Planning, Design and Access Statement

Installation of External Cooling Plant at Server Room

Whittle Building at Rolls-Royce, Filton

April 2021

Quality information

Prepared by	Checked by	Approved by
Eleanor van der Klugt Planning Consultant	Thomas Smith Technical Director	Thomas Smith Technical Director

Revision History

Revision	Revision date	Details	Authorized	Position
V1		Draft	TS	Technical Director
V2		Final	TS	Technical Director

Prepared for:

Rolls Royce Plc

Prepared by:

Ella Van Der Klugt
Planning Consultant
E: Eleanor.VanDerKlugt@aecom.com

AECOM Limited
Aldgate Tower
2 Leman Street
London
E1 8FA
aecom.com

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1. Introduction

This Planning Statement has been prepared by AECOM on behalf of Rolls-Royce Plc ('The Applicant') and accompanies a detailed planning application seeking permission for;

"Installation of three roof mounted condenser units, one extractor fan and a roof mounted air intake Air Handling Unit (AHU) together with associated groundwork for power and data cable laying."

at Whittle House, Rolls Royce Filton, Gloucester Road, Little Stoke'', Bristol BS34 7QE.

The application is submitted to South Gloucestershire Council under the Town and Country Planning Act 1990 (as amended) and the Town and Country Planning (Development Management Procedure) Order 2015.

Employing 3,000 people, Rolls-Royce Bristol is the company's principal defence site in the UK. It is also a hub of cutting-edge training for apprentices, specialising in both the aerospace and naval sectors. The Bristol site has recently benefitted from a £75 million investment to create a centre of excellence for the assembly, manufacture, test and overhaul of gas turbines for the defence sector.

1.1 Accompanying Documents

This Planning Statement describes the development for which planning permission is sought and assesses the proposed development against the relevant planning policies contained in the development plan and has regard to other relevant material considerations.

1.2 Report Structure

This Planning Statement is structured as follows:

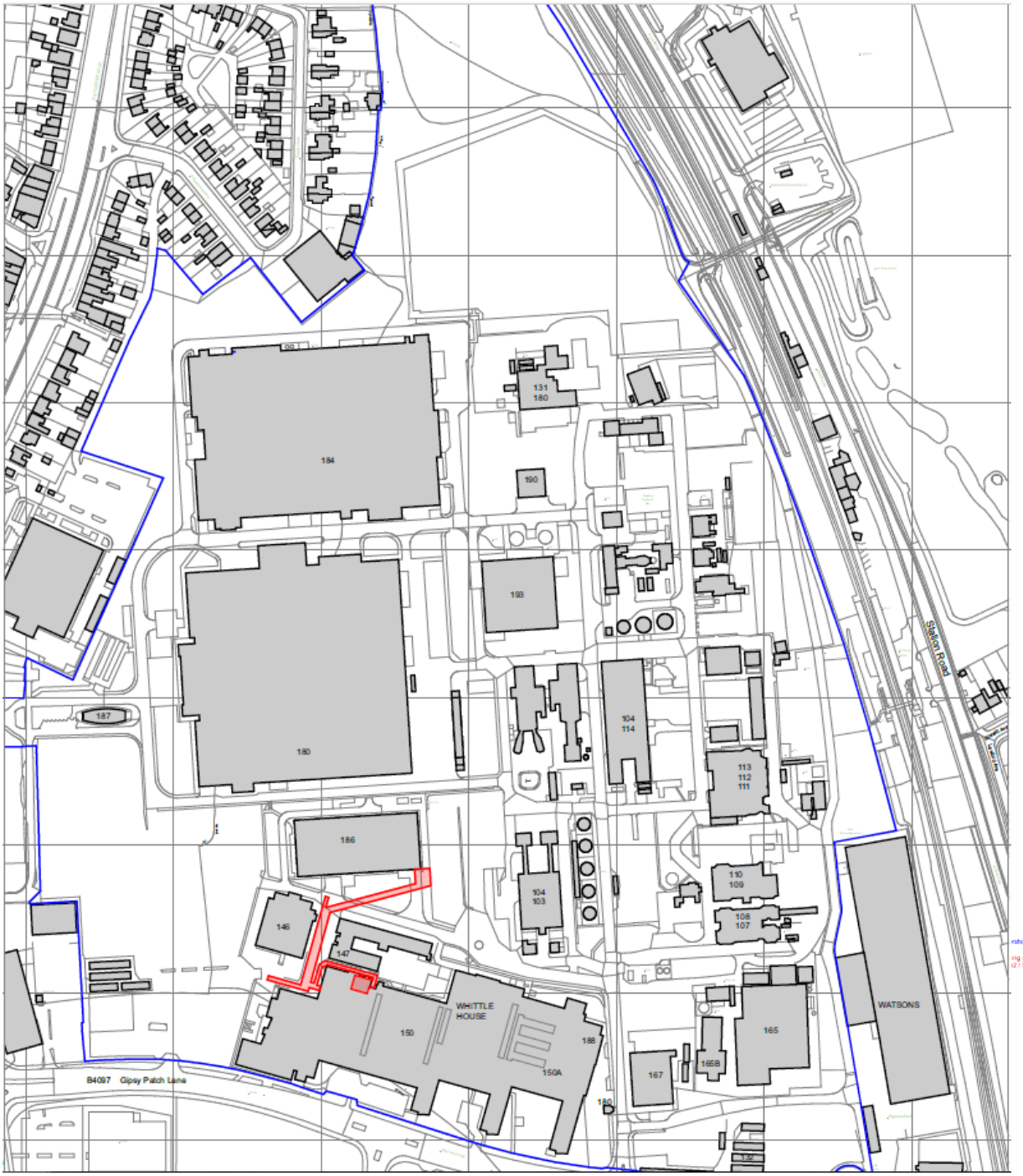
- **Section 2** describes the site and its surroundings;
- **Section 3** summarises the proposed development;
- **Section 4** sets out relevant planning policies;
- **Section 5** sets out the principle of the development, how this is supported by current policy and outlines the impact of the development; and
- **Section 6** provides a summary and conclusions.

2. Site and Surroundings

2.1 Location

The Rolls-Royce Filton site is situated north of Bristol on the east side of the A38 between Filton and Almondsbury, two miles south of M5 junction 16. Located to the east of the site is the Patchway railway station, Little Stoke Park and the residential area of Little Stoke, with the temporarily vacant East Works site to the south. To the west of the site is the Cribbs/Patchway new neighbourhood outlined in Policy CS26 of the South Gloucestershire Core Strategy, and an area allocated under Local Plan policy PSP47 as a 'Major Mixed-Use Development Proposals at Northfield, Filton Aerodrome, Patchway' that includes a Royal Mail depot and Aerospace Bristol.

Figure 1: Site location with proposed development area outlined in red (Extract from drawing 00200, Site Location Plan)



2.2 Site Description

The application relates to Whittle House, located to the southern end of the Rolls-Royce Filton Campus on Gipsy Patch Lane.

The site sits within an industrial context, with operational industrial buildings 146, 147, 180, 167 and 103 located nearby. There are residential properties over the railway in Little Stoke to the east and to the northwest of the wider site.

Table 1 below includes recent applications for the Rolls Royce Filton site.

Table 1. Planning History

Application number	Description	Status
P20/17296/F	Installation of 5no. Air Handling Units and associated ductwork at roof level.	Approved November 2020
P20/16918/F	Installation of external plant to Building 165, together with new boreholes and underground pipework associated with the extension of the existing ground source heating system	Approved November 2020
P20/12284/F	Installation of 1no. external cooler and associated equipment to the north side of Building 185.	Approved August 2020
P20/08689/F	Erection of 5 year temporary storage building.	Approved May 2020
P20/05083/F	Installation of 2 no. temporary freezer containers for a period of 6 months to the east of Building 116.	Approved April 2020
P20/00354/F	Installations to building 184 comprising oil and chemical stores to the eastern elevation, a stand-by generator and 3m external acoustic screening to the northern elevation, and a replacement prep clean Local Exhaust Ventilation (LEV) to the southern elevation.	Approved February 2020
P19/11043/F	Erection of 5 no. 6m high lighting columns and 2.2m high paladin fencing to enclose an ancillary storage area to the east of building 185. Erection of 2.2m high paladin fencing to enclose an ancillary storage area to the east of building 121A.	Approved October 2019
P19/10505/F	Installation of 1 No. scrubber, Local exhaust ventilation system and steel gantry structure to the Northern elevation.	Approved September 2019
P19/10006/F	Installation of 2 No. chiller units and 1 No. GRP enclosure to the eastern elevation.	Approved September 2019
P19/6438/F	Installation of 1 no. heating system to the northern elevation.	Approved August 2019
P19/6730/F	Installation of 1 No. self-contained external Loadbank and associated plant.	Approved August 2019
P19/0562/F	Installation of an external Air Handling Unit (retrospective) and external fume extraction stack.	Approved May 2019
P19/1650/F	Extensions and alterations to building 184 comprising an extension to existing wax cell, erection of new pumphouse and substation building (retrospective), and the installation of pedestrian door and roller shutter opening.	Approved April 2019
PK18/5235/F	Erection of a building to house Coolant Farm	Approved January 2019

Application number	Description	Status
PT18/4907/F	Installation of oxygen storage tank and chiller with associated works.	Approved December 2018
PT18/4852/F	Installation of a switchgear sub-station and load bank and associated works.	Approved December 2018
PT18/4532/F	Erection of a switch room and associated works.	Approved November 2018
PT18/1847/F	Installation of Emergency Generator	Approved April 2018
PT18/0585/F	Creation of renewable energy heating plant with associated alterations to Buildings 105, 137, 140, and 141, which comprise the installation of a ground source heat pump, three air handling units, a packaged plantroom, and gantry and pipework. Installation of solar thermal matting (retrospective)	Approved April 2018
PT17/4089/F	Erection of single storey switch room	Approved October 2017
PT17/3827/F	Erection of extensions and alterations to existing industrial building (Class B2) to form external scrubber, substation and pumphouse	Approved October 2017
PT05/0351/F	Erection of new aerospace assembly facility with ancillary offices and new conference centre. Erection of extensions to Whittle House and central amenity building. Erection of waste management, surface water treatment, and trade effluent facilities with associated parking, access and landscaping.	Approved August 2005

3. Proposed Development

3.1 Overview

This application proposes the installation of three new condenser units (of which no more than two will operate simultaneously), one extractor fan and a roof mounted air intake Air Handling Unit (AHU) on the roof of the Whittle Building. The works will also require groundworks (the digging of three 900m deep trenches) to lay power and data cable ducts.

The proposed works will support the installation of a new server room within the building allowing for increased server capacity within the building which will better allow Rolls Royce to undertake their work on this site.

The proposed condenser units, extractor fan and AHU will be located on the roof of the Whittle building, while the power and data cable trenches will provide wider connections. There are existing rooftop installations on the roof of the Whittle Building and existing maintenance access to the roof is provided on the western side of the building.

In terms of materials for the proposed works, all general ventilation ductwork will be manufactured from galvanised sheet metal and all supply and return air ductwork will be thermally insulated and externally protected with heavy duty smooth silver aluminium venture clad. Flexible connections will be incorporated in the ductwork system to isolate the ductwork from vibration producing equipment, and ensure they are thermally insulated. Ductwork and heat recovery air handling units will be supported on 'bigfoot' roof support systems as per the manufacturers detail and turning vanes will be installed on all square and rectangular ductwork sections at every change in direction.

Details of the proposed works are shown in **Figures 2 and 3** below.

Figure 2 – Proposed groundworks and location of condenser units, and air supply ventilation unit

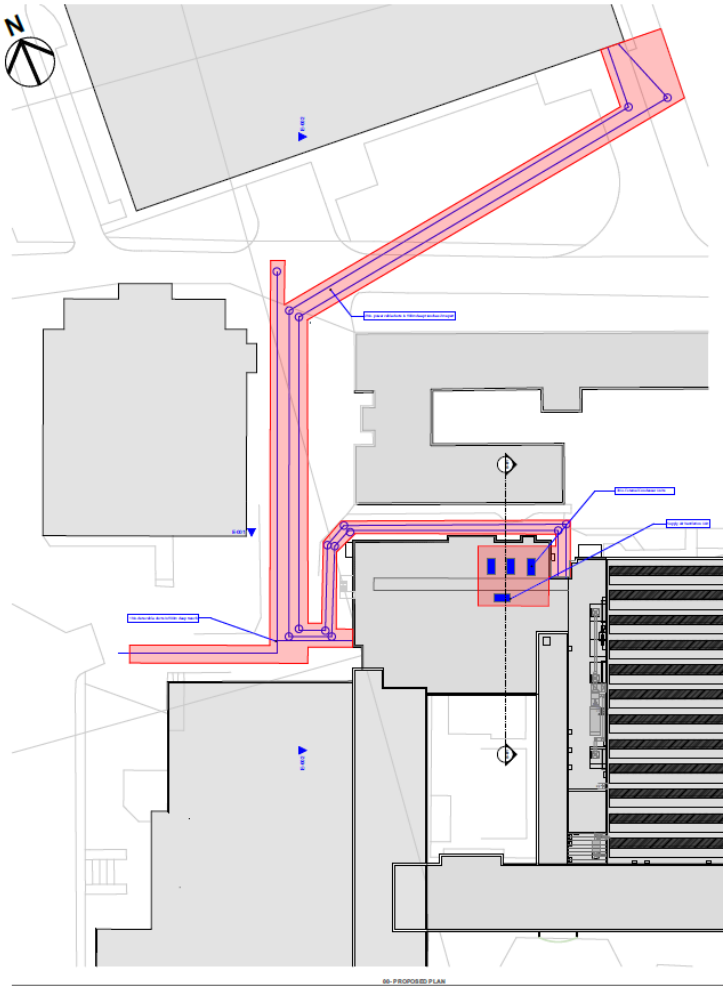
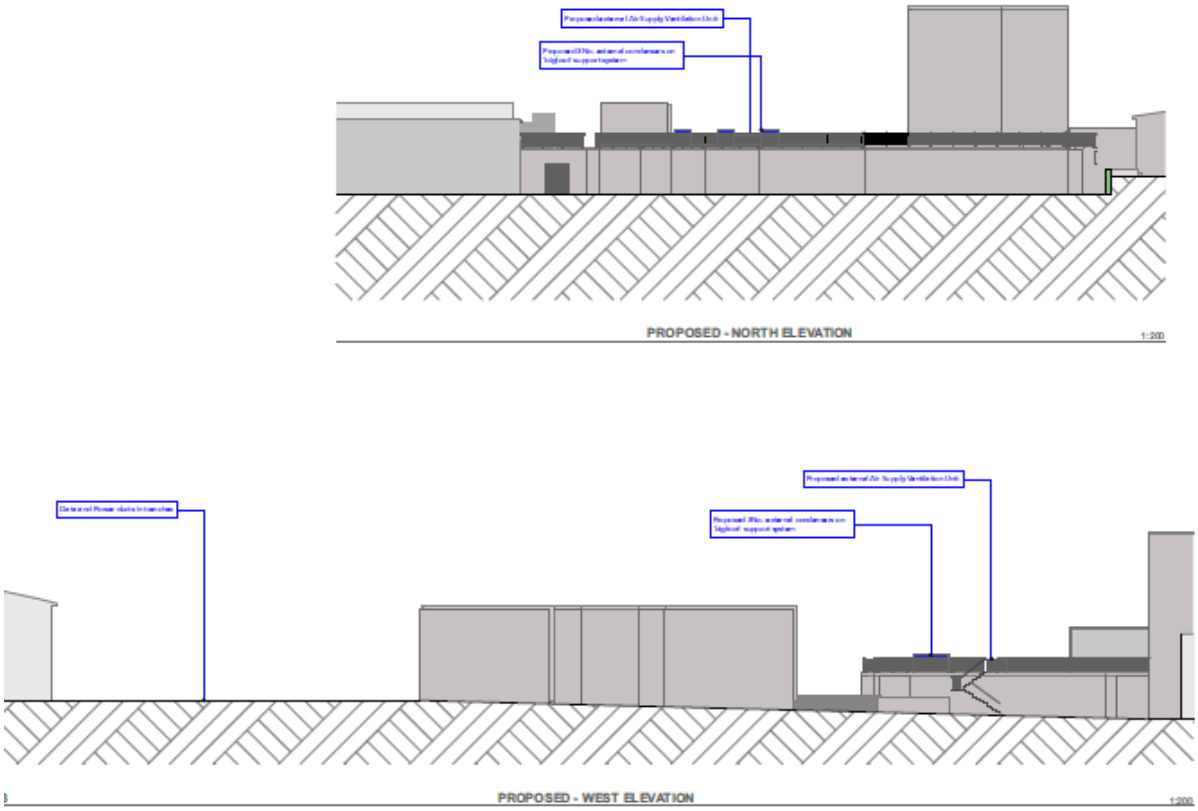


Figure 3 – Proposed Elevations



3.2 Planning Drawings

Further details of the proposed development are provided on the planning drawings as set out in **Table 2** below.

Table 2: Application Drawing Schedule

Ref.	Title
BPA-MAB-00-00-DR-A-00200	Site Location Plan
BPA-MAB-00-00-DR-A-00201	Existing Plan & Elevations
BPA-MAB-00-00-DR-A-00202	Proposed Plan & Elevations

4. Planning Policy Context

4.1 Statutory Development plan

The Policies Sites and Places Plan (PSP Plan)[1] was adopted on 8 November 2017 and forms part of the South Gloucestershire Development Plan. The PSP Plan contains detailed planning policies to manage new development, allocate and safeguard sites for various types of development and is to be read alongside the Core Strategy (adopted December 2013)[2]; replacing the "saved" policies of the 2006 Local Plan.

Policies, Sites and Places Plan (2017)

Policy PSP8 – Residential Amenity accepts development that does not create unacceptable living conditions or have an unacceptable impact (i.e. noise or disturbance) on the residential amenity of occupiers of the development or of nearby properties.

Policy PSP26 – Enterprise Areas identified Filton as an Enterprise Area (as viewed in Error! Reference source not found.) where development is acceptable where it:

1) Safeguards future economic prosperity;

2) Provides for integrated development while avoiding conflicts between neighbouring land-uses;

3) Makes appropriate provision towards the sustainability of sites, the wider Enterprise Area and surrounding communities.

South Gloucester Core Strategy Document (2013)

Policy CS1 of the Core Strategy states that development will only be permitted where the highest possible standards of design and site planning are achieved. Information submitted with an application should be proportionate to the scale, significance and impact of the proposal. Development proposals will also be required to demonstrate that siting, form, scale, height, massing, detailing, colour and materials, are informed by, respect and enhance the character, distinctiveness and amenity of both the site and its context.

Policy CS12 states that '*Land identified in Table 1 will be safeguarded for economic development. Proposals for change from B Use Classes to other economic development uses, including town centre uses, or to non-employment uses, will need to demonstrate that:*

1. *the proposal would not prejudice the regeneration and retention of B Use Classes elsewhere within the defined employment area; and*
2. *it can be clearly demonstrated that it would contribute to a more sustainable pattern of development in the local area as a consequence of the appropriateness of the proposed use to the location; and*
3. *the proposal would improve the number or range of jobs available in the local area; and*
4. *no suitable alternative provision for the proposal has been made elsewhere in the Local Development Framework.'*

This land as it relates to the site is shown below in yellow in **Figure 6.**

[1] South Gloucestershire Local Plan. Policies, Sites and Places Plan, Adopted November 2017. Available at: http://www.southglos.gov.uk//documents/PSP-Plan-Interim-Web-Version.pdf
[2] South Gloucestershire Local Plan Core Strategy 2006 – 2027 http://www.southglos.gov.uk/documents/cleanversionforinterimpublication2.pdf

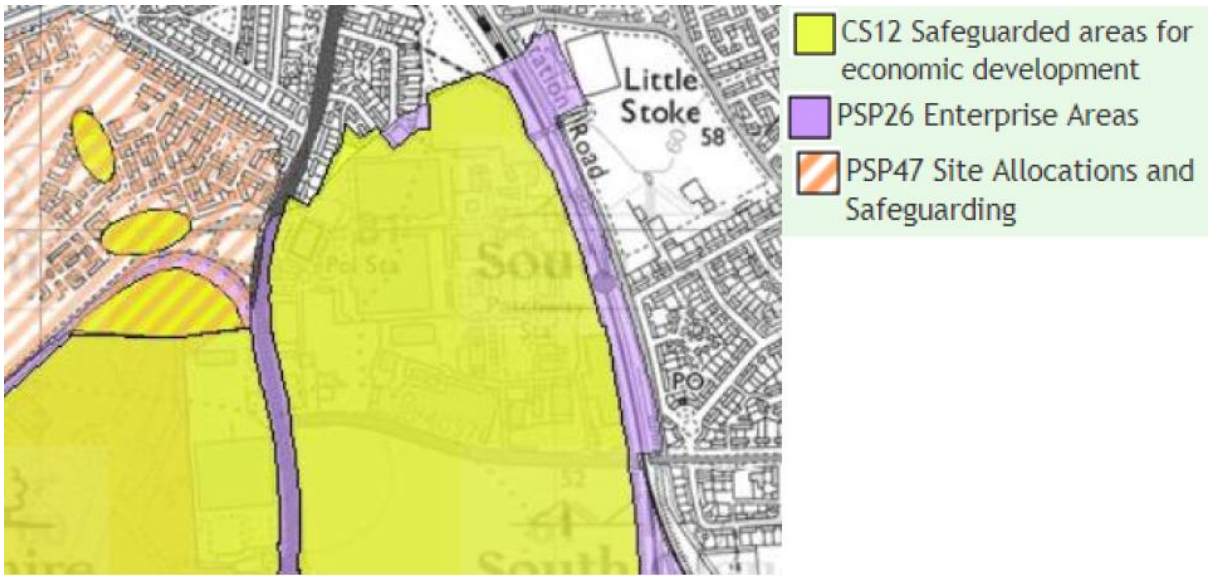


Figure 6: Extract taken from the South Gloucestershire Interactive Policy Map

Policy CS25 outlines future development proposals and vision for the **'**Communities of the North Fringe of Bristol Urban Area'. As part of this, the policy states that South Gloucestershire will support the redevelopment of the Rolls Royce East Site for new employment uses and the provision of additional small-scale employment opportunities that enhance the variety and integration of uses in new residential neighbourhoods or existing centres.

4.2 Other Material Considerations

National Planning Policy Framework (February 2019)

The publication of the revised NPPF updated in February 2019 reiterates national policies presumption in favour of sustainable development. The introduction section of the document sets out the following:

'Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive way:

- *an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and 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 a well-designed and safe built environment, 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 contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'*

Paragraph 11 sets out a presumption in favour of sustainable development, stipulating that for decision-taking this means:

'approving development proposals that accord with an up-to-date development plan without delay.'

With regard to 'Building a strong, competitive economy', paragraph 80 states that:

'Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into both local business needs and wider opportunities for development. The

approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential'.

Paragraph 124 describes how the creation of high quality buildings and places is fundamental to what the planning and development process should achieve, stating:

'Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.'

Paragraph 170 seeks that planning policies and decisions should contribute to and enhance the natural and local environment by:

'preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.'

Paragraph 180 further states that planning policies and decisions should also ensure that new development should:

'mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life.'

Emerging South Gloucestershire Local Plan 2020

South Gloucestershire Council are currently progressing a new Local Plan which will guide and manage growth and change in their administrative area over the next 15 years. NPPF paragraph 48 sets out that local planning authorities may give weight to relevant policies in emerging plans according the stage of preparation of the emerging plan, the extent to which there are unresolved objections to relevant policies, and the degree of consistency of the relevant policies in the emerging plan to the NPPF.

The plan is at an early stage and contains high-level proposed strategic and non-strategic policies which are not yet fully drafted. However, it sets out draft policies related to:

- **Energy Management in New Development** which will address the emissions from the operational phase of a building/development, in terms of heat and power seeking to ensure that new development (residential and non-residential) is built to high energy efficiency standards, uses renewable heating and cooling systems, and incorporates renewable energy generation and **Sustainable Design and Construction** (not yet drafted).
- It also intends to retain policy **PSP8 Residential Amenity** in the adopted plan (listed in planning policy section above) and to include a new policy **Employment Land, Locational Criteria policy** which will incorporate elements of relevant adopted policies including **PSP26 Enterprise Areas**, **CS12 Safeguarded areas for economic development** and **CS13 Non-safeguarded economic development sites** (listed in planning policy section above).

5. Planning Assessment

5.1 Principle of Development

Policy CS12 states that the context within which this site sits is safeguarded for economic development, with development proposals clearly demonstrating a contribution to a more sustainable pattern of economic development for the wider site. The development proposals are encouraged by Policy PSP6, which supports development that safeguards future economic prosperity of the site. The development proposals comply with Policy CS3 and do not cause significant demonstrable harm to residential amenity.

Policy PSP26 identifies the Filton area that contains the site as an Enterprise Area to be safeguarded for future economic prosperity where development is acceptable where it makes appropriate provision towards the sustainability of sites.

The proposed works will support the installation of a new server room within the building allowing for increased server capacity within the building which will better allow Rolls Royce to undertake their work on this site and improve the performance of the building.

As a result, the proposed development is considered to be acceptable in principle subject to matters of design, appearance, and access which are addressed below.

5.2 Design and Appearance

It is proposed that all general ventilation ductwork will be manufactured from galvanised sheet metal and all supply and return air ductwork will be thermally insulated and externally protected with heavy duty smooth silver aluminium venture clad. Flexible connections will be incorporated in the ductwork system to isolate the ductwork from vibration producing equipment, and ensure they are thermally insulated. Ductwork and heat recovery air handling units will be supported on 'bigfoot' roof support systems as per the manufacturers detail and turning vanes will be installed on all square and rectangular ductwork sections at every change in direction.

The proposed works are to be installed within an existing industrial site with a large complement of existing operation fixed plant. The proposed works are minimal and will not exceed in height existing installations on the roof of Whittle Building. As a result, they will not be visually intrusive, and it is considered that they will not appear out of character with the existing roofscape of the building.

The proposed development is consistent with the Core Strategy Policy CS1 which outlines that information submitted with an application should demonstrate that siting, form, scale, height, massing, detailing, colour and materials, are informed by, respect and enhance the character, distinctiveness and amenity of both the site and its context. As a result, the proposed development within this application is consistent with both the existing buildings and the industrial landscape within which it sits.

5.3 Access

Existing maintenance access to the rooftop is available on the western side of the building. Other than periodic maintenance access, the proposed installations would not generate any further access requirements.

5.4 Noise

A Sound Impact Assessment prepared by AECOM is submitted in support of this application. The assessment identifies cumulative sound predictions using baseline data and predicted sound levels from the proposed units for both day and night operation.

The plant may operate at any time of day or night, although it is likely to operate at a lower load (and hence sound level) during the night-time when ambient temperatures are lower. Hence, as a worst case, the assessment covers both the daytime and night-time period, and is based on the expected sound emission levels at full load.

The new items of plant are to be installed within an existing industrial site with a large complement of existing operational fixed plant, and where the residual acoustic environment at surrounding sensitive receptors is at a higher level than that predicted for the new plant.

The rating levels at the receptors for the cumulative assessment are predicted to be at or below the background sound level during the day and night-time and therefore the requirements of SGC are met.

6. Summary

This Planning, Design and Access Statement demonstrates the acceptability of the proposed development in planning terms and highlights the design and access considerations.

The roof mounted condenser units, extractor fan and AHU are necessary to support the new server room in Whittle Building which will in turn support the processes being undertaken at Whittle House and at the wider Rolls-Royce Filton Campus. As small but important additions to the wider Rolls-Royce Filton site, the server room and associated items within this planning application will deliver economic benefits and contribute to the enhancement of operations at the site and is supported in principle.

It has been demonstrated that the design of proposed development is appropriate to its industrial context and would not have any significant adverse impacts on nearby occupiers. As such, the planning application is compliant with relevant development plan policy and national planning policy and should be approved accordingly.