposed Development is providing from 2,675 to 6,500 as set out in **Paragraph 1.1.3**. The key principles that have driven the update to the development proposals are as follows:

- **Creating a dense and sustainable community:** there is both a critical need and consumer demand for more housing, more urban living and more employment; and
- **Establishing a landscape for living:** post-pandemic living and a global biodiversity crisis both provoke a different attitude to landscape. Proximity and quality are paramount so more is needed where density is highest. The landscape needs to work harder as ecological connectors and Biodiversity Net Gain is now a key aspiration. Further detail on Biodiversity Net Gain is provided in **Section 12.5**.

1.2.11 The key changes to the development proposals are shown in **Table 1.1** below.

Table 1.1: Key Changes to development proposals between the extant planning consent and the new planning application

Development Type	Extant Planning Consent	New Planning Application
Dwellings	2,675	6,500
Hotel	120 bed hotel	3 hotels
Rail Station	Rail Station	No change
Secondary School	Secondary School	No change
Primary School	2 x primary school	No change
Nursery	2 x nurseries	No change
Further Education	None	55,000sqm
Library	Library	No change
Sports Facilities	Sports facilities (including a cricket pitch, football pitches, a hockey pitch and a rugby pitch)	No change
Doctors Surgery	6 no. Doctors surgeries	To be agreed
Dental Surgery	800m ² Dental surgery	To be agreed
Extra Care Facility	70 Bed Extra Care Facility	600 units of extra care
Food/drink	Food/drink facilities	No change
Supermarket	2,787m ² Supermarket	Flexible provision

Development Type	Extant Planning Consent	New Planning Application
Drinking Establishments	Drinking Establishments	No change
Business Offices	500m ²	270,000m ² of Business Offices and Research Development
Student Accommodation	None	55,000m ²

1.3 Terms and Definitions

1.3.1 For ease of reference the following terms have been used throughout the ES (unless the context dictates otherwise):

- **Parameter Plans** – plans for approval that establish parameters for the Proposed Development. These plans form the basis of the assessment in this ES. These are included in **Appendix A.2**;
- **‘Proposed Development’** – the application for which planning permission is being sought, as described in **Chapter 3**;
- **‘the Site’** – the Site area being developed, as per **Appendix A.1** and described in **Chapter 2**;
- **‘SGC’** – South Gloucestershire Council (the determining authority);
- **‘BCC’** – Bristol City Council, authority for land immediately adjacent to the south of the Site and a statutory consultee for this application;
- **‘the Applicant’** – YTL Developments (UK) Ltd;
- **‘2014 ES’** – The Environmental Statement (ES) submitted in 2014 by BAE Systems (Planning Application Reference PT14/3867/O);
- **‘2015 ES Addendum’** – An ES Addendum to the 2014 ES, a Regulation 22 submission comprised of further information required as a result of consultation and consultee feedback on the 2014 ES (Planning Application Reference PT14/3867/O);
- **‘2017 ES Addendum’** – A further ES Addendum to the 2014 ES which was submitted in 2017 by the Applicant (Planning Application Reference PT14/3867/O);
- **‘2021 S73’** – A Section 73 application submitted by the Applicant in 2021 to make allowance for the YTL Arena in the development proposals (Planning Application Reference P21/02390/RVC);
- **‘2021 ES’** – the ES submitted with the S73 application;
- **The extant planning consent** – outline planning permission for 2,675 dwellings and associated development at the former Filton Airfield, granted in March 2018 (Planning Application Reference PT14/3867/O);
- **Previous environmental information** – refers collectively to information provided in the 2014 ES, 2015 & 2017 ES Addendums and 2021 ES;

- **Brabazon Phase 1** – The phase of the extant planning consent comprising 302 units that is currently under development (at the time of writing). These units have been included in the current baseline (Planning Application Reference PT18/5892/RM); and
- **Transport Phases** - The transport strategy for the Proposed Development which will come forward in four phases linking sustainable travel to the quantity of permitted development.

1.4 The Environmental Statement and Other Documents

- 1.4.1 This ES presents the findings of an EIA undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended), referred to as the 'EIA Regulations'.
- 1.4.2 The Proposed Development is an urban development project comprising more than 150 dwellings and has the potential to give rise to significant environmental effects by virtue of its size, nature and location. It is therefore considered to be EIA development falling within paragraph 10(b) of Schedule 2 of the EIA Regulations and the Applicant has voluntarily undertaken an EIA in accordance with the EIA Regulations.
- 1.4.3 Running concurrently with the design process, the EIA has sought to identify any likely significant environmental effects, to identify appropriate design and construction measures and apply good practice both to mitigate any likely significant adverse environmental effects and to maximise the environmental opportunities which might arise as a consequence of the construction and operation of the Proposed Development. The EIA has also sought to determine the residual beneficial and adverse environmental effects remaining after mitigation measures have been incorporated.
- 1.4.4 The other documents submitted with this planning application include:
- Design and Access Statement;
 - Planning Statement;
 - Statement of Community Involvement;
 - Heritage Settings Assessment;
 - Flood Risk Assessment;
 - Energy Strategy;
 - Retail Assessment;
 - Phase 1 Geo-Environmental Assessment Report;
 - Biodiversity Net Gain Assessment; and
 - Health Impact Assessment.

1.5 Report Structure

- 1.5.1 The ES comprises the following volumes:
- **Volume 1: Main Report (this document)**
 - **Chapter 2:** description of the Site and surrounding area

- **Chapter 3:** summary of the Proposed Development
 - **Chapter 4:** summary of demolition, construction and site management
 - **Chapter 5:** methodology adopted to undertake the EIA
 - **Chapter 6:** summary of the planning and policy context
 - **Chapter 7-14:** technical chapters which document the assessments of likely significant effects of the Development
 - **Chapter 15:** assessment of impact interactions
 - **Chapter 16:** schedule of mitigation and monitoring
 - **Chapter 17:** glossary of abbreviations used in the ES
- **Volume 2: Appendices**
 - **Non-Technical Summary**

1.6 Project Team

1.6.1 The project team for this EIA is shown in **Table 1.2**.

1.6.2 In accordance with Regulation 18(5)(b) of the EIA Regulations, a statement outlining the relevant expertise and qualifications of competent experts appointed to prepare the ES is provided in **Appendix A.4**.

Table 1.2: EIA Project Team

Project Team Member	Team Position
Stantec	EIA Coordination and ES Production
	Landscape and Visual
	Air Quality
	Noise and Vibration
	Socio-economics
	Climate Change and Sustainability
Momentum Transport Consultancy	Traffic and Transport
Wessex Water	Biodiversity
Architectural Aerodynamics Ltd. (ArcAero)	Wind Microclimate

2 Site and Surrounding Area

2.1 The Site

- 2.1.1 The Site is located within the administrative boundary of SGC. The Site lies between the A38, the A4018 and the residential areas of Filton, Patchway, Brentry and Catbrain. The Site has brownfield status and extends to 141.7 ha, with the majority of the Site comprising the former Filton Airfield and associated buildings and hangars. The Site includes areas of semi-improved grass either side of the runway, and existing trees and woodland, marsh, and a Henbury Trym stream to the west. In the east the Site includes the airfield's former terminal buildings, fire station, storage buildings and the Hangar 16U. A Site Location Plan is provided in **Appendix A.1**. A Site Context Plan is provided in **Appendix A.5**.
- 2.1.2 The Site lies on a gentle slope, south east of a ridgeline followed by the M5 motorway up to its junction with the M4. The land across the Site rises from approximately 55 metres Above Ordnance Datum (AOD) in the southeast corner to approximately 70 metres AOD halfway along the runway before gently falling to approximately 40 metres AOD beyond the end of the runway at Henbury Trym stream.
- 2.1.3 The principal existing feature of the Site is the main runway, which runs in an east-west direction. The runway is 2,467 m in length. At the time of writing the runway is being demolished and removed to facilitate the extant planning consent.
- 2.1.4 At either end of the runway are large circular areas for turning of aircraft, approximately 180 metres in diameter, and at the western end of the runway is an area of concrete used as part of an arrestor system to prevent overrun of aircraft.
- 2.1.5 In addition to the main runway, there are the remnants of a crosswind runway, which runs almost perpendicular to the eastern end of the main runway. North of the main runway there are three former taxiways, which were used for the movement of aircraft, and four areas of airfield apron, which were used for aircraft parking. A cluster of airfield buildings remains to the north of the runway, and these include three Grade II Listed hangar buildings, only one of these buildings, Hangar 16U is onsite.
- 2.1.6 Apart from areas of concrete hardstanding forming the runways, ground cover within the Site boundary is predominantly grassland, consistent with the former use as an airfield. North of the main runway there are areas of more substantial vegetation and trees, the most notable of which is the Filton Wood Site of Nature Conservation Interest (SNCI). A range of buried services is present on the Site including surface water drainage, foul water drainage and electrical connections.
- 2.1.7 The functional space across the Site is open and expansive in character with long distance views from the highest point in the centre of the runway. Views to the west are of the ridgeline beyond the M5 with Haw Wood on the summit and increasingly the new construction works for emerging residential-led developments. Views to the south are of the edge of Brentry, Elm Farm, the Paynes Orchard caravan park, Cedar House and the BAE Systems / Airbus estate. Views to the east are of the recent developments along the A38 and the very distant Cotswold Hills and views to the north are of Cribbs Causeway and the new link road (Hayes Way) and the Charlton Hayes development.
- 2.1.8 Brabazon Phase 1 is the first phase of the extant planning consent which comprises 302 units that are currently being constructed (at the time of writing). Brabazon Phase 1 lies within the north east of the Site and is accessed off Blenheim roundabout on Hayes Way.
- 2.1.9 When operational as an airfield, the Site had one access provided via the Combination Junction, which still links the Site to the A38 Gloucester Road.

2.2 Environmental Context

- 2.2.1 There are relatively few sites designated for their natural or cultural heritage interest in the vicinity of the Site. Intertidal areas in the Severn Estuary are designated as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Area (SPA), with particular interest for migratory fish and birds. The Severn Estuary SSSI, SAC and SPA is located approximately 8.5km west of the Site. There is also a smaller SSSI, Cattybrook Brick Pit SSSI, which is situated north of the M5 to the south west of Almondsbury, approximately 2.7km north of the Site. The Filton Wood SNCI is located adjacent to the northern Site boundary and is a 1.8 ha woodland and part of Filton Golf Course located to the south of the Site is designated as an SNCI. There are areas of ancient woodland within the Green Belt to the west of the Site, and registered parks and gardens to the south east and south west.
- 2.2.2 The land use of the Site comprises concrete and hardstanding infrastructure and declining semi-improved neutral grassland and semi-improved poor grassland accounts for the majority of habitats within the Site. The remaining habitats within the Site consist of broadleaved woodland in 3 different locations and scrub habitats which are almost exclusively bramble. There is a settlement lagoon at the eastern end of the Site. The boundaries of the Site comprise approximately 4km of hedgerow and scrub mix and security fencing constituting the remainder where vegetation is absent.
- 2.2.3 There are no scheduled monuments within the Site. There are scheduled monuments to the south west, south and east, although these are some distance from the Site. A cluster of airfield buildings remains to the north of the runway, and these include three hangar buildings that are Grade II Listed. Only one of these buildings, Hangar 16U is onsite. The other buildings are associated with the Bristol Aero Collection Trust (BACT) museum. Another listed building on the Site is a small WWII pill box adjacent to the southern boundary. There are relatively few listed buildings in the immediate vicinity of the Site, although there are higher numbers of listed buildings in the wider area to the south, including at Henbury, Westbury on Trym, Stapleton and Frenchay.
- 2.2.4 Three Air Quality Management Areas (AQMA) have been declared by SGC due to exceedances of the annual mean nitrogen dioxide (NO₂) National Air Quality Objective (NAQO). The closest AQMA to the Site is located more than 5 km away at Staple Hill. In 2020, SGC revoked AQMA 1 (Cribbs Causeway), encompassing a single property adjacent to the M5 junction 17, approximately 860 m from the Site, due to continued compliance with the annual mean NO₂ NAQO.
- 2.2.5 The neighbouring local authority, Bristol City Council (BCC), has declared an AQMA encompassing the city centre and parts of the main radial roads including the M32. The AQMA has been declared due to exceedances of the annual mean and hourly mean NO₂ NAQO, as well as the 24-hour mean particulate matter (PM₁₀) NAQO and is located approximately 2.2 km south of the Site at its closest point.
- 2.2.6 In 2019¹, SGC undertook monitoring at one automatic monitoring site which measures NO₂ and PM₁₀ and 107 non-automatic monitoring sites which measures PM₁₀ only. The closest monitoring location was at the A4018 Cribbs Causeway, approximately 600 m from the Site. There were no exceedances of NO₂ at this location. In addition, there were no exceedances of the annual mean NO₂ NAQO at any SGC monitoring locations in close proximity to the Site between 2015 - 2019.
- 2.2.7 The Site lies in Flood Risk Zone 1; identified as having low risk from fluvial or tidal flooding. The Site falls away to the east and west from its central point forming two catchments to the closest watercourses; the Stoke Brook to the southeast which is culverted through the Site

¹ Due to temporary changes in travel patterns in 2020 resulting from the COVID-19 pandemic, 2019 is the latest year of representative monitoring data.

and the Henbury Trym to the northwest. The Site is drained by on-site networks which discharge to both watercourses. The Site is not at risk of flooding from reservoirs or sewers. Flood maps indicate some small areas at risk of flooding from surface water.

- 2.2.8 According to records held by the British Geological Survey (BGS), the geology of the Site comprises interbedded mudstones and limestone of the late Triassic and early Jurassic Periods.
- 2.2.9 The geology below the Site comprises the Wilmcote Limestone Member (Limestone and Mudstone interbedded) and the Westbury and Cotham Member (Limestone and Mudstone interbedded). No superficial deposits are recorded. Made Ground was not shown on the geological maps however, it was considered likely Made Ground would be present associated with buildings, roads and historic cut and fill.

2.3 The Surrounding Area

- 2.3.1 The boundaries of the Site are broadly defined by the A38 (Gloucester Road) and Royal Mail sorting office to the east, the Charlton Hayes mixed-use development and Hayes Way / Merlin Road to the north (with the Cribbs Causeway Regional Shopping Centre beyond Merlin Road), the A4018 to the west and the Hallen Freight Line and Airbus Estate to the south.
- 2.3.2 The Site is in the Cribbs Patchway New Neighbourhood (CPNN) area allocated by SGC in the Core Strategy (December 2013) to bring forward new homes and supporting infrastructure. The Site is situated in a wider mixed use area containing employment, manufacturing, residential, recreational and retail uses.
- 2.3.3 The Royal Mail sorting office is a substantial structure immediately adjacent to the eastern boundary of the Site. It is serviced by a slip road from the A38 (the B4057) that runs parallel to the A38 and re-joins to the north of the sorting office. A small part of the Site lies to the east of the A38 and includes a lagoon, which was designed to contain a fuel spillage on the eastern side of the airfield in an emergency.
- 2.3.4 East of the Site is the manufacturing site operated by Rolls Royce and office employment uses, the Village Hotel, GKN Areospace Technology Centre and car dealers (Horizon 38 development). Further east are the urban areas of Patchway, Stoke Gifford and Harry Stoke, which are predominantly residential areas with associated schools and other community uses. East of the Site there is also significant railway infrastructure including main lines to Bristol, London Paddington, and South Wales.
- 2.3.5 Land to the south east of the Site has a predominantly urban character but this is a lower density than other areas to the north, east and south of the Site. An area of Green Belt extends in towards the city beyond the M4 leading to a registered park and garden at Lockleaze. This green corridor either side of the B4058 is flanked by University of the West of England Frenchay campus and the residential areas of Frenchay and Broomhills.
- 2.3.6 Immediately to the south of the Site fronting on to the A38 is the Airbus estate, comprising the Airbus freehold site and Brabazon Hangars. Adjacent sites are occupied by Rolls Royce, GKN, MBDA and BAE Systems, which together employ over 10,000 workers and form a tight cluster of high-tech industry that comprises the majority part of the internationally recognised aerospace / defence cluster in the southwest.
- 2.3.7 To the south of the Site lies the consented YTL Arena Bristol which will comprise a change of use, refurbishment and external alterations to the Brabazon Hangar building, construction of a pedestrian bridge over the Henbury railway line, connecting the Hangar to Filton Airfield, demolition of existing structures around the hangar and alterations to existing areas of hardstanding and temporary car parking provision on the Site. Further detail on the arena development is provided in **Section 5.11**.

- 2.3.8 Land south of the Site includes Filton Golf Course (which is an SNCI) and the predominantly residential areas of Filton, Brentry, Southmead and Henbury, with the City of Bristol further south. The Fishpool Hill development lies to the south west.
- 2.3.9 To the north of the Site lies the BACT museum, a number of car dealership garages and the urban areas of Patchway and Cribbs Causeway. Beyond these areas lies the M5 corridor which is an area of Green Belt containing scattered dwellings, farms, villages and the settlement of Almondsbury. Northwest of the Site, along the shore of the Severn Estuary are areas of heavy industry, power stations, trading estates, manufacturing and other commercial uses. These land uses lead to Avonmouth Docks, which is to the south west of the Site.
- 2.3.10 The Site is well placed in relation to both the strategic and local road and public transport network. It is situated to the south of the M5 motorway junctions 16 and 17 and lies between the A4018 and A38 which provide radial connections into Bristol city centre and key public transport corridors as part of the Greater Bristol Bus Network. The Site is also well placed in relation to the A4174 Avon ring road providing access to the M32 and M4 in the east.
- 2.3.11 The section of the A38 adjacent to the Site is dual carriageway and provides a key link between Bristol and the M5, to the north. Current principal access to the Site to Brabazon Phase 1 is from Blenheim Roundabout from Hayes Way.
- 2.3.12 The B4057 provides access to Hayes Way / Merlin Road that runs close to the northern boundary of the Site. Hayes Way serves the residential area of Charlton Hayes.
- 2.3.13 West of Charlton Hayes is the Cribbs Causeway Regional Shopping Centre and Patchway Trading Estate. Principal access to Cribbs Causeway is via Junction 17 of the M5 but local access is also available via Hayes Way and Highwood Road.
- 2.3.14 The Hallen Freight Railway Line (also known as the Henbury Loop Line and Filton to Avonmouth line) runs to the south of the Site. This line was opened in 1910 as a direct route to Avonmouth Docks, and connection to Severn Beach. The line historically had a number of stations, including one at Filton and carried passengers until 1964. Since 1964 the line has only been used for rail freight. As part of the transport strategy for the Site this rail line will provide passenger services (See **Appendix C.1 Transport Assessment**).

3 The Proposed Development

3.1 Introduction and Plans

- 3.1.1 This chapter sets out the description of the Proposed Development for which outline planning permission is sought, which is as follows:

“Mixed use development on 141.94 hectares of land comprising: residential development for up to 6,500 dwellings; Student Accommodation (Sui Generis); Business Office and Research development (Use Class E); General Industry (Use Class B2); Hotels (Use Class C1); Extra Care Accommodation (Use Class C2); Education provision to include a Secondary School, Primary Schools, Children’s Nurseries and further education buildings (Use Class E and F1); Community centres and uses inclusive of library, health (including GP and Dental facilities), and built sport facilities, (Use Class E, F1 and F2); Other E use class town centre uses up to inclusive of, public house and other drinking establishments, and hot food takeaway (Sui Generis) together with; supporting infrastructure and facilities including demolition, ground works and remediation, highways and parking inclusive of pedestrian and cycle routes, public transport inclusive of Metrobus route and rail station, utilities, landscaping, sustainable urban drainage, water basins and public open space. Outline application including access, with all other matters reserved.”

- 3.1.2 This Proposed Development description should be read in conjunction with the Parameter Plans which are provided at **Appendix A.2**. These Parameter Plans set out the proposals for approval including the range of proposed land uses and height of development that will be accommodated within the Site. The basis of the EIA are the following parameters:

- Parameter Plan: Land Use (FAD-FCB-000-X-PL-A-8002)
- Parameter Plan: Density (FAD-FCB-000-X-PL-A-8004)
- Parameter Plan: Heights (FAD-FCB-000-X-PL-A-8005)
- Parameter Plan: Access (FAD-FCB-000-X-PL-A-8006)
- Parameter Plan: Landscape (FAD-FCB-000-X-PL-A-8010)
- Parameter Plan: Heritage (FAD-FCB-000-X-PL-A-8015)

- 3.1.3 **Appendix A.3** contains Illustrative Plans that demonstrate one way in which the Proposed Development could be built out; these are provided for information only. The Illustrative Plans do not form the basis for the assessment. As for the extant planning consent, the Proposed Development will also comprise supporting infrastructure and facilities including demolition, ground works and remediation, highways and parking, utilities, landscaping, sustainable urban drainage system, water basins and public open space.

3.2 Quantum of Development

- 3.2.1 Extant planning consent for the Site includes provision for 2,675 dwellings. The Proposed Development will see an increase to 6,500 dwellings to deliver a residential led mixed-use development, accommodated through an increase in building height and density. Alongside the 6,500 dwellings, the Proposed Development will also deliver education, employment and community use spaces to help meet the needs of the future residents and the local community. **Table 3.1** below summarises the quantum of floor space for the various use classes of the Proposed Development.

Table 3.1: Development by Use Class

Use Class	Maximum quantum of development Number/GIA (m ²)
Residential Dwellings (Use Class C3)	Up to 6,500 no.
Hotel (Use Class C1)	Up to 3 no.
Extra Care Units (Use Class C2)	Up to 600 no.
Offices (Use Class E)	Up to 270,000m ²
Industrial (Use Class E)	Up to 55,000m ²
Town Centre Uses (Use Class E)	Up to 25,000m ² and 2no. Gyms
Student Accommodation (Sui Generis)	Up to 55,000m ²
Further Education (Use Class E and F1)	Up to 55,000m ²
Community Uses (Use Class E, F1 and F2)	Up to 2 no. Primary Schools Up to 2 no. Nurseries 1. No Secondary School Additional facilities inclusive of community buildings, health and built sports (Number/floorspace not capped)

3.2.2 The Proposed Development has a number of different character areas (shown on **Appendix A.6**), as follows:

- The Enterprise District located in the north eastern corner of the Site which will comprise of business and office uses;
- The Innovation District located in the south eastern corner of the Site which will comprise of university and research uses;
- The Hanger District located in the north of the Site to the east of Brabazon Park which will comprise a mixed use area with residential and retail uses;
- The East Lake District located in the west of the Site to the east of Brabazon Park which will comprise predominantly commercial uses;
- The Neighbourhood Centre located in the north of the Site to the west of Brabazon Park which will comprise community and residential uses;
- The West Lake District located in the south of the Site to the east of Brabazon Park which will comprise primarily residential uses;
- Brabazon West, the 'Cedars Neighbourhood'.

Residential

- 3.2.3 The Proposed Development will provide a range of housing types and tenures to meet a variety of needs. These will include 1 and 2 bed apartments, and 2, 3 and 4 bed houses. The EIA has been informed by the indicative housing mix shown in **Table 3.2**.
- 3.2.4 The Land Use Parameter Plan (**Appendix A.2**) shows the majority of residential use areas are situated in the western half of the Site with smaller pockets also being present in the centre of the Site. The land use that is predominantly proposed to be residential will be up to 90% residential (including care homes and senior living), with up to 10% to be occupied by non-residential uses. This will help to enable areas to be more varied in character, such uses might include shared community or leisure facilities, or small-scale retail or commercial uses.

Table 3.2: Indicative Housing Mix

Unit Type	Number
Houses	1,800
Apartments	4,700

- 3.2.5 The houses are predominately located in the western half of the Site. Approximately 1,200 houses will be provided in the western half and 600 houses in the centre of the Site. The majority of the apartments are located in the centre of the Site, with 3,600 apartments in the centre of the Site and 1,000 apartments in the western half of the Site.
- 3.2.6 There are a number of character areas within the Proposed Development. Those character areas containing residential land use are as follows: Brabazon West (Hills Neighbourhood), Brabazon West (Trym Bank), Brabazon West (The Cedars), Neighbourhood Centre (Community Hub), West Lake District and The Hangar District (Neighbourhood). The location of these is shown on **Appendix A.6**.
- 3.2.7 The Proposed Development includes a total of up to 1,500 student accommodation units. These units will be provided in the mixed use development area shown on the Land Use Parameter Plan (**Appendix A.2**).
- 3.2.8 Following a detailed assessment of viability through the Cribbs Patchway New Neighbourhood (CPNN) Framework Agreement and subsequent Site-Specific Agreement (SSA) processes, the extant planning consent establishes an affordable housing provision of 17%. The percentage provision for the Proposed Development will be agreed through a viability appraisal.
- 3.2.9 The Proposed Development includes a total of up to 600 units of care accommodation. This provision will be split across the east and west halves of the Site falling within residential land use areas.
- 3.2.10 The Proposed Development will include up to 270,000m² (Use Class E) of business office and research development space and 55,000m² of general industry (Use Class B2). The extant planning consent provided for an area of employment land use in the north eastern part of the Site, adjacent to the A38. The Proposed Development retains employment land use, however it is proposed that the majority be incorporated into mixed use development areas in the eastern half of the Site which will include retail, commercial spaces, offices, university

campus/buildings, student accommodation, residential, hotels, extra care, and community uses.

- 3.2.11 The development description has a substantial increase from the extant planning consent in mixed use areas being proposed, rather than having zones of residential or commercial space. This has been proposed to support the concept of 15 minute neighbourhoods, to ensure flexibility in planning geographic phases, and to prevent large areas of mono-use that might only be active at certain parts of the day.
- 3.2.12 The majority of office space is located in the eastern half of the Site, with lower provision proposed to be located in the western half of the Site. Offices will be provided in the West Lake District, East Lake (Town Centre), Eastern Quarter (Mixed Use Neighbourhood), Innovation District, Enterprise District and the Hangar District.
- 3.2.13 This industrial space is predominately proposed to be located in the north east of the Site in the Enterprise District, with smaller areas of industrial space proposed to be located in the western half of the Site.

Education Provision

- 3.2.14 The extant planning consent includes the provision of a Secondary School, a Primary School and a Children's Nursery in the centre of the Site and a Primary School and a Children's Nursery in the west of the Site. These are being retained within the Proposed Development and will be located broadly within the same areas of the Site as previously proposed.
- 3.2.15 As shown on the Land Use Parameter Plan (**Appendix A.2**) the approximate location of the education provision is split across two hatched areas. An area to the west of the Site will provide the following:
- 3ha of land for a 3 Form Entry (FE) Primary School that includes 1.25ha of dual use outdoor open space; and
 - 0.4ha of land for 1 nursery with up to 72 places.
- 3.2.16 This would be provided in the context of predominately residential uses to the north and green infrastructure to the south of the Site.
- 3.2.17 The other area in the centre of the Site will provide the following:
- 2ha of land for a 2 FE Primary School that includes 0.79ha of dual use outdoor open space;
 - 8.31ha of land for a 7FE Secondary School that includes 7.65ha of dual use outdoor space; and
 - 0.4ha of land for 1 nursery with up to 72 places.
- 3.2.18 The exact locations of the nurseries will be agreed with SGC and could be accommodated within the mixed use areas of the Proposed Development.
- 3.2.19 Up to 55,000 m² (GEA) of university campus/buildings is also proposed, which the illustrative masterplan suggests will be provided in the south east of the Site in the Innovation District (as shown on **Appendix A.6**).

Retail Provision

- 3.2.20 The emphasis on mixed-use areas within the Proposed Development, as part of the 15 minute neighbourhood masterplan concept, will mean that areas of retail will be provided across the Site amongst other uses.

Community Provision

- 3.2.21 A hatched zone is shown on the Land Use Parameter Plan (**Appendix A.2**) within the central open space which indicates the broad location of the proposed community facilities (across 0.6ha), consisting of a community hall, library, GP surgery, dental surgery and sports hall.
- 3.2.22 The majority of community facilities will be provided in the centre of the Site in the Neighbourhood Centre adjacent to the primary transport corridor with the exception of a Primary School, and Nursery which will be located in the western half of the Site.
- 3.2.23 Community facilities including schools, health facilities and a library will also benefit from proximity to the formal sports provision in the central part of the Site.
- 3.2.24 The Proposed Development includes up to 3 hotels. These hotels are proposed to be located in the mixed use area; the illustrative masterplan suggesting they be in the centre of the eastern half of the Site in the East Lake (Town Centre) and Eastern Quarter neighbourhoods.

Building Heights and Massing

- 3.2.25 The Building Heights Parameter Plan (**Appendix A.2**) shows an increase in building heights from the extant planning consent. Density will be achieved by achieving a tight urban grain first, before increasing height. The western half of the Site and the centre consists of buildings of heights up to 7 storeys. Within the eastern half of the Site in the centre around Brabazon Park, buildings will be up to 18 storeys, with up to two tall buildings of up to 30-storeys or 125m sited within the urban centre.
- 3.2.26 The Density Parameter Plan (**Appendix A.2**) shows greater densities across the Site compared to the extant planning consent. For example, low range density in the extant planning consent was between 30 and 60 dwellings per hectare (dph), which has now increased in the Proposed Development to 60dph. A 'High range 2' density in the extant planning consent was up to 150dph, now increased in the Proposed Development to up to 300dph.
- 3.2.27 As for the extant planning consent, density will still broadly decrease from east to west across the Site. The highest density is located in the eastern half of the Site in the centre around Brabazon Park where densities are up to 300dph. Whereas in the western half of the Site density reduces to up to 60dph.

Landscaping and Green Infrastructure

- 3.2.28 The Landscape Parameter Plan (**Appendix A.2**) shows green infrastructure will be provided across the Site, situated in corridors between the northern end and southern end of the Site covering and has been designed so that residents are in close proximity to open space. The public open space will consist of informal open space (hard public squares, parks and semi-improved grassland, on plot), natural and semi natural space (semi natural wooded area, semi natural grassland, semi natural grassland with basins) as well as sports facilities, provision for children and young people and allotments in close proximity to residential dwellings.
- 3.2.29 A large area of green infrastructure, Brabazon Park, will be located in the central part of the Site running from Hayes Wood in the north to the Arena in the south (see **Section 1.1** for further detail).

- 3.2.30 Features that will be incorporated into Brabazon Park include wildlife water basins, green roofs, orchards, food provision, and vegetated architecture. Brabazon Park will be approximately 6 ha and will be based around a 1.2 acre lake that will feature walking routes, water gardens, exercise areas and children's playgrounds, with wildlife corridors intersecting the area of open green space.
- 3.2.31 The habitat strategy includes measures such as inclusion of pollinator species, integration of bat and bird boxes, creation of grassland habitats for slowworms and implementation of newt ponds to create localised wetland habitats. A green infrastructure buffer will be planted along the Trym Valley. Planting will incorporate a diverse range of species and habitats.
- 3.2.32 Sports fields and provision of space for play will be provided on Site. Dual use sports facilities and sports facilities cover up to 12.6 ha. These areas are proposed to be provided in the centre of the Site in the Neighbourhood Centre (Community Hub) and the southern boundary of the western half of the Site in Brabazon West (The Cedars). Children and youth play provision covers an area of up to 10.3 ha integrated into the residential areas within open space.

Access and Movement

- 3.2.33 As shown on the Illustrative Masterplan (**Appendix A.3**), the Proposed Development incorporates green infrastructure with pedestrian and cycle routes to enable accessibility into and throughout the Site. The Proposed Development contains fewer car parking spaces than dwellings to encourage sustainable modes of transport and reduce reliance on the private car.
- 3.2.34 The transport strategy for the Proposed Development will come forward in four phases linking sustainable travel to the quantity of permitted development. This is to ensure that at each stage of development the transport, traffic and access is assessed to make sure that the Site has the capacity to support more people and movement. There are four development thresholds proposed, each expected to be tied to sustainable transport metrics through the planning conditions and a Section 106 Agreement.
- 3.2.35 As part of the transport strategy, additional densification sought within the Proposed Development will be achieved through additional public transport capacity alongside enhanced cycle and pedestrian infrastructure.
- 3.2.36 The Access Parameter Plan (**Appendix A.2**) provides details of the primary road network, Metrobus network, Metrobus stops, local bus routes, cycle routes and the railway station.
- 3.2.37 The proposed vehicular access strategy facilitates a full east-west connection from the A38 to Wyck Beck Road. It allows for the connections at the existing Brabazon and Blenheim roundabouts on Hayes Way to the north, and public transport access to the Site at the San Andreas roundabout on Charlton Road.
- 3.2.38 The A38 will be the principal all modes vehicular access to the Site on its eastern boundary. Across the northern Site boundary, all modes junctions are proposed at the Concorde, Blenheim and Brabazon roundabouts. With San Andreas roundabout used for bus only access, the other all modes vehicular access to the Site will be via the Fishpool Hill junction. This connection to the Fishpool Hill junction will provide access to the A4018 dual carriageway. The A4018 provides connections to Junction 17 of the and north-west Bristol.
- 3.2.39 A footpath crosses the western end of the Site and connects to a footpath around the boundary from Filton Golf Course to Cedar House, running west to the end of the runway and then around the end of the runway before turning east along the boundary to Highwood Road east of Cribbs Causeway. This path is known as Charlton Walk.

- 3.2.40 A total of 23 new pedestrian access points are proposed around the Site boundary, as shown on the Access Parameter Plan (**Appendix A.2**). The majority of the Site's proposed pedestrian connections will also provide cycle access points to the surrounding network of routes. The cycle trunk route begins at the A38 Junction and follows the alignment of the east to west Primary Road network to the south west corner of the Site and will extend through the Fishpool Hill development.
- 3.2.41 Hayes Wood is located along the northern boundary of the Site adjacent to the proposed Brabazon Park. Hayes Wood has a 30m offset zone adjusted to ensure provision of a service area for Hangar 16U. The buffer zone intends to minimise impacts of disturbance during and post construction. Hangar 16U has a direct line of sight and pedestrian connection south with Brabazon Hangar and east to the Pill Box.
- 3.2.42 The Metrobus route will enter the Site at the A38 Junction access, stopping close to this access in the University/Enterprise area, stopping again along the north-south public transport link and then egressing from the Site south of the San Andreas roundabout (and vice versa) and stopping on approach to the San Andreas roundabout, facilitating the east-west link between The Mall and Parkway Railway Station. The bus stops are located to provide access to many of the proposed education and community facilities which are focused towards the centre of the Site. The section of the Metrobus route linking the edge of the Site and the San Andreas roundabout (including alterations to the roundabout) will be delivered by SGC.
- 3.2.43 Local bus services will use the primary and potentially secondary road network across the Site. These routes are not yet agreed with the relevant authorities and operators. However, routes are anticipated to traverse the Site on its principal east-west axis. A bus only connection between the Site and Charlton Road is provided, enabling direct links into and through the Site from Bristol.
- 3.2.44 Parking associated with housing involves minimal street parking for apartments on plot, and there will be podiums and some mini multistorey car parks. Parking associated with commercial use includes 4 multistorey car parks. One of the multistorey parking areas is to be located by the railway line, and the other three are located within the eastern framework.
- 3.2.45 As part of the MetroWest Phase 2 proposals, a new railway station will be provided in 2023 on the Henbury Line running along the Site's southern boundary. The location for this station has been agreed with Network Rail so that it sits immediately adjacent to the YTL Arena and commercial uses of the Site. The railway station is located on the southern Site boundary and will be a key point of connection for the Site connecting to Bristol Temple Meads and Henbury, amongst other stations.

Heritage

- 3.2.46 **Appendix A.2** shows the Heritage Parameter Plan. All the heritage assets relate to the Site's aerospace heritage.
- 3.2.47 There is one Grade II Listed Building within the Site boundary. The northernmost, a former aircraft hangar, will be refurbished and re-used and is already subject to a separate Listed Building Consent.
- 3.2.48 For the small WWII pill box adjacent to the southern boundary, there is a commitment in the extant planning consent, and which is retained for the Proposed Development, to incorporate this within open space and as part of a heritage trail to provide a suitable means of allowing the setting of this heritage asset to be maintained.
- 3.2.49 Whilst the setting of these assets is important and policies are already in place supporting this, with the scale of development proposed for the Site, the relationships between some of these heritage assets is also an important consideration. A sightline between Hangar 16U on the

Site and the listed hangars 16M and 16S has been established by removing the site of previously demolished WWII stores and the adjacent mound.

Surface Water Drainage Strategy

- 3.2.50 Increasing impermeable area (roads, houses etc), a desire to reduce redeveloped runoff rates and taking into account climate change over the lifetime of the Proposed Development introduces the need to attenuate the additional surface water runoff. As a brownfield site, the requirement is for discharge rates to be reduced by 30% compared with the existing situation.
- 3.2.51 The surface water management strategy for the Site has been developed using best practice Sustainable Drainage Systems (SuDS) techniques and consultation with SGC. The overall philosophy of SuDS is to replicate, as closely as possible, the natural drainage processes of a Site prior to development to mitigate the adverse effects of urban storm water run-off on the environment. SuDS provide the ability to control surface water flows but also improve water quality, biodiversity and amenity of the Proposed Development.
- 3.2.52 The proposed strategy to manage surface water drainage for the Proposed Development includes a variety of SuDS techniques within the network. The SuDS combines underground storage solutions with open water bodies, swale habitats and blue infrastructure including water and rain garden features that express water as positive features in the landscape and will allow for ecological and amenity benefits and integrating flood protection measures. Water sensitive urban design will involve collecting runoff water for wetland habitat creation and irrigation of productive landscapes. The benefits of a SuDS network include:
- Reduction of surface water runoff rates thus reducing the risk of flooding downstream;
 - Reduction of surface water runoff volumes;
 - Encouraging groundwater recharge;
 - Reduction of pollutant concentrations;
 - Acting as a buffer for accidental polluting spills;
 - Reduction of volumes of water entering combined sewer systems;
 - Contributing to enhancing amenity and aesthetic value of development; and
 - Providing habitats for wildlife in urban areas and opportunities for biodiversity enhancement.
- 3.2.53 To manage surface water, the Site has been split into two main catchments based on topography (east and west), which has in turn been broken down into further subcatchments with attenuation storage provided for each sub-catchment. The surface water management strategy has included a 40% allowance for predicted increased rainfall due to climate change, as recommended by the National Planning Policy Framework (NPPF).
- 3.2.54 While attenuation storage manages the additional rate of runoff caused by paving over natural surfaces, a provision of 'long-term' storage is also required (calculated separately to the attenuation volume) to cater for the additional runoff volume generated by the new development. This additional volume of surface water will be stored within SuDS and discharged at rates limited to 2 litres per second per hectare (l/s/ha).
- 3.2.55 The strategic drainage network has been assessed to integrate the required attenuation volumes within the strategic open space network insofar as practical. A combination of open and below ground attenuation has been utilised to provide sufficient volumes without

compromising the quality of the open space. On-plot SuDS have not been included within the calculations at this stage due to the outline nature of the application. As part of future detailed applications, on plot SuDS techniques such as rainwater harvesting, raingardens, street swales etc. will be assessed to integrate techniques into development layouts and potentially reduce attenuation within the strategic areas.

Foul Drainage

- 3.2.56 Wessex Water is currently carrying out construction of a large strategic tunnel sewer, the North Bristol Relief Sewer, toward the western end of the Site. This sewer will form the ultimate outfall for the entire Proposed Development. It is anticipated that this sewer will be complete in Spring 2023.
- 3.2.57 Because of the timescales involved with the completion of the relief sewer, a temporary foul drainage solution is required for the Proposed Development to cater for foul flows for any completed development until the Wessex Water tunnel works are complete.
- 3.2.58 A suitable temporary solution has been developed for the Site in conjunction with Wessex Water and will involve the installation of strategic pumping stations within the Site boundaries to suit development phasing. These strategic pumping stations will then pump through rising mains to the existing Wessex Water sewer which crosses the Royal Mail sorting office and then on to outfall at the Frome Valley Relief Sewer (FVRS) on a temporary basis. Some attenuation storage may be required to balance peak flows until the new tunnel sewer is complete. The strategic pumping station serving the eastern section of the Site is proposed for completion on first occupation.

3.3 Embedded Mitigation

- 3.3.1 In accordance with Reg 18(3(c) of the EIA Regulations and guidance from the Institute for Environmental Management and Assessment (IEMA), assessments within each topic section have taken account of embedded mitigation which is inherent in the scheme design. Each topic chapter (**Chapter 7-15**) will include details of embedded mitigation relevant to that topic. The embedded mitigation which forms part of the Proposed Development includes:
- Provision of a Framework CEMP that sets out measures to minimise construction phase impacts (**Appendix A.9**);
 - Implementation of a Surface Water Management Strategy, incorporating SuDS, to reduce flood risk and help control the quality and quantity of surface water runoff conveyed to the local watercourses. It has been designed to manage runoff up to a 1 in 100 year storm event, plus a 40% increase in peak rainfall intensity to account for the likely effects of climate change;
 - Provision of education space, the delivery of which will be agreed with SGC as the local education authority;
 - Provision of a mixture of jobs through the construction and operation of the Proposed Development. The employment area will have a range of use classes, alongside supporting uses and amenities as part of the Employment Area;
 - Retention and enhancement of existing areas of green infrastructure and incorporation of areas of new planting contributing to the character and visual amenity of the Site, and the landscape context as trees and hedgerows contribute to the green corridors network across the Site. The landscape areas will include informal open space (hard public squares, parks and semi-improved grassland, on plot), natural and semi natural space (semi natural wooded area, semi natural grassland, semi natural grassland with basins) as

well as sports facilities, provision for children and young people, allotments, open water and SuDS. The Proposed Development will strive for 10% Biodiversity Net Gain; and

- Consideration of height and scale of development to be sensitive to the surrounding landscape.
- Retention of Filton Wood with open space buffer around southern edge;
- Retention of a green corridor along Henbury Trym watercourse;
- Creation of new green links, north to south across the site, to connect Filton Wood with Brabazon Park in front of the YTL Arena; Cribbs Causeway with Fishpool Hill and Charlton Common; and Charlton Hayes to Charlton Common and Brabazon Park.
- Retention of the lagoon to the east of the A38;
- Creation of open spaces throughout the Proposed Development;
- Determining maximum acceptable building heights;
- Areas of existing woodland, hedgerows and trees to be retained;
- View created between listed hangars 16U and 16M, by removal of existing earth mound;
- Public space providing setting for listed hangar 16S;
- New tree planting including street trees throughout the development.
- The airfield currently has considerable exposure to dominant westerly and south-westerly winds from the Bristol Channel. The landscape strategy proposes to integrate tree belts which will act as wind breaks and wind shelters to provide valuable microclimate benefits and shelter from prevailing winds.

3.4 Consideration of Alternatives

- 3.4.1 Regulation 18(3)(d) of the EIA Regulations requires an ES to include "a statement of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the options chosen, taking into account the effects of the development of the environment". This is expanded upon at paragraph 2 of Schedule 4 to the EIA Regulations, which requires an ES to include "a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".
- 3.4.2 Although a full description of all possible alternatives and a full assessment of their likely environmental effects is not required, sufficient detail should be provided to allow for a meaningful comparison between the alternatives and the Proposed Development.
- 3.4.3 The consideration of alternatives in this ES complies with the requirement for the inclusion of reasonable alternatives and has regard to the guidance in the PPG on EIA which states (similarly to the EIA Regulations) "Where alternative approaches to development have been considered, the Environmental Statement should include a description of the reasonable alternatives studied which are relevant to the Proposed Development and its specific characteristics and provide an indication of the main reasons for the choice made, including a comparison of environmental effects".

- 3.4.4 Alternatives should only be considered where they are feasible, realistic and genuine. This may depend on various factors, including planning policy, land ownership, financial viability, technical feasibility and design quality. Options which are unlikely to be acceptable or deliverable are not realistic alternatives and so do not need to be considered.
- 3.4.5 Whilst environmental effects are relevant when choosing between alternatives, other factors are also relevant. The main selection criteria which the Applicant has used when choosing between the alternatives which it has considered include planning policy, viability, deliverability design quality, market requirements, site constraints and opportunities and environmental effects.
- 3.4.6 The following provides an outline of the reasonable alternatives considered in relation to the Proposed Development and the main reasons for choosing the Proposed Development in preference to them.

No Development

- 3.4.7 Key objectives of the South Gloucestershire Core Strategy (2013) include supporting local housing needs, locating development where it will provide the opportunity to minimise the need to travel and allow safe and convenient access to services by walking, cycling and public transport and concentrating the majority of new development to take advantage of existing services and facilities and higher levels of accessibility.
- 3.4.8 The Site is part of the Cribbs Patchway New Neighbourhood allocation (Policy CS26) in the South Gloucestershire Core Strategy and is within the control of the Applicant. The key part of this policy states: 'provision will be made for approximately 5,700 dwellings in new mixed-use communities, around 50ha of employment land, and greater diversity of commercial uses including additional retail, together with supporting infrastructure and facilities.'
- 3.4.9 The Cribbs Patchway New Neighbourhood Supplementary Planning Document (SPD) was adopted by South Gloucestershire Council in 2014 and provides an overview and a range of objectives for new development in this area, the focus being on the sustainability and accessibility of this locality. The SPD ensures that development in this area is comprehensively planned and delivered, rather than on a piecemeal basis on individual disparate Sites.
- 3.4.10 As such, no development is not a reasonable alternative that has been considered as it does not accord with policy and would not help to meet the housing and employment needs of the area.

Extant Planning Consent

2014 ES

- 3.4.11 An ES was prepared in 2014 for a mixed use development including up to 2,675 units and associated infrastructure. The development description for the 2014 ES is set out in **Section 1.2**. The 2014 ES considered three alternatives, which have been summarised as follows:

Alternative 1:

- The first masterplan layout focused the retail, food store, community centre and library uses closer to the centre of the Site along the line of the runway. This was intended to make the functions accessible to all areas of the airfield site, using a primary public transport corridor along the line of the runway.
- Employment land was focused along the eastern side of the Site and integrated residential uses with the employment uses, extending much closer to the eastern

boundary of the Site and the A38 than the current masterplan. The Bristol Aero Centre development was also part of the wider masterplan in the 2014 ES.

Alternative 2:

- Compared with Alternative 1, the Alternative 2 layout repositioned the land uses associated with the Neighbourhood Centre closer to the northern boundary of the Site. This retained the aforementioned land uses close to the centre of the site, therefore maintaining accessibility from all directions but it also provided a more direct access to Merlin Road and Hayes Way. This alternative enabled traffic seeking to access these land uses from outside the site to avoid moving through residential areas and the secondary school.
- The eastern end of the site included substantially more residential development than shown on Alternative 1, with proportionally less employment development, although there was more substantial retail development proposed adjacent to the Neighbourhood Centre along the northern central part of the site. This had the potential for increased traffic flows in this part of the site, as it would have represented a destination for people living outside of the site.
- The Bristol Aero Centre development was still part of the wider masterplan at this point and the layout had sought to provide an appropriate landscaped setting for the museum and associated listed buildings, and to provide strong visual links from between the museum site and the eastern areas of the masterplan site.
- The railway station location had become more central to the site, which provided greater access for a greater number of residential users, the Neighbourhood Centre and schools but was further from the predominant areas of employment development.

Alternative 3:

- The final masterplan that was consulted upon included a clear zone on the eastern side of the Site for employment uses. This followed the principle established in previous layouts and within the CPNN for traffic associated with employment uses to predominantly utilise the new signalised junction with the A38.
- The location and focus of the Neighbourhood Centre, food store and secondary school remained in the same broad location as in Alternative 2 although the proportion of retail development shown along the northern boundary of the site in this area was reduced compared to Alternative 2. This had the beneficial effect of reducing potential road traffic movements in this area of the site.
- The open space link to Charlton Common had become larger and more defined, and an enlarged central park space close to the Neighbourhood Centre. The green corridor between Filton Wood SNCI and the southern boundary had also become more substantial, enabling a clear connection between the northern and southern parts of the Site

3.4.12 Further detail on these alternatives can be found in Chapter 4 of the 2014 ES, Planning Application Reference PT14/3867/O.

2015 ES Addendum

3.4.13 An ES Addendum to the 2014 ES was prepared in 2015 ('2015 ES Addendum'). The 2015 ES Addendum comprised a Regulation 22 submission of further information (related to assessments of air quality, cultural heritage, ecology and public rights of way). The 2015 ES Addendum did not alter the development proposals and therefore the consideration of alternatives was not changed.

2017 ES Addendum

- 3.4.14 The 2017 ES Addendum sought to include the concept of a linear park (Planning Application Reference: PT14/3867/O). Two further alternatives were considered beyond those explored for the 2014 ES. A summary of the two alternatives is provided below:

Alternative 4:

- The removal of approximately 3ha of land bordering the southern boundary of the site west of Charlton Road (which falls outside of YTL's ownership);
- Two minor differences at junctions serving the site; and
- The inclusion of the Brabazon Hangar within other land in the ownership of the Applicant (i.e. within the Blue Line).

Alternative 5:

- Inclusion of a linear park (which was part of original masterplan proposals). The linear park was designed to establish a permanent public legacy of the Site's unique aerospace history.
- Within this overall format, regard was given to the relocation of the town centre and railway station as well as making Brabazon Hangar more central to the development proposals. Considerations included:
 - Revising the overall mix of retail uses to provide more flexibility to respond to market considerations and the local offer;
 - Revising the location of the centre to better connect the employment area to the east of the site and the predominantly residential areas to the west, to sit between key heritage assets, including listed hangars and the Brabazon Hangars;
 - Within this area, the town centre is to become the focus of more intensive commercial and mixed use buildings, including a central tall building to create a new landmark building for the area; and
 - Relocation of the proposed MetroWest railway station further to the west, bringing it closer to the new town centre, the Brabazon Hangars and closer to the majority of the planned growth across the CPNN area. This, in turn, assists in the modal shift from private car to rail and enhances the sustainability of the Proposed Development.

2021 S73 Application

- 3.4.15 Whilst not an alternative to the Proposed Development, the Section 73 Application was prepared to ensure the Site could respond to the introduction of the YTL Arena and facilitating multi-modal access to it was the principal rationale behind the S73 planning application. The S73 did not change the description of development (**see Section 1.2**).
- 3.4.16 One alternative that could have been progressed would have been to restrict the minor material changes to those specifically required for the Arena development. This would have necessitated fewer changes to the parameter plans but would have represented a compromised outcome that would not facilitate subsequent design code processes and reserved matters. For example, the alignment of the Aerospace Promenade could have been

retained on the original park/BACT axis but this would have compromised the overall masterplan response to the changes required (e.g. location of the urban square).

- 3.4.17 A potential alternative was to not make any changes and adhere to the consented parameter plans; in practice this would not enable the delivery of the Arena and as such does not represent a viable alternative to ensuring the cumulative impacts of this site and neighbouring sites can be addressed satisfactorily.

Alternative Sites

- 3.4.18 The nature of the Proposed Development is such that the objective is to redevelop the Site as part of the wider CPNN area and, as a result, no alternative sites have been considered. The development proposals for the site have consistently comprised the broad mix of uses described within **Chapter 3** of this ES (which has been influenced by the CPNN) and therefore no alternative uses of the site have been considered by the Applicant. The principle of development at the site has already been established.

Alternative Forms of Development

- 3.4.19 This section sets out the alternatives considered for the Development as the design has progressed, in relation to types and quantum of uses on site. The parameter plans have evolved steadily since the 2014 ES and planning application. Changes were made to those parameters in 2021 via the S73 process to facilitate necessary changes to accommodate the transport strategy for the YTL Arena. Those changes focused entirely on the Eastern Framework as the Arena transport strategy does not affect development west of the north-south link. Given how recently the changes were made, it is not the intention of this application to 'undo' any of the principles already established in terms of access, principal routes through the site and distribution of open space.
- 3.4.20 Given the uplift in quantum of development there are changes to height and density parameters proposed. Land use distribution has also changed to allow more flexibility and a less zoned approach to masterplanning. This in part reflects the process of Design Review that the applicants have undertaken in helping to formulate the parameter plans.

Key Design Considerations

Density and Heights

- 3.4.21 There is a critical demand to build more homes. By increasing density, the Proposed Development will be able to accommodate more residential units. Constructing these units on a brownfield site maximises its potential and reduces the need to develop on green fields, Green Belt and rural sites. The Proposed Development seeks to accord with SGC's emerging Urban Lifestyle policies which aim to provide most new housing on sustainable brownfield sites.
- 3.4.22 One alternative could be to seek to accommodate the uplift in quantum elsewhere in South Gloucestershire. Whilst technically feasible, the Site remains the largest brownfield development opportunity in the South West. Failure to seek to maximise the efficiency of brownfield land is against national policy and arguably this is the most sustainable location for accommodating strategic growth in South Gloucestershire. There are no other locations that can benefit from proximity to metrobus, rail infrastructure and the potential mass rapid transit. In addition, an increased number of dwellings at this location assists with the delivery of the YTL Arena.
- 3.4.23 Height and density are greatest in the Eastern Framework. It would not be appropriate to consider a more blended distribution across the Western Framework because comparatively it is less well served by points of access and public transport. Moreover, on a site of this scale it

is important to offer variety in product mix and character and making this distinction will enable this.

Accommodating the Arena

- 3.4.24 To the south of the Site the Applicant has gained planning consent for the YTL Arena. The new vision for the Proposed Development has been designed to integrate with the approved YTL Arena, to help meet the increase in demand for housing and need to adapt to post-pandemic living and to enhance biodiversity. The YTL Arena (granted planning permission in March 2020) has transformed the Site from being a mixed-use residential led neighbourhood to a destination in its own right. The Proposed Development must be able to accommodate the people flows and transport demands anticipated from the YTL Arena. The 2021 S73 incorporated the YTL arena into the development proposals.
- 3.4.25 The principle of higher density development and commercial development around the Brabazon Park has been maintained in this application in order to provide for the Arena visitors in terms of bars and restaurants.
- 3.4.26 A new Bridge / Brabazon Park South Application is currently being prepared and will be submitted in April 2022 to amend the existing bridge connecting the arena to the Site.

Access and Movement

- 3.4.27 The Proposed Development will provide no further parking than that secured by the extant planning consent. The additional trips will be achieved through sustainable modes of travel including walking, cycling and use of the new railway station. Network Rail submitted a planning application for Filton North Station in 2021 (Planning Application Reference P21/06296/F). The railway station is due to open in 2023. From 2023, the Metrobus route is due to run through the Site. The frequency of rail and metrobus services will increase as the Site is built out (See **Appendix C.1 Transport Assessment**).

Conclusion

- 3.4.28 The design of the Proposed Development has been based on the requirements of national and local policy taking into account environmental conditions and public consultation. These requirements have therefore limited and shaped the opportunities for alternatives, with the design instead being based on an iterative process to respond to the constraints and opportunities of the Site.

4 Construction and Site Management

4.1 Introduction

- 4.1.1 This chapter provides information on the anticipated construction of the Proposed Development and the management of the construction phase on Site.
- 4.1.2 Likely significant environmental effects associated with the construction phase will be managed through a Construction Environmental Management Plan (CEMP) that will build on the CEMP prepared for Brabazon Phase 1. A Framework CEMP has been prepared for this outline application and is provided as **Appendix A.9**. The technical chapters of this ES detail, as appropriate, the mitigation measures included in the Framework CEMP, and these are summarised in **Chapter 16**.

4.2 Construction Works and Programme

- 4.2.1 As part of the construction of the Proposed Development, a limited amount of demolition will also be required. Given the nature of the previous and existing Site uses, demolition is primarily limited to the digging up, crushing and re-use of the runway on the Site and other hard surfaces. The enabling and infrastructure works to facilitate each phase will be undertaken prior to the development of each phase.
- 4.2.2 Other demolition requires includes, but is not restricted to, the demolition of existing air raid shelters, the site operations centre and control tower.
- 4.2.3 The construction of the Proposed Development comprises 4 phases, as follows:

Table 4.1: Construction Phasing

Phase	Number of homes (cumulative)	B1 offices (cumulative) (m ²)	Other Uses (cumulative) (m ²)	Other
1a	1838	37,000	65,000	Includes Brabazon Phase 1 currently under construction. Complete by Q1 2024. Temporary YTL Arena car parking Meanwhile Uses Multi Storey Car park
1b	3675	74,000	120,700	Ancillary infrastructure
2	4667	139,300	185,800	Ancillary infrastructure
3	5325	204,000	204,000	Ancillary infrastructure
4	6500	269,000	278,000	Ancillary infrastructure

- 4.2.4 Details of phasing have been included in the Phasing Schedule (**Appendix A.8**). The phased nature of the construction of the Proposed Development means that environmental effects during construction will vary temporally and geographically through the construction period.

Therefore, while construction is anticipated to last for between approximately 25-35 years, it is not anticipated that any area of the Site or surrounding area will experience construction effects during all, or even the majority, of that time. Construction effects also typically vary in magnitude depending on the processes occurring at any one time (e.g. earth movements are more likely to lead to significant environmental effects than internal fit out of a building).

- 4.2.5 This ES has sought to address this variation on construction effects when assessing the likely significant effects during construction.
- 4.2.6 It is anticipated that the standard working hours for all construction activities will be from 07:30 to 18:00 Mondays to Fridays and 08:00 to 13:00 on Saturdays. No continuous 24- hour activities are envisaged at this stage and neither is external Sunday or Bank Holiday working. This is set out in the Framework CEMP (see **Appendix A.9**) which will be secured by planning condition (as it was for the extant planning consent).

4.3 Construction Management

- 4.3.1 All of the construction operations carry with them a range of issues to be dealt with in their design, preparation and execution. Due to the extent and nature of the Proposed Development it will be constructed in phases and therefore some areas will be occupied and operational whilst others are undergoing construction. Best practice in construction management will be required to minimise the potential environmental effects and disruption that could be caused by the construction works. This will minimise potential disruption to affected communities, services and habitats.
- 4.3.2 Construction will be phased so the assessment of construction-related effects in this ES has been cognisant to the effects of constructing the later phases of the Proposed Development on occupants of earlier phases. Where necessary, these have been identified and mitigated, along with any other likely significant effects that could arise from the phased implementation of the Proposed Development.
- 4.3.3 It is anticipated that key construction activities are likely to include:
- Establishment of construction compound(s) and welfare facilities;
 - Demolition, including of the runway;
 - Vegetation clearance, earthworks and soil preparation to prepare the Site for construction activities;
 - Construction of infrastructure including internal access routes, highway improvements, access works and drainage;
 - Formation of open space, with associated landscaping;
 - Construction of building foundation, structure, cladding and glazing and internal walls and partitions;
 - Installation of fixtures, fitting and building service;
 - Utility diversions, upgrades and connections; and
 - Soft landscaping.
- 4.3.4 The plant and equipment that is likely to be employed at the Site during the enabling / infrastructure phase of construction may include scrapers, dozers, 360° excavators, backhoe loaders, dumpers, dump trucks, rollers and compressors. The construction of the proposed

buildings may also utilise other heavy equipment such as lifting plant, cranes and fork lift trucks. The precise nature and quantity of plant employed during construction will vary with each stage of the Proposed Development.

4.4 Construction Traffic

- 4.4.1 Traffic will be generated during the construction of the Proposed Development as a result of bringing plant and materials to the Site, transporting demolition material offsite and due to construction personnel accessing the Site. All material from the runway will be reused on Site.
- 4.4.2 **Chapter 8 (Transport and Access)** sets out additional details on construction traffic and management. The movement of construction traffic to and from the Site during the construction phase of the Proposed Development would likely route enter from Charlton Road, Brabazon Roundabout, Concorde Roundabout, A38 and Fishpool Hill Road and utilise the Site's excellent connections to the strategic highway network.

4.5 Construction Materials

- 4.5.1 It is anticipated that the construction materials required will be those normally associated with a development of this nature, including for example bricks, windows, roof tiles, block work, bulk timber, timber trusses, ready mixed concrete, plasterboard, dense bitumen / stone macadam, concrete kerbing and sub-base crushed concrete.

4.6 Construction Waste

- 4.6.1 The construction process needs to be managed to accommodate the peak periods of waste generation. Where possible waste reduction strategies and practices will be formulated in advance. In order to embed the principles of the circular economy, the Proposed Development, throughout the construction phase, will develop and adhere to both a materials management plan (MMP) and a sustainable procurement plan (SPP). During construction, materials recovered from on-site works may be suitable for reuse on site, reducing the costs of transportation and procurement of virgin materials. This, combined with considerate design practice, will help to minimise construction waste in line with the Waste Hierarchy.
- 4.6.2 Topsoil will be stripped and stored separately for later re-use within the proposed development and landscaped areas.
- 4.6.3 An objective of the remediation strategy and design of the Site has been to retain soil material within the Site and minimise volumes of material to be removed for off-site disposal. It is estimated that there could be approximately 2,000m³ of remediation waste requiring offsite disposal. There will also be removal of building demolition waste that cannot be reused within the Site (e.g. wood and metal cladding) . Waste has been scoped out of the EIA.

5 Assessment Method

5.1 Introduction

- 5.1.1 This chapter describes the process by which the EIA has been carried out. It includes a discussion of the relevant regulations, the EIA process, consultations and the over-arching assessment methods applied. Details of the technical method followed for each topic are presented in each of the **Chapters (7-14)** as appropriate.

5.2 EIA Regulations

- 5.2.1 The Town and County Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the EIA Regulations) implement EC Directive 85/337/EEC, as amended, into domestic legislation. The initial Directive and its three amendments have been codified by Directive 2011/92/EU. A new Directive 2014/52/EU was implemented in 2014 and the provisions and requirements were enacted in the UK on 16 May 2017 to form the EIA Regulations.
- 5.2.2 To ensure that the provisions of the EIA Regulations continue to be implemented in the same way or an equivalent way following the exit of the United Kingdom from the EU at the end of the transition period, appropriate amendments were made by The Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018. There has been no substantive change to EIA requirements as a result of the departure of the UK from the European Union.
- 5.2.3 The EIA Regulations set out the procedures for undertaking an EIA and the information which is required in an ES and such procedure has been followed in this assessment.

5.3 EIA Process

- 5.3.1 In general terms the main stages in the EIA are as follows:
- **Screening** – determining whether a proposed project falls within the remit of the EIA Regulations;
 - **Scoping** – determining the extent of issues to be considered in the assessment and reported in the ES;
 - **Establishing Baseline** – drawing together and reviewing existing available data and undertaking surveys to determine the existing and future baseline conditions;
 - **Assessment and Iteration** – assess likely significant effects of development, evaluate alternatives, provide feedback to design team on potential adverse impacts, modify development or impose parameters, incorporate mitigation, assess effects of mitigated development;
 - **Preparation of the ES**; and
 - **Consultation and Decision Making.**

5.4 Screening

- 5.4.1 As the original planning application (Planning Application Reference: PT14/3867/O) required an EIA, the Applicant has voluntarily undertaken an EIA for the Proposed Development. Therefore, no EIA screening request was prepared for the Proposed Development.

5.5 Scoping

- 5.5.1 EIA Scoping was undertaken with SGC to agree the scope of the assessments for the 2014 ES. A new request for a Scoping Opinion (supported by a Scoping Report) was submitted to SGC in December 2021 and is provided in **Appendix A.10**. Following consultation with statutory consultees, a Scoping Opinion was received from SGC on 3rd February 2022 (Planning reference: P21/033/SCO) and is provided in **Appendix A.11**.
- 5.5.2 Comments provided within the Scoping Opinion have been considered in this ES. The ES has also responded to the comments within the Scoping Opinion as set out in **Appendix A.12**.
- 5.5.3 As a result, this ES has been prepared to fulfil the requirements of the Scoping Opinion and in compliance with regulation 18(4)(a) of the EIA Regulations which requires an ES to be based on the most recent scoping opinion issued.

5.6 Consultation

- 5.6.1 In addition to consultation to agree the scope of the EIA, consultation with relevant statutory and non-statutory bodies has been undertaken throughout the EIA and design process. Section X.3 of each of the technical discipline chapters (**Chapter 7-14**) provides a summary of consultation undertaken in relation to that discipline.
- 5.6.2 As part of the EIA process, the following bodies have been consulted to agree the detailed scope of the assessment, to provide information, to discuss assessment methods and findings, and/or agree mitigation measures and design responses.
- South Gloucestershire Council (Archaeological/Conservation Officer, Landscape, Contaminated Land, Urban Design Officer, Public Health, Ecology Officer, Climate Change Officer, Health and Safety Executive, Lead Local Flood Authority, Environmental Protection, Community Infrastructure);
 - National Highways;
 - Network Rail;
 - Environment Agency;
 - Crime Prevention Design Advisor;
 - Historic England; and
 - Natural England.
- 5.6.3 A number of public consultation events have been held, including:
- Brabazon residents presentations held on 14th December 2021; and
 - Public consultation events held on 8th, 11th and 13th January 2022.

Table 5.1: Public Consultation Events

Community Group	Date
Bristol Cycle Campaign	10 th September 2021
Almondsbury Parish Council	5 th October 2021

Community Group	Date
Patchway Town Council	19 th October 2021
South Gloucestershire Community Forum Presentations	Afternoon and Evening Presentation on 9 th November 2021
Royal Mail	Monthly Meetings
Charlton Hayes Steering Group	9 th December 2021
BS10 Community Group	10 th January 2022
Charlton Hayes Councillors (Jo Buddharaju, Brian Hopkinson and Sanjay Shambhu)	Zoom Presentation on 21 st January 2022
WECA	21 st January 2022
Bristol West	25 th January 2022
Stoke Gifford Parish Council	25 th January 2022
Bradley Stoke Parish Council	26 th January 2022

5.6.4 A series of three Design Review Panel sessions on the outline proposals were undertaken on 6th August 2021, 7th September 2021 and 2nd November 2021.

5.6.5 The EIA has given due regard to the requirements of the consultees and the assistance of these consultees is gratefully acknowledged.

5.7 Assessment Assumptions

5.7.1 The following assumptions have been used to ensure that the EIA provides a robust assessment of likely significant effects of the Proposed Development:

- The Proposed Development will be constructed in accordance with the parameters documented in **Chapter 3**. Therefore, the assessment recognises the flexibility in how the Proposed Development could be delivered within these parameters and assesses the likely significant effects associated with the maximum build out of the development parameters;
- The detailed design of the Proposed Development for geographic phases A, B, C, E and F (see **Appendix A.8**) will be managed through the eastern Framework Design Code (July 2021) (see **Chapter 6** for further detail). Future Reserved Matters Applications (RMAs) will be built out in accordance with this Design Code;
- Recognising the potential range in the sizes of residential dwellings and the range of employment uses applied for, the assessments have drawn from the indicative mixes identified in **Chapter 3** to enable an assessment of likely significant effects of the Proposed Development;
- Suitable planning conditions will be imposed as identified in this ES to secure appropriate mitigation measures, noting the suite of planning conditions which applied to the extant planning consent;
- The assessment of likely significant cumulative effects has assumed that the committed developments identified in **Appendix A.6** will be built out as set out in the documents supporting these applications;

- Baseline conditions are generally considered to be current conditions. Likely changes to the current situation (the baseline evolution) have been considered as appropriate;
- The assessment of transport related effects, including noise and air quality, assumes that developments and infrastructure will come forward as agreed with SGC; and
- The Proposed Development will be complete and implemented in accordance with the programme set out in **Chapter 3**.

5.8 Uncertainty and Limitations

- 5.8.1 The prediction of future effects inevitably involves a degree of uncertainty, in particular for a project with a build out into the 2040s. Where necessary, the technical chapters describe the principal factors giving rise to uncertainty in the prediction of likely environmental effects and the degree of the uncertainty.
- 5.8.2 Confidence in the predictions has been achieved by employing accepted assessment methodologies, e.g. Guidelines for Ecological Impact Assessment in the UK. Uncertainty inherent within the prediction has been described. The ES has sought to provide a robust assessment of the likely significant effects of the Proposed Development.
- 5.8.3 Further limitations in preparing this ES are noted in each of the technical chapters, as appropriate in Section X.4 of each chapter.

5.9 Assessing Effects

Establishing Baseline Conditions

- 5.9.1 A range of Site surveys and data collection exercises have been used to identify environmental conditions at the Site and in the surrounding area to provide a basis for the subsequent assessment work. The surveys undertaken are reported in each of the technical chapters.
- 5.9.2 It should be noted however that some of the technical surveys and assessments on which the EIA is based are too detailed and lengthy for incorporation into Volume 1 of this ES (e.g. ecology survey reports). In such instances, the technical survey and assessment reports are provided in full as an appendix to this ES (Volume 2), with a relevant summary and the reference for the full survey or assessment provided in the ES. The geographical scope of these appended surveys and assessments has been based on the likelihood for significant effects.
- 5.9.3 The EIA has assessed the likely significant effects of the Proposed Development against baseline conditions in the same year (i.e. providing an assessment of a 'do something' and a 'do nothing' scenario).
- 5.9.4 To fulfil the requirements of the EIA Regulations, the ES documents both the current state of the environment and provides assessment of the likely significant effects of the Proposed Development during construction and operation as set out below.

Current State of the Environment

- 5.9.5 As specifically required by the EIA Regulations, the ES documents the current state of the environment. The effect of the pandemic on the current state of the environment has been given due consideration in the ES and is set out in the limitations section of each technical chapter, where relevant (**Chapters 5-15**).

- 5.9.6 The current state of the environment includes the 302 dwellings currently under construction as Brabazon Phase 1 (which form part of the overall 6,500 dwellings), as this development is already partially visible. Whilst it is not completed in its entirety at the time of writing, it is considered that the development is sufficiently complete so that clarity is added by including it in the current state of the environment. It is due to be complete by Q1 2024.

Future 2036 Baseline

- 5.9.7 The Proposed Development is likely to take between 25-35 years to construct with an estimated completion between the years 2045-2055. As such baseline conditions for the assessment of operational effects need to be mindful of how the current state of the environmental is likely to evolve up to the completion of the development, noting the reduced confidence of predictions the further into the future being predicted.
- 5.9.8 The Greater Bristol Area Transport Model 4 (GBATS4), being used for the Transport Assessment accompanying the ES, uses 2036 as its end year. This transport model inherently includes cumulative developments as identified in **Section 5.11**, including allocations in the Cribbs Patchway New Neighbourhood (CPNN) allocation.
- 5.9.9 The supporting assessments to the extant planning consent assumed completion in 2031. The original planning application was made in 2014 with a 17-year build out was assumed. It is therefore reasonable to assume that the extant planning consent could be built out by 2036, given that phase 1 is underway and with 14 years to complete the remainder of the development.
- 5.9.10 As a result, to support consistency with the Transport Assessment, the year 2036 has therefore generally been identified as the future baseline year for the assessment of operational phase effects within the ES. This is termed the 2036 baseline.
- 5.9.11 The 2036 baseline includes the extant planning consent. The consent is already being implemented with associated mitigation secured and planning conditions discharged. There is a clear market for the consented development and therefore it is reasonable to assume the consented development will be fully built out should a new permission not be secured. As such it is unrealistic to assume that the consented scheme will not be delivered.
- 5.9.12 The approach set out above is consistent with the EU's Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017), which states: *"The state of the environment and the nature of impacts such as pollution rates or emission limits change over time, and this has to be accounted for in the Baseline assessment. In addition, the Baseline should consider Projects in the vicinity that exist and/or that have been approved (see Part B section 1.4.3 on Cumulative Effects). The Baseline should, therefore, be dynamic, going beyond a static assessment of the current situation. This is especially important for issues where there is considerable uncertainty, such as climate change, or for longer-term developments, such as large infrastructure Projects."*
- 5.9.13 It has also been successfully adopted by Stantec in preparing other ESs for sites that benefit from extant planning consents.
- 5.9.14 The 2036 baseline therefore comprises:
- The extant planning consent, including 2,675 dwellings (see **Section 1.2**);
 - The additional works as consented through the 2021 S73 consent, which are measures required to be in place on the Site prior to the opening of the YTL Arena;
 - The YTL Arena adjacent to the Site;

- Approved developments (or those considered likely to have been approved and implemented by 2036) (see **Table 5.3**); and
- The likely changes to the natural environment between now and 2036. This includes natural changes such as growth in vegetation and establishment of habitats, especially of any landscaping implemented as part of the S73 consent, in particular for the Brabazon Park. It also includes anthropogenic changes such as changes to air quality and human behaviours where there can be a high degree of confidence that such changes will occur (for example the transition towards electric vehicles on the basis of clear Government policy on the phasing out of internal combustion engines and the increase in bus services to avoid private vehicle usage as promoted in the recently published national bus strategy).

5.9.15 Given this approach, approved developments (or those considered likely to have been approved and implemented by 2036) (as set out in **Section 5.11** and **Appendix A.6**) have been factored into the 2036 baseline, and therefore the assessment of likely significant cumulative effects with these developments is inherent to the assessment and is not reported separately.

Assessment scenarios – a topic based approach

5.9.16 It is considered that it is increasingly challenging to make meaningful predictions when looking too far into the future given the limited information available on development in Bristol beyond the next 10-15 years. Therefore 2036 was considered to provide a realistic assessment year to support robust and credible environmental assessments. If an assessment year beyond 2036 was chosen to be assessed, it is unlikely that any year would contain any further information than that set out in the 2036 baseline (see Section 5.11). The 'do something' scenario (i.e. with the full build out of the Proposed Development) and 'do nothing' scenario (i.e. without the Proposed Development) are both therefore assessed as at 2036.

5.9.17 It should however be noted that 2036 is not the date of completion of the Proposed Development. The Transport Phases 2, 3 and 4 go into the 2030s and 2040s with consideration of Park and Ride services, train routes to Parkway and the Bristol rapid mass transit system. See **Chapter 8: Transport of the Planning Statement** (YTL, 2022) submitted with the planning application, which sets out the planning controls with regards to future transport phases.

5.9.18 The general approach to assessment for this ES is that the 2036 baseline with the Proposed Development has been assessed against the 2036 baseline, for the reasons set out above. However, it has been necessary for some chapters to adapt this approach to meet the specific requirements of guidance, stakeholders, etc. The approach to assessment for each Technical Chapter and the rationale for that approach is set out in **Table 5.2**.

Table 5.2: Approach to assessment by Chapter

Chapter No.	Chapter	Assessment approach	Rationale
7	Socio-economics	Assessment of full Proposed Development against the 2036 baseline	As set out above
8	Transport and Access	Assessment of full Proposed Development	2036 is the end year of the Greater Bristol Area Transport Model 4 (GBATS4) being

Chapter No.	Chapter	Assessment approach	Rationale
		against the 2036 baseline	prepared for the Transport Assessment accompanying the ES.
9	Air Quality	Assessment of full Proposed Development against the 2036 baseline	2036 is the end year of the Greater Bristol Area Transport Model 4 (GBATS4) being prepared for the Transport Assessment accompanying the ES. The EIA Scoping Opinion states that an assessment against the current state of the environment is also required. However, the differences between the traffic assigned model used for the extant planning consent and the Proposed Development mean that assessment against the current state of the environment would not be appropriate. See Chapter 11 Air Quality for more details.
10	Noise and Vibration	Assessment of full Proposed Development against the 2036 baseline	2036 is the end year of the Greater Bristol Area Transport Model 4 (GBATS4) being prepared for the Transport Assessment accompanying the ES.
11	Landscape, Townscape and Visual	Assessment of full Proposed Development against the current state of the environment	A 2036 baseline would in theory contain the built out consented scheme which is some parts is different to the Proposed Development, including some aspects of proposed layout, land use, open space, heights and mass, and therefore would be difficult to robustly assess the uplift of visual effects. The chapter instead includes a comparison table of the effects identified in the 2017 LVIA and the effects identified for the 2022 LVIA, to demonstrate where there are differences and notes why those differences occur.
12	Biodiversity	Assessment of full Proposed Development against the current state of the environment and the 2036 baseline	In EIA Scoping Opinion (Appendix A.11), SGC identified the requirement for an assessment against the current state of the environment and the 2036 baseline.
13	Wind Microclimate	Assessment of full Proposed Development against the current state of the environment	A 2036 baseline would contain the built out extant planning consent which is some parts is different to the Proposed Development, including some aspects of proposed layout, land use, open space, heights and mass, and therefore would be difficult to robustly assess the difference in wind microclimate effects. In

Chapter No.	Chapter	Assessment approach	Rationale
			addition, the 2036 baseline wind conditions would not be mitigated through the implementation of enhanced design measures such as landscaping, and would likely represent a worse case. Conditions within the proposed development are instead being compared against the Lawson criteria, with mitigation being implemented through the detailed design stages to ensure a safe and comfortable wind microclimate throughout.
14	Climate Change and Sustainability	The Climate Change Risk Assessment (CCRA) considers the assessment year (2036) as well as a number of intervals up to 2099. The GHG assessment has assessed the Proposed Development against the 2036 baseline.	Provides a comparison of the extant planning consent against the Proposed Development. Using IEMA Guidance, 25 year intervals were considered in the CCRA as an appropriate timescale to assess effects of climate change upon the Proposed Development.

5.9.19 The ES chapters that provide an assessment of the Proposed Development against the 2036 baseline have outlined as appropriate how these changes have been considered in establishing the 2036 baseline.

5.9.20 Where the 2036 baseline has been utilised the ES does not include a separate assessment of cumulative effects as the cumulative developments and will be assessed in the scenario where the full Proposed Development is assessed against the 2036 baseline.

Assessing Construction Effects

5.9.21 The EIA has assessed the likely significant environmental effects that could occur during demolition and construction against the current state of the environment. Given that a principal contractor has not yet been appointed it is not possible to be definitive about the construction works. Therefore, the assessment of likely environmental effects during the construction phases has been based on available information and reasoned judgements based on professional experience to enable the likely environmental effects to be identified.

5.9.22 Demolition and construction effects will be temporary and intermittent, i.e. works will not occur in one location throughout the entire duration of the construction works. The potential duration and intermittency of effects is identified where appropriate in **Chapters 7-15** based on the information provided in **Chapter 4**.

- 5.9.23 A Framework CEMP was provided as part of the planning submission for the extant planning consent and was secured through a planning condition. In judging the significance of construction effects of the Proposed Development, it has been assumed that the same approach would be taken and that a CEMP that will be secured via a suitably worded condition will adequately address mitigation measures in relation to construction effects identified within **Chapters 7-15**. This CEMP will take forward measures set out in the Framework CEMP that has been prepared for this planning application (**Appendix A.9**).

Assessing Operational Effects

- 5.9.24 To provide an assessment that is generally consistent between topic chapters, the EIA has focused on assessing the likely significant environmental effects of the overall Proposed Development as at 2036. This approach ensures that the full environmental effects of the outline planning application have been considered. Where worst case effects could occur during an earlier or later year than such an assessment has been undertaken and this is reported in the relevant topic chapter.

Mitigation and Enhancement

- 5.9.25 The incorporation of mitigation measures, which are measures to avoid, minimise or compensate for adverse effects, is an integral part of the design and EIA processes.
- 5.9.26 The EIA Regulations require an ES to contain: *“A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment”*.
- 5.9.27 As part of the design process suitable mitigation measures have been incorporated into the Proposed Development to mitigate potentially significant environmental effects. This mitigation is termed "embedded mitigation" and has been considered within each of the topic chapters in this ES and are set out in **Section 3.3**.
- 5.9.28 Measures to enhance biodiversity on the current Site have also been included within the design of the Proposed Development such as habitat creation.
- 5.9.29 Further mitigation measures, compensation and opportunities for environmental enhancement have also been identified through the EIA process. Such mitigation, compensation and enhancement measures are identified in this ES along with how it is proposed that they be secured.
- 5.9.30 A hierarchy of methods for mitigating significant adverse effects will be followed; these are, in order of preference:
- **Avoidance** – designing a development in such a way that avoids effects on the environment (e.g. avoiding siting residents in areas that could be affected by flood risk)
 - **Reduction** – design the Proposed Development or employ construction methodologies such that significant effects identified are reduced (e.g. employment of sustainable drainage to mitigate the effects of development on surface water run-off)
 - **Compensation** – providing off-site enhancement in order to compensate for where onsite mitigation has not been possible (e.g. financial contributions towards local infrastructure).
- 5.9.31 Environmental effects remaining after mitigation measures have been incorporated are termed "residual effects" and these are fully described in the ES.

5.10 Assessment of Cumulative Effects

- 5.10.1 The EIA Regulations require the assessment to consider the likely significant effects of the Proposed Development in the context of other existing and/or approved projects, as well as the cumulative effects that may result from the Proposed Development and these other developments.
- 5.10.2 'Approved developments' are considered to be planning permissions that are partially built out and extant planning permissions. Planning applications that have been submitted but not yet determined have also been considered where there is a likelihood that the application may be granted planning permission before this application is determined.
- 5.10.3 The approved developments that have been considered are set out in **Table 5.3**. Developments within 3km have been considered. These approved developments were agreed with SGC through EIA Scoping. As requested by SGC in the Scoping Opinion, this list also includes any cumulative sites assessed for the YTL Arena ES.
- 5.10.4 The ES will not include a separate assessment of cumulative effects as these cumulative developments are included in the 2036 baseline and will be assessed in the scenario where the full Proposed Development is assessed against the 2036 baseline. Where the approach differs, which is the case for Chapters 11 (LTVIA) and 13 (Wind Microclimate) this is explained in **Table 5.2** above.

Table 5.3: Cumulative Developments

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
Cribbs/Patchway New Neighbourhood Allocation	Adopted 2014	Approximately 5,700 new homes and around 50ha of employment land, together with a range of community services and facilities.	Adopted 2014	Yes
Cribbs Urban Village, Almondsbury Bristol South Gloucestershire BS10 7TE	PT14/0565/O	Mixed use development of 44 hectares of land comprising: up to 1,000 new dwellings (Use Class C3); an 86-bed Extra Care Home (Use Class C2); a mixed use local centre including a food store up to 1,422sqm net internal sales area (Use Classes A1, A2, A3, A4, A5, B1, D1, D2); a 2-form entry primary	Approved January 2021	Yes

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
		school; community facilities including a satellite GP surgery, dentist and community centre; associated public open space and sporting facilities; green infrastructure integrated with foot and cycle paths; together with supporting infrastructure and facilities including three new vehicular accesses. Outline application including access, with all other matters reserved		
Wyck Beck Road / Fishpool Hill Patchway Cribbs Causeway South Gloucestershire	PT12/1930/O	Mixed use development across 53.80 hectares of land comprising up to 1,100 new dwellings (Use Class C3) a local centre (Use Classes A1,A2,A3,A4, A5,B1,D1,D2) a primary school together with supporting infrastructure and facilities including: new vehicular access with Wyck Beck Road, public open space and landscaping. Outline application including access with all other matters reserved.	Approved July 2020	Yes
Land off Charlton Road, Filton Bristol	PT15/4165/F	Proposed Development of 80 dwellings (use	Approved May 2019	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
South Gloucestershire BS10 6LB		class C3 including affordable homes), open space (including children's play space and improvements to Charlton Common), sustainable urban drainage, vehicular access, pedestrian and cycle accesses, pumping station and related infrastructure and engineering works.		
Laurel Hill	PT14/2646/O and PT14/1886/O	Mixed use development on 3.15ha of land comprising offices (Use Class B2) Storage (Use Class B8) car showrooms (sui generis) and all associated ancillary facilities. Outline application including access with all other matters reserved.	Approved January 2015	Yes
Asda extension Highwood Lane Patchway Bristol South Gloucestershire BS34 5TL	PT15/4386/O	Alterations and reconfiguration of the Site with access to be determined (Outline) all other matters reserved including the erection of up to 14,674sqm of new buildings for uses within Use Classes A1 (shops) up to 12,723sqm, A3 (restaurants and cafes) up to 1,665sqm, A4 (drinking establishments) up	Approved January 2017	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
		to 930sqm, A5 (hot food take-away) up to 116sqm and D2 (assembly and leisure) up to 1,951sqm. Alterations to the front elevation of the Asda store (including removal and replacement of existing entrance structures), altered circulation, servicing and car parking layout (including alterations to lighting and landscaping), relocation and re-provision of bus stops and bus turning facility. Demolition of existing filling station and car wash and erection of new filling station. Provision of new public realm, including public space and landscaped areas.		
Land South of Merlin Road (Ice Rink and Sky Diving Centre) South Gloucestershire Cribbs Causeway BS10 7UD	PT15/5319/O and PT18/1459/F	Hybrid planning application for development of an indoor ice rink (D1 use), indoor skydiving venue (D1 use), coffee drive thru (A3/A5 use), restaurant (A3 use) and car showroom (sui generis), and associated landscaping, access, infrastructure and parking (detailed application).	Approved October 2018	Yes

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
		Outline application for development to provide hotel (C1 use) (up to 2,787 sqm GIA) and A2/A3 uses (up to 465 sqm GIA) or up to 2,323 sqm (GIA) retail floorspace (A1 use). Revised scheme to PT15/5319/O		
East Works Site Gloucester Road North Filton South Gloucestershire BS34 7BQ	PT18/4908/F	Development of 10,872sqm of research and development facility (B1b) including ancillary offices, external compound and associated parking, landscaping, highways and drainage infrastructure.	Approved January 2019	No
Application Site A – Arena complex comprises the Brabazon Hangars BS34 7DU	19/05500/P	Hybrid planning application comprising: the demolition of existing ancillary buildings and structures; full details associated with the change of use of, and associated external alterations to, the Brabazon Hangar buildings from Class B8 use to a mixture of Class D1, D2, A1, A3, A4 and B1a uses, along with outline details associated with infrastructure works including: revised vehicular access	Approved April 2021	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
		arrangements; redevelopment and reorganisation of the former aircraft apron to provide parking, servicing and associated infrastructure provision; plus associated landscaping, service infrastructure and other associated works and improvements.		
Application Site B – West Way	P19/16740/F	Amendments to the existing highway and highway junction at Charlton Road and West Way.	Approved April 2021	No
Application Site C – Temporary Car Park	P19/16741/F	Formation of a temporary car park for up to 2,000 vehicles and bus, taxi, park and ride, pick up and drop off areas on the eastern end of the former Filton Airfield.	Approved April 2021	No
Application Site D – Pedestrian Bridge	P19/16742/F	Construction of a new pedestrian bridge linking the former Filton Airfield and the Brabazon Hangar site over the Henbury Loop railway line, including associated demolition, earthworks and landscaping.	Approved April 2021	No
Northfield Park Charlton Hayes Hayes Way	PT14/5028/O	Mixed use development on 6.24 hectares of	Approved April 2016	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
Northfield Charlton Hayes Filton South Gloucestershire BS34 5BZ		land comprising up to 120 new dwellings (Use Class C3) up to 8000 sq m of office development (Use Class B1) and up to 400sqm of ancillary retail use (Use Classes A1, A2, A3, A4 and A5) together with supporting infrastructure and facilities, including new vehicular access, landscaping and services. Outline application including access with all other matters reserved.		
East Works Site Gloucester Road North Filton South Gloucestershire BS34 7BQ	PT15/1634/RVC	Redevelopment of site for mixed use development comprising Use Classes: B1(a) Offices, B1(c) Light Industry, B2 General Industry, B8 Storage and Distribution, C1 Hotel including ancillary leisure and food and drink, sui generis trade units and car dealerships, with associated infrastructure, access, parking (Outline) with access to be considered with all other matters to be reserved.	Approved 15 July 2015	No
Land At Harry Stoke Stoke Gifford Bristol South	PT06/1001/O	Residential development on 39.57 hectares of land (Outline) with infrastructure,	Approved January 2007	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
Gloucestershire BS34 8QQ		public open space and ancillary facilities. Means of access to be determined, all other matters reserved.		
Land At The South Of The Railway East Of Harry Stoke Bradley Stoke Bristol South Gloucestershire	PT16/4782/O	Outline planning permission for mixed use development comprising up to 1,290 dwellings including an extra care facility (Use Class C2/C3); community facilities (comprising use classes D1 and D2); provision of a mixed use local centre (Use Classes A1, A2, A3 and D1) together with the supporting infrastructure and facilities including: new vehicular and pedestrian accesses, public open space and landscaping with access to be determined and all other matters reserved.	Approved March 2020	No
Former Filton Airfield Patchway South Gloucestershire BS34 5BZ	P21/05318/RM	Construction of primary access infrastructure (Brabazon Eastern Framework) that facilitates road links and associated pedestrian and cycle paths through the Brabazon Eastern Framework.	Under consideration.	Yes

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
P21/08021/RM	P21/08021/RM	Laying out of public open space to include provision of two Local Equipped Areas of Play (LEAP), a Neighbourhood Equipped Area of Play (NEAP), area for Youth Play and a Sports Zone, informal open space, landscaping, water feature/sustainable drainage system (SuD) and all associated works.	Under consideration.	No
Former Filton Airfield -	P21/06296/F	Erection of railway station with 1 no. footbridge, temporary car park, access.	Under consideration.	No
Former Filton Airfield South Gloucestershire	P20/24199/F	Application for the temporary change of use for a period of 3 years to mixed use retail (Class E), pop-up food and drink space (Classes A4, A5) and temporary events (sui generis) with associated car parking.	Under consideration.	No
North of the railway East of Harry Stoke New Neighbourhood (EoHSNN)	PT16/4928/O	Hybrid planning application for the demolition of farmhouse and agricultural buildings and erection of 327 dwellings with a primary school.	Approved 20 October 2019	No
North of the railway East of Harry Stoke NN	Full element of PT16/4928/O	Erection of 150 no. dwellings.	Approved 18 June 2021	No

Location	Application Number	Description of Development	Status	Part of the CPNN allocation?
	superseded by P20/03681/F			
Old Gloucester Road within EoHSNN	PT17/5873/O	Erection of up to 158no dwellings	Approved 5 October 2020	No
Northfield Park, Patchway -	PT17/5387/F	Erection of Lidl foodstore (Class A1) with access, servicing, parking and associated works.	Approved 27 February 2019	No
Land At Norton Farm Berwick Drive Almondsbury Bristol South Gloucestershire BS10 7TB	PT18/6360/F	– Land at Norton Farm - Demolition of existing buildings and erection of 30no dwellings.	Resolution to grant 2021	Yes
Land Off Fox Den Road Stoke Gifford South Gloucestershire	P20/05916/F	Erection of mixed-use development comprising of Hotel and Restaurant, Supermarket, Coffee Shop with Drive Thru Facility and multi-use building (comprising flexible combinations of Use (Class A1) shops, (Class A2) financial and professional, (Class A3) food and drink, (Class A5) hot food takeaways, (Class B1) business, (Class D1) non-residential institutions, and (Class D2) Assembly and Leisure).	Approved 23 April 2021	No

5.11 Impact Interactions

- 5.11.1 **Chapter 15** provides the assessment of impact interactions, i.e., receptors being affected by more than one environmental effect and therefore potentially being subject to a more significant combined effect than the individual effects reported in each of the topic chapters.
- 5.11.2 The approach adopted for the assessment is in accordance with the methodology set out above, with further details provided in **Chapter 15**.

5.12 Significance Criteria

- 5.12.1 The two principal criteria for determining significance of an environmental effect are the magnitude of the effect and the sensitivity of the receptor, in addition the likelihood of the effect occurring is also considered as appropriate.
- 5.12.2 The approach to assessing and assigning significance to an environmental effect has relied upon such factors as consideration of the EIA Regulations, guidelines, standards or codes of practice, the advice and views of statutory consultees and other interested parties, and professional judgement.
- 5.12.3 The following questions are relevant in evaluating the significance of likely environmental effects:
- Is the effect direct, indirect or cumulative?
 - Does the effect occur over the short, medium or long term?
 - Is the effect permanent or temporary?
 - Is it a positive, neutral or adverse effect?
 - Is the effect reversible or irreversible?
 - Does the effect increase or decrease with time?
 - Is the effect of local, regional, national or international importance?
 - Are health standards or environmental objectives threatened?
 - Are mitigating measures available and is it reasonable to require these?
- 5.12.4 Specific significance criteria have been prepared for each specialist topic, based on the generic criteria, for adverse and beneficial effects, set out in **Table 5.4**.

Table 5.4: Significance criteria

Significance Level	Criteria
Substantial	Only adverse effects are assigned this level of significance as they represent key factors in the decision-making process. These effects are generally, but not exclusively, associated with sites and features of national or regional importance. A change at a country scale site or feature may also enter this category.
Major	These effects are likely to be important considerations at a district scale but, if adverse, are potential concerns to the project and may become key factors in the decision-making process.

Significance Level	Criteria
Moderate	These effects, if adverse, while important at a local scale, are not likely to be key decision-making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	These effects may be raised as local issues but are unlikely to be of importance in the decision-making process. Nevertheless, they are of relevance in enhancing the subsequent design of the project and consideration of mitigation or compensation measures.
Negligible	Either no effect or effect which is negligible or beneath the level of perception, within normal bounds of variation or within the margin of forecasting error. Such effects should not be considered by the decision-maker.

- 5.12.5 Effects that are described as ‘substantial’, ‘major’ or ‘moderate’ are determined to be *significant*; and effects that are described as ‘minor’ or ‘negligible’ are determined to be *not significant* in the context of the EIA Regulations.

5.13 Monitoring

- 5.13.1 The EIA Regulations introduce the requirement for the monitoring of significant adverse environmental effects where appropriate and that a schedule of proposed monitoring should be set out in an ES.
- 5.13.2 Each chapter of the ES therefore identifies the proposed monitoring arrangements for that topic. As stated in the EIA Regulations effort should be made to ensure that *“the type of parameters to be monitored and the duration of the monitoring are proportionate to the nature, location and size of the development and the significance of its effects on the environment.”*
- 5.13.3 A summary of mitigation and monitoring requirements identified in each topic chapter is provided in **Chapter 16**.

6 Planning Policy and Context

6.1 Introduction

- 6.1.1 This chapter has been prepared as part of the Environmental Impact Assessment process, which aims to protect the environment and ensure the public are given early and effective opportunities to participate in the decision-making procedures (PPG Paragraph: 002 Reference ID: 4-002-20140306). Minimising the impact of the development of the environment has been at the forefront of the applicant's mind since the beginning of the project, more details of which are set out below and in the supporting planning statement. Furthermore, extensive public consultation has taken place since the EIA Scoping Opinion Request was submitted in December 2021, more detail of which is set out in other chapters of this Environmental Statement and Statement of Community Involvement. Relevant consultees have also had the opportunity to raise or address any issues within the EIA scoping process, which ran for seven weeks from early December 2021. An overview of the relevant Environmental Statement legislation and policy guidance is set out in Chapter 5 of this statement and each chapter of the statement will detail specific policies, legislation and guidance that is relevant for that chapter.
- 6.1.2 The purpose of this planning policy chapter is to set out the relevant policies, at both a national and local level, that are considered as part of the assessment. On a local level, emerging policies are also considered.
- 6.1.3 The Statutory Development Plan for South Gloucestershire includes the:
- South Gloucestershire Core Strategy 2006 – 2027 (December 2013); and
 - South Gloucestershire Policies, Sites and Places Plan (November 2017)
- 6.1.4 Material planning considerations for the site include:
- National Planning Policy Framework (July 2021)
 - Planning Practice Guidance (PPG)
 - South Gloucestershire Local Plan 2020 (Emerging Planning Policy)
 - Cribbs Patchway New Neighbourhood SPD (March 2014)
 - Green Infrastructure SPD (April 2021)
 - Trees and Development SPD (April 2021)
- 6.1.5 The Site forms a substantial part of the Cribbs Patchway New Neighbourhood (CPNN) and extends to some 141.94 hectares. The Site is allocated for mixed use development within the adopted South Gloucestershire Core Strategy as part of Policy CS26: CPNN. The CPNN is the largest of the 'new neighbourhoods' in the South Gloucestershire Core Strategy and makes a very significant contribution (circa 5,700 dwellings) towards meeting the Council's strategic housing requirement. The CPNN area is subject to an adopted SPD which sets out the expectations of development in this area; more information is set out in section 6.4 of this chapter.
- 6.1.6 The Eastern Framework Design Code for the site has been previously approved for the extant planning consent. However, it is intended that the design code to reflect the new outline application for this revised masterplan will be submitted later this year and determined alongside this outline planning application.

6.2 National Planning Policy Context

National Planning Policy Framework

6.2.1 At a national level planning policy is set out within the National Planning Policy Framework (NPPF 2021) (the Framework). The Framework explains that the purpose of the planning system is to contribute to the achievement of sustainable development. The Framework continues to explain that in order to achieve this aim the planning system has three overarching objectives; an economic objective; a social objective and an environmental objective.

6.2.2 At the heart of the NPPF is a presumption in favour of sustainable development that should run through both place-making and decision-taking. The NPPF sets out three overarching objectives to achieving sustainable development. These are independent but should be sought to be achieved in mutually supportive ways. The objectives are:

***“An economic objective** - to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*

***A social objective** - to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being; and*

***An environmental objective** - to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”*

6.2.3 The applicant acknowledges the importance of the NPPF, and the wide-ranging policies set out within the Framework. However, the below policies highlight the importance of housing delivery and the importance of considering brownfield sites in the first instance, these have been critical to the proposed development.

6.2.4 Paragraph 60 of the NPPF states:

‘To support the Government’s objective of significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed, that the needs of groups with specific housing requirements are addressed and that land with permission is developed without unnecessary delay.’

6.2.5 Part of Paragraph 119 of the NPPF relates to the preference for developing previously developed or brownfield land, stating:

‘Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or ‘brownfield’ land.’

6.2.6 Paragraph 141 of the NPPF states:

‘before thinking of altering Green Belt boundaries, the strategies should make ‘as much use as possible of suitable brownfield sites and underutilised land.’ The proposals for Brabazon are in line with this policy and represent a suitable use of currently underutilised brownfield land in a

sustainable location. National Planning Policy makes it clear that the development of brownfield land is highly favourable over greenfield and especially Green Belt land.

6.2.7 There are numerous policies set out in the NPPF which are of relevant to this development and have been considered as part of the design process. Key chapters of relevance to this proposal include:

- Chapter 2: Achieving Sustainable Development (Paragraphs 7-14)
- Chapter 5: Delivering a sufficient supply of homes (Paragraphs 60-80)
- Chapter 8: Promoting healthy and safe communities (Paragraphs 92-103)
- Chapter 9: Promoting Sustainable Transport (Paragraphs 104-113)
- Chapter 11: Making effective use of land (Paragraphs 119-125)
- Chapter 12: Achieving well-designed places (Paragraphs 126-136)
- Chapter 13: Protecting Green Belt Land (Paragraphs 137-151)

6.2.8 Each chapter of this ES sets out the policy relevant to the respective discipline and identifies the key elements of the NPPF that need to be considered.

Planning Practice Guidance (PPG)

6.2.9 The Planning Practice Guidance (PPG) supports the NPPF and covers a wide range of categories. Of most relevance to this development are the following categories:

- Environmental Impact Assessment (EIA); which provides information on the purpose of EIA, overview of the EIA process, development covered by the regulations, preparing an environmental statement and the procedures for submitting an Environmental Statement. This EIA chapter has been considered as part of the process of preparing this statement.
- Effective use of land
- Housing needs of different groups
- Housing supply and delivery
- Open space, sports and recreation facilities, public rights of way and local green space
- Travel Plans, Transport Assessments and Statements

6.2.10 The above chapters have been considered in the context of this Environmental Statement.

6.3 Local Planning Policy and Guidance

South Gloucestershire Core Strategy (2013)

6.3.1 South Gloucestershire adopted the Core Strategy on 11th December 2013. Brabazon is included within the Cribbs Patchway New Neighbourhood (Policy CS26). The key part of this policy states: *'provision will be made for approximately 5,700 dwellings in new mixed-use communities, around 50ha of employment land, and greater diversity of commercial uses including additional retail, together with supporting infrastructure and facilities.'*

6.3.2 The key issues set out in this Strategy are set out below, and have been considered throughout the design process:

1. Reducing and Adapting to Climate Change
2. Managing Future Development
3. Maintaining Economic Prosperity
4. Providing Housing for All
5. Improving Existing Communities
6. Tackling Congestion and Improving Accessibility
7. Managing the Environment and Heritage
8. Improving Health and Wellbeing

6.3.3 The following policies are of most relevance to the development:

CS1: High Quality Design

6.3.4 This policy focuses on the delivery of ensuring new development delivers a high-quality design. The proposed development at Brabazon has been subject to two Design Review (Design West) workshops.

6.3.5 NPPF policies regarding design, which include Paragraphs 124 to 132 have been considered as part of the development design process.

CS2: Green Infrastructure

6.3.6 Policy CS2 provides information on the provision of Green Infrastructure, this policy has been considered throughout the design process at Brabazon with a key feature of the revised Masterplan being the new 15-acre park, the largest urban park in the South-West for 50 years.

6.3.7 Brabazon falls within Zone 6 of the Strategic Green Infrastructure Network and there is a small area of Strategic Green Infrastructure to the west of the site.

CS6: Infrastructure and Developer Contributions

6.3.8 This policy sets out that development at the scale of Brabazon is required to make contributions, such as site-specific measures to directly mitigate the impact of development and infrastructure, services, and community facilities to mitigate its own impact on existing communities and provide for the needs arising from the development.

CS7: Strategic Transport Infrastructure

6.3.9 Policy CS7 (Strategic Transport Infrastructure) requires priority to be given to the implementation of strategic infrastructure proposals. Under this policy several key projects are listed – this includes the Cribbs/Patchway New Neighbourhood Package and the re-introduction of passenger services on the Hallen Line/ Henbury Loop which involves the opening of the new Filton North Station. Both packages will serve Brabazon and enable and promote sustainable living.

CS8: Improving Accessibility

- 6.3.10 Policy CS8 sets out criteria by which new proposals will be assessed against, providing a range of travel options other than the private car and states: *'Priority will be given to providing the users of new development with a range of travel options other than the private car. The following principles will be applied in the consideration of planning applications and formulation of other Local Development Documents.'* A new train station at Filton North is due to open in 2023 and the MetroBus will serve the site with a frequency of six times an hour. There will be a range of dedicated cycle lanes and pedestrian only areas across the site, making a movement towards sustainable transport a viable option.

CS11: Distribution of Economic Development Land

- 6.3.11 This policy refers to the distribution of economic development land across SGC and identifies a total of 355ha of safeguarded employment in the North Fringe of Bristol. The redevelopment of the site provides an opportunity to respond to and to enhance the area's strength in research and development and the wider aerospace sector.

CS15: Distribution of Housing

- 6.3.12 This policy states that: *'Between 2006 and 2027, covering a period of up to 14 years from adoption of the plan, a supply of deliverable and developable land will be identified to secure the delivery of a minimum of 28,355 new homes in accordance with the plan.'* The policy sets out that the Cribbs Patchway New Neighbourhood is expected to deliver a total of 5,700 of these homes.
- 6.3.13 There is a focus on the relationship between local employment growth and housing to provide a prosperous and balanced local economy. Policies CS16 (Housing Density), CS17 (Housing Diversity), CS18 (Affordable Housing) and CS20 (Extra Care Housing) require developments to make efficient use of land; providing both market and affordable homes and providing Extra Care Housing in new neighbourhoods. Policy CS23 (Community Infrastructure and Cultural Activity) requires new development to provide or contribute towards additional, extended, or enhanced community and cultural infrastructure.

CS16: Housing Density

- 6.3.14 The Council supports higher density living, stating that: *'housing development is required to make efficient use of land, to conserve resources and maximise the amount of housing supplied'* Allowing a high-density scheme in this location will ensure that a generous provision of homes is delivered and will make an important contribution to the five-year housing land supply.
- 6.3.15 Paragraph 124 of the NPPF also refers to planning policies and decisions supporting developments make efficient use of land, considering the identified need for different types of housing and local market conditions.

CS17: Housing Diversity

- 6.3.16 The policy states: *'in all localities, new housing development, comprising both market and affordable, must provide a wide variety of housing type and size to accommodate a range of different households.'* The Proposed Development is in accordance with this policy and will deliver a range of house types including apartments, in which there are fewer of in the local area.

CS18: Affordable Housing

- 6.3.17 Policy CS18 states that on proposals of 10 or more dwellings, developers are required to achieve 35% of the total as affordable housing. Following a detailed assessment of viability

through the CPNN Framework Agreement and subsequent Site-Specific Agreement (SSA) processes, the extant planning consent establishes an affordable housing provision of 17%. This is commensurate with the significant infrastructure costs associated with the CPPN Infrastructure Delivery Plan. There will still be a considerable and important contribution towards the provision of on-site affordable housing given the proposed numbers of dwellings; the proposed uplift in homes will naturally secure more affordable homes at Brabazon.

- 6.3.18 The level of affordable housing within the Proposed Development will be subject to detailed viability calculations and discussions.

CS20: Extra Care Housing

- 6.3.19 In line with Policy CS20, to create a mixed and balanced community, there is a requirement to provide extra care housing at Brabazon. The development proposals seek the delivery of up to 600 no. extra care (Use Class C2) units.
- 6.3.20 In line with Policy CS1, the design of the extra care housing will be of the highest quality and will be incorporated into the design of the wider scheme.

CS23: Community Infrastructure and Cultural Activity

- 6.3.21 Core Strategy Policy CS23 states:

'The Council will work with partners to provide additional, extended or enhanced community infrastructure and encourage participation in cultural activity.'

New development will be required to provide or contribute towards additional, extended, or enhanced community and cultural infrastructure where it would generate a need for such facilities in accordance with the following sequential criteria:

Enhance the quality, role and viability of existing facilities that are within easy walking distance of the new development

Provide adaptable multi-use building(s) on site in easily accessible location(s) for pedestrians and cyclists.'

- 6.3.22 The applicant will provide a range of community and cultural infrastructure facilities across Brabazon, including community centres and sports/recreational facilities. YTL will design community buildings and spaces to ensure they offer a multi-use purpose and can be used by several groups simultaneously, to ensure the diverse needs and wants of the community can be met at one time.
- 6.3.23 The vision for proposed development at Brabazon is to reduce car dependency and promote the use of public transport and modes of active travel. As such, a range of high-quality segregated cycle paths and footpaths will be provided across the site which will be accessible and safe for the whole community. Furthermore, the appropriate infrastructure will be provided to ensure there are safe and secure locations to leave bikes and well-lit paths to encourage the community to consider active modes of travel throughout the day and at all times of year.

CS24: Green infrastructure, sport, and recreation

- 6.3.24 Policy CS24 states: *'Green Infrastructure assets are integral to sustainable communities.'* YTL wholly acknowledges this statement and the proposed development will have a range of high-quality green and blue infrastructure provision across the scheme.
- 6.3.25 The policy goes onto state:

‘Provision for Green Infrastructure, outdoor space, sport and recreation facilities will be according to the following principles:

New developments must comply with all the appropriate local standards of provision in terms of quantity, quality and accessibility.

Provision must be delivered on-site, unless it is demonstrated that partial or full off-site provision or enhancement creates a more accessible proposal; and

The functionality and usability of spaces and facilities must be suitable for their intended purposes.’

- 6.3.26 Within the proposal a range of high-quality accessible sport and recreation facilities will be included. Play parks of various sizes will be provided and well-integrated across the site, with a LEAP and NEAP included within Brabazon Park. Furthermore, a range of multi-use sport facilities will be provided within the school complexes for the benefit and use of the wider community.
- 6.3.27 Green infrastructure will be provided throughout the site, in the form of greenery and trees along roads and footpaths/cycle paths but also in green corridors and the proposed 15-acre Brabazon Park, which will also make a generous contribution to public open space. The focus of YTL is to provide high quality, attractive and useable public open space, rather than a higher quantity of less useable and attractive open spaces.

CS25: Communities of the North Fringe of Bristol

- 6.3.28 This policy sets out South Gloucestershire Council's aspirations for development in the North Fringe which includes the former Filton Airfield site as part of the CPNN. Bringing forward the revised proposals is in keeping with the policy to develop this site.

CS26: Cribbs Patchway New Neighbourhood (CPNN)

- 6.3.29 This policy provides further detail regarding the CPNN proposals and sets out the requirement for an area-wide SPD to act as the policy delivery mechanism to ensure development is comprehensively planned and delivered in accordance with the vision. Brabazon takes up the largest land parcel of the CPNN allocation and is looking to deliver not only the most homes in the CPNN area, but also the highest quality sustainable living principles.
- 6.3.30 There are ambitious transport proposals for Brabazon which will be of benefit to the wider area. A new train station at Filton North and a range of Metrobus, park and ride and bus services will move reliance away from the car and onto public transport or modes of active travel.
- 6.3.31 In line with the policy requirement, the proposed development will include a range of services and amenities expected as part of a new high-quality imaginative community, including three new schools (two primary schools and a secondary school), several day nurseries, medical facilities including a new GP surgery, a range of retail and leisure facilities, community meeting spaces, indoor sport, children's and youth facilities, well planned and integrated Green Infrastructure, and recreation provision sufficient to meet the needs of the new community.

South Gloucestershire Policies, Sites and Places Plan (2017)

- 6.3.32 The Policies, Sites and Places Plan (PSP) forms part of the South Gloucestershire Local Plan. The PSP was adopted on 8 November 2017. The document is split into two parts, with section one covering policies for managing new development, and part two covering the allocation and protection of sites and places within South Gloucestershire.

- 6.3.33 Part 1 of the PSP covers Development Management Policies, with Part 2 focussing on details of town centres and site allocations. The following policies, taken from Part 1, are of most relevance to this scheme:

PSP1: Local Distinctiveness

- 6.3.34 This policy states: *‘Development proposal(s) will be acceptable where the proposals demonstrate an understanding of and respond constructively to the buildings and characteristics that make a particularly positive contribution to the distinctiveness of the area / locality.’*
- 6.3.35 As discussed with South Gloucestershire’s Conservation Officer a stand-alone setting assessment has been prepared and submitted alongside this application to ensure local buildings and structures of historic merit have been considered in the context of the proposal.

PSP9: Health Impact Assessment

- 6.3.36 This policy requires that very major development proposals are discussed with the Director of Public Health and an appropriate Health Impact Assessment is prepared. An intermediate Health Impact Assessment (HIA) has been prepared and submitted alongside this application as previously discussed with the relevant officer. PSP10: Active Travel Routes (ATRs)
- 6.3.37 This policy states: *‘Where appropriate, new development proposal(s) will be expected to provide links to an existing or proposed ATR.’* The supporting transport documentation demonstrates how Brabazon will reduce reliance on the car and the incorporation of ATRs is therefore vital to the success of the scheme. Several kilometres of new dedicated footpaths and cycle paths will be constructed throughout the site which will be accessible to both the Brabazon community and wider area.

PSP13: Safeguarding Strategic Transport Schemes and Infrastructure

- 6.3.38 This policy provides details on the MetroBus route extension which will serve the site; there will be three MetroBus stops, each of which will be served by MetroBus six times an hour. The route will be segregated from other traffic to ensure a fast, direct, and reliable service is delivered. Furthermore, there will be a range of other public transport offerings at the site, such as a new train station and alternative bus routes all of which are in accordance with Policy PSP13.

PSP16: Parking Standards

- 6.3.39 South Gloucestershire Council currently provides minimum residential parking standards. The first development phases at Brabazon will be compliant with these parking standards. However, in line with Urban Living principles, parking provision will be reduced as time goes on. More information is provided in the Transport and Access Chapter and supporting transportation documentation.

PSP19: Wider Biodiversity

- 6.3.40 Biodiversity is an increasingly important issue in today’s world, with the Government’s Environment Bill going through Royal Assent in early November 2021.
- 6.3.41 Development at Brabazon will be compliant with NPPF Paragraph 174 which aims to ensure that development contributes and enhances the local and natural environment.
- 6.3.42 Policy PSP19 states: *‘Where appropriate, biodiversity gain will be sought from development proposals. The gain will be proportionate to the size of the scheme and be secured through an appropriate planning condition or legal undertaking. This will include sites of low nature*

conservation interest (for example, intensive agricultural land) where new semi-natural habitat (green infrastructure) would provide opportunities and gains for local wildlife.'

- 6.3.43 In line with this policy, Brabazon is looking to deliver at least 10% Biodiversity Net Gain and consideration of net gain has been at the forefront of YTL's mind from the outset of the project and design process. A BNG calculation has been submitted alongside this application to demonstrate the biodiversity uplift on the site and explains how this figure has been reached. Ecological enhancements will be incorporated across the scheme to provide an attractive, green landscape for residents and visitors, and a range of habitats for various species and animals. This provision will come through a network of green corridors across the site and along the margins to facilitate biodiversity and habitat connectivity.

PSP21: Environmental Pollution and Impacts

- 6.3.44 Within this policy, consideration is given to noise, air quality and contaminated land. YTL will ensure that there are no adverse environmental pollution impacts from this development.

6.4 Supplementary Planning Documents

Cribbs Patchway New Neighbourhood Development Framework Supplementary Planning Document (March 2014):

- 6.4.1 The Cribbs Patchway New Neighbourhood Supplementary Planning Document (SPD) was adopted by South Gloucestershire Council in 2014 and provides an overview and a range of objectives for new development in this area, the focus being on the sustainability and accessibility of this locality. The SPD ensures that development in this area is comprehensively planned and delivered, rather than on a piecemeal basis on individual disparate sites.

Details the vision and objectives for the CPNN, sets out that the development will deliver sustainable development through:

- A strong new landscape and movement framework for the area;
- Good physical connections with the surrounding area;
- Healthy, lively and well-connected communities with their own sense of identity;
- Distinctive and high quality public realm;
- Local jobs, services and facilities and a full range of dwelling types and tenures; and
- Recognition of the history of the area.

- 6.4.2 It is evident from this document that strategic transport objectives are of key importance to the success and delivery of this New Neighbourhood. The SPD sets out that the overall aim of the development should be to provide as many low carbon connections as possible to the existing and proposed surrounding network to give people as much choice as possible about how they travel to and from destinations in and around the Bristol North Fringe.
- 6.4.3 A range of community infrastructure will be provided across the new neighbourhood and will include facilities such as playing pitches, a library, community centre, schools, cafes, medical facilities, indoor and outdoor leisure. Brabazon will provide a significant proportion of these facilities on site, all of which will be delivered to a high standard. YTL is committed to delivering a range of attractive facilities and amenities to ensure Brabazon offers the highest standards of placemaking.

Green Infrastructure SPD (April 2021)

- 6.4.4 South Gloucestershire Council's Green Infrastructure Supplementary Planning Document adopted in April 2021 provides a detailed explanation of Green Infrastructure (GI), the relevant policy wording and how this should be incorporated into schemes, with a focus on best practice.
- 6.4.5 Good GI is defined as: *'A well-designed scheme coordinates all disciplines, avoiding conflict between existing and proposed vegetation, service routes and drainage requirements.'*
- 6.4.6 YTL has worked with a range of technical consultants to ensure the proposed green infrastructure works alongside the drainage requirements for the site. One example of this is the lake, which is situated within Brabazon Park. This not only provides an attractive piece of blue infrastructure but also provides an effective drainage solution for much of the site.

Trees and Development Sites SPD (April 2021)

- 6.4.7 This SPD provides practical guidance and advice on how trees can be incorporated into new development, conserving, and enhancing the existing trees, hedgerows, groups, and woodlands within a scheme. The importance of trees in mitigating Climate Change is vitally important and is a concept YTL fully acknowledge. New trees will be planted as part of the development of the site, additional details of which are set out in the submitted Landscape Ecological Management Plan (LEMP).

6.5 Emerging Planning Policy

South Gloucestershire Local Plan 2020

- 6.5.1 South Gloucestershire Council is currently in the process of preparing a new Local Plan. This is currently at very early stages and is known as the South Gloucestershire Local Plan 2020.
- 6.5.2 An Issues Paper was published in November 2020, and a consultation on this plan ran between 27th November 2020 until 1st March 2021.
- 6.5.3 Within this draft document, a section on Urban Lifestyles is set out which includes the following new urban lifestyle themes:
- Optimising density and making efficient use of land
 - Mixed uses
 - Private amenity spaces and public realm
 - Internal living space size
 - Adaptability, views, and natural light
 - Reduced car parking
- 6.5.4 The proposed development at Brabazon is in accordance with all identified themes in the emerging Local Plan, and the applicant acknowledges what South Gloucestershire Council is looking to deliver through the draft urban lifestyle themes and policies. The scheme optimises density where appropriate and will provide a sustainable mixed-use community which will remove reliance on the car.
- 6.5.5 Phase 2 public consultation on the Local Plan Consultation Document commenced from Monday 7th February 2022 to the extended date of the 4th April 2022. Analysis of Phase 2

representations will take place from April to November 2022. Further stages of the plan preparation will be dependent on the progress of the West of England Combined Authority Spatial Development Strategy.

- 6.5.6 The Cabinet meeting resolution on 13 December 2021 notes that the South Gloucestershire Local Plan Phase 2: Urban, Rural and Key Issues is a material consideration for the purposes of exercising the Council's development management functions and can be given weight that is appropriate for the early stage the Plan has reached. Further weight will be given to this plan as it progresses through its preparation and Examination stages.

West of England Combined Authority Spatial Development Strategy (SDS)

- 6.5.7 The SDS is being prepared to positively address the strategic planning needs in the West of England area (BANES, South Gloucestershire, and Bristol City Council). The SDS will broadly cover:
- Strategic priorities,
 - Spatial vision,
 - Spatial strategy,
 - Housing and jobs requirements, and
 - Other thematic policies such as ensuring a cross-cutting, multi-scale and collaborative approach to the natural, historic, and built environment
- 6.5.8 Statutory consultation on the draft SDS (12 weeks statutory public consultation) is due to take place in Spring 2022, with examination of the plan taking place a year later in Spring 2023. The Council will publish (adopt) the SDS as soon as possible after receiving the report and becomes part of statutory development plan, this is anticipated to be in Summer 2023.