

LONDON STANSTED AIRPORT

Stansted Transformation Programme (STN-TP)

Terminal Extension

Sustainability Statement (July 2023)

Issue and Revision Record

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Contents

Issue and Revision Record	ii
Contents	iii
1.0 Headline Statement	4
2.0 Introduction	5
3.0 Review of Relevant Sustainability Policy and Guidance	8
4.0 Specific Sustainability Regulations and Proposed Response	12
5.0 Conclusion	16
Appendix A	17
Appendix B	25

1.0 Headline Statement

Stansted Airport Limited (STAL) has submitted a planning application for an extension to its existing passenger terminal together with supporting infrastructure including new skylink walkways, a domestic reclaim building and plant enclosure.

The proposals are targeting a BREEAM Excellent rating which supports the transition, as a whole, of Stansted Airport towards a net zero airport in operation by 2038, in accordance with MAG's current Corporate Social Responsibility (CSR) Strategy. STAL is wholly owned by MAG.

To support this aspiration, STAL will deliver an extension to the existing terminal which will be net zero in operation in relation to the airport company's scope 1 and 2 emissions, defined by the World Resources Institute Greenhouse Gas Protocol. The extension will meet key performance indicators that consider BREEAM standards and address guidance, or policy set out in the LETI Climate Design Guide¹, the Uttlesford Local Plan and supplementary guidance and the Essex Design Guide – Net-Zero Carbon Viability and Toolkit Study². The extension will also facilitate an improvement in the overall energy efficiency of the existing terminal infrastructure over time.

¹ LETI (2020), *Climate Design Guide*, available at [REDACTED] Last accessed July 2023)

² Essex Climate Action Commission (2022), *Net-Zero Carbon Viability and Toolkit Study*, available at [REDACTED] (last accessed July 2023)

2.0 Introduction

2.1 Document Overview

This document (herein referred to as ‘the Statement’) presents the proposed sustainability performance of the Stansted Airport Transformation Programme’s (STN-TP) terminal extension project. It has been prepared to support the planning application for the terminal extension and its associated works (new skylinks, baggage handling building, and plant enclosure).

The application has been submitted by Stansted Airport Limited (STAL), a company wholly owned by MAG. In this Statement, all references to MAG equally apply to STAL.

Delivering sustainable new airport terminal building facilities and infrastructure in the development of a terminal extension at Stansted Airport is key to delivering MAG’s Corporate Social Responsibilities (CSR). This Sustainability Statement demonstrates MAG’s commitment to meeting Government and local targets and following best practice to ensure STN-TP will be a successful and sustainable project.

MAG is committed to a sustainable airport, targeting a BREEAM Excellent terminal extension which contributes to the wider transition to a net zero airport-wide operation by 2038.

To support this aspiration, STAL will deliver an extension to the existing terminal which will be net zero in operation by 2038 in relation to the airport company’s scope 1 and 2 emissions, defined by the World Resources Institute Greenhouse Gas Protocol. The extension will meet key performance indicators that consider BREEAM standards and address guidance, or policy set out in the LETI Climate Design Guide³, the Uttlesford Local Plan and supplementary guidance and the Essex Design Guide – Net Zero Carbon Viability and Toolkit Study⁴. The

³ LETI (2020), *LETI Climate Emergency Design Guide*, available at: [REDACTED] (Last accessed July 2023)

extension will also facilitate an improvement in the overall energy efficiency of the existing terminal infrastructure over time.

2.2 Defining Sustainability

Achieving sustainable growth is a fundamental challenge for all organisations, in all sectors, ensuring the current demand for both natural and human resources is managed in a way which does not hinder future generations to meet their needs.

Climate change policy in the UK is built on the 2015 Paris Agreement, which has been incorporated into law through the 2008 (amended 2021) Climate Change Act, requiring the UK to achieve net zero emissions by 2050.

Building on this policy, the UK government’s ‘Jet Zero’ strategy (2022) lays out the roadmap for decarbonisation in the aviation sector. The document outlines an aspiration for a zero-carbon airport in operation target by 2040.

MAG’s net zero airport in operation by 2038 target is a strong statement of intent to deliver on this potential commitment ahead of the Government’s 2040 milestone and will ensure MAG maintains its social license to operate in a market which increasingly monitors and aims to reduce the environmental impacts of air travel. Alongside this environmental focus, the project also has to be delivered in a way which supports business, driving economic growth and benefiting the local community as outlined in the MAG Corporate Social Responsibility (CSR) Strategy.

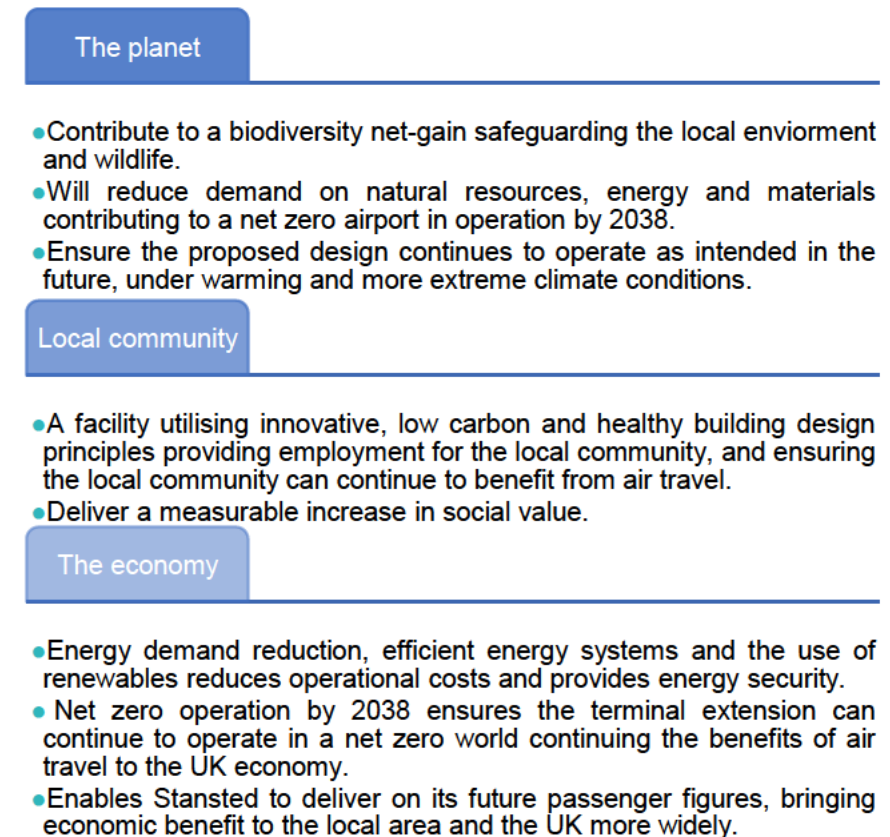
To ensure MAG can deliver on its wider net zero target and CSR objectives the project must be delivered in a sustainable manner; this requires a clear definition of sustainability which captures the nuance of an airport context, encourages design decisions which bring about the most optimal outcome for society and enables the project to help uplift existing infrastructure in the future to meet shifting sustainability targets. Sustainability is not an end state which can be achieved but is instead a series of robust processes and values which create a desired outcome, in this case the aforementioned CSR objectives and net zero target.

⁴ Essex Climate Action Commission (2022), *Net Zero Carbon Viability And Toolkit Study*, available at: [REDACTED] (last accessed July 2023)

For this project, sustainability is defined as making decisions which prioritise the long-term impact of the scheme on the **planet**, the **local community**, and the **economy**, ensuring future generations can benefit from the economic and social benefits of air travel, in a **net zero** society and the proposed design continues to operate as intended under more extreme climate conditions considering factors described in the MAG Climate Change Adaptation Progress Report⁵.

To deliver on this ambition, the project will work towards Key Performance Indicators (KPIs) which are comprehensive, challenging and ambitious, ensuring the delivery of the extension achieves an optimal outcome in the key sustainability areas (full details of these KPIs are provided in section 4.1).

Figure 2.1 Defining sustainability for this project.



⁵ Manchester Airport Group (2021), *Climate Change Adaptation Progress Report 2021*, available at: [REDACTED] (Last accessed July 2023)

2.3 National strategies and Frameworks

National strategies and frameworks are constantly evolving in relation to the setting of sustainability standards for the UK and are being driven and directed from an international scale to a local scale. This Statement therefore outlines those policies that are relevant to developments in Uttlesford, and the county of Essex. It also provides detail on how the project is responding to these policies.

In addition, this document has been prepared in the context of corporate policy to ensure the project's performance aligns with:

- MAG's commitment to have a net zero airport in operation by 2038, ahead of the Government's 2040 zero carbon airport in operation target
- MAG's Climate Change Adaptation Progress Report 2021
- MAG's Corporate Social Responsibility Strategy 2020-25

This has been done to ensure that the business is recognised as a responsible operator by investors and other stakeholders.

The structure of this document is as follows:

- Section 3.0 provides an outline of the relevant policy and guidance relating to sustainability
- Section 4.0 introduces the project KPIs and how they align to national, local and county policy and guidance, serving as a summary of how the project is responding to meet these requirements

The scope of the application and this Statement covers the terminal extension and associated infrastructure's impacts only. It does not include the existing passenger terminal or aircraft movements. The table below fully outlines the scope of this Statement.

Table 1 Summary of Statement scope

Included services (in scope)	Excluded services (out of scope)
<ul style="list-style-type: none"> • Services within the application site including but not limited to: 	<ul style="list-style-type: none"> • Activities beyond the boundary of the application site including but not limited to:

Included services (in scope)	Excluded services (out of scope)
<ul style="list-style-type: none"> – Retail and property accommodation – All lighting – Baggage system including X-Rays – Building services – Lifts and escalators – IT comms room – Drainage 	<ul style="list-style-type: none"> – Rail station – Track Transit System (TTS) – Airfield Systems i.e., Fixed Electrical Ground Power (FEGP), Airfield Ground Lighting (AGL), Docking Systems and Airbridges – Aircraft piers/satellites – Existing terminal facilities adjacent to the extension – Roads – Car parks – Aircraft movements

Whilst an underlying pillar of the project's sustainability strategy is to target BREEAM Excellent, the strategy aligns to MAG's aspiration to go beyond BREEAM requirements in two ways. Firstly, it is important that BREEAM is not used as a 'tick box exercise' or as a strategic approach to attaining the certification in the easiest manner. Instead, credits will be targeted based on those considered most relevant to MAG's approach to Corporate Social Responsibility (CSR) and those that offer best value to the project. Secondly, it is acknowledged that the requirements of BREEAM Excellent alone are not sufficient in some areas to achieve MAG's CSR objectives. These areas include embodied and whole life carbon, net zero in operation and social value. Therefore, the project's response goes beyond BREEAM indicators where required, again with a focus on adding value to the project.

Note, the reports summarised within this report do not constitute the entire planning submission. There are other standalone reports that are being submitted as part of the planning application that are not summarised within the sustainability statement.

3.0 Review of Relevant Sustainability Policy and Guidance

3.1 Overview

This section summarises the most relevant overarching national, regional, and local sustainability policy and guidance for the proposed terminal extension and associated infrastructure. For simplicity, the full details of these policies are not included, but instead summaries of the relevant requirements are provided. This project’s specific responses to policy can be found in Section 4.0.

3.2 UN Sustainable Development Goals

The United Nations Sustainable Development Goals are key tools for ensuring all aspects of sustainability are considered in the programme. The 17 goals and targets came into effect in 2016 with the aim of guiding policy for the next 15 years until their completion in 2030. The SDGs focus on five key branches: people, planet, prosperity, peace, and partnership, each with an equal importance⁶.

Figure 3.1 UN SDGs focused on in this report.



⁶ United Nations General Assembly (2015), *Transforming our world: the 2030 Agenda for Sustainable Development*, available at [redacted] (Last accessed May 2023)

⁷ Ministry of Housing, Communities and Local Government (2021), *National Planning Policy Framework*, available at [redacted]

The programme will align with these goals to ensure it contributes to the global sustainability agenda, with particular focus on Sustainable Development Goals 9, 11 and 13.

3.3 National Policy

3.3.1 National Planning Policy Framework⁷ (NPPF)

The NPPF sets out the Government’s planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. The NPPF outlines a range of policies that influence good health and health inequalities, including building a strong competitive economy, sustainable transport, a wide choice of high-quality homes, mitigating impacts such as noise from new development, ensuring safe and healthy living conditions, achieving well-designed places, and conserving and enhancing the natural and historic environments.

At the heart of the guidance is the presumption in favour of sustainable development (Paragraphs 10 and 11). This commitment to sustainable development should be achieved through three mutually supportive overarching objectives: an economic objective, a social objective, and an environmental objective.

Of significant relevance to the application proposals is Section 14: Meeting the challenge of climate change, flooding, and coastal change, particularly the following paragraphs.

- Paragraph 152: “*The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.*”

[redacted] (last accessed July 2023)

- Paragraph 157: “In determining planning applications, local planning authorities should expect new development to: a) comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and b) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.”

Note: The NPPF does not specify a minimum standard (such as BREEAM) that should be achieved for new commercial buildings or specifically airport development.

3.3.2 Jet Zero Strategy

The ‘Jet Zero’ strategy⁸ has been developed by the Government to clarify aviation related climate goals. Released post-COVID19 whilst the aviation industry was recovering, this strategy includes a roadmap for achieving net zero carbon in the sector by 2050. It will be revised every 5 years to ensure its continuing viability.

Zero Carbon Airport Operations by 2040

Building on the full trajectory, a secondary goal from Government under consultation is for all airport operations to be zero emissions by 2040. While this has not yet been set into national or local planning policy, it is an important consideration for this project as it may be adopted at a later date.

Notwithstanding this target, the Government is yet to provide clarity on:

- What constitutes ‘zero’ emissions in this case
- The scope of activities which the target will be applied to

⁸ Department for Transport (2022), *Jet Zero Strategy*, available at [redacted] (last accessed July 2023)

⁹ Uttlesford District Council (2007), *SPD- Energy Efficiency and Renewable Energy Adopted October 2007*, available at [redacted]

Net Zero Domestic Aviation 2040

This target is reliant on the development of low carbon air travel; therefore, it is vital that this programme is designed to accommodate emerging technologies as they reach commercial maturity.

3.4 Local Policies

3.4.1 Uttlesford Local Plan

The Uttlesford Local Plan⁹ was published in 2007, and despite its age it remains the adopted plan. It therefore includes the following Planning Policies that are relevant to:

Local Plan Policy 1 GEN2 – Design

Development will not be permitted unless its design meets all the following criteria and has regard to adopted Supplementary Design Guidance and Supplementary Planning Documents.

- It is compatible with the scale, form, layout, appearance, and materials of surrounding buildings
- It safeguards important environmental features in its setting, enabling their retention and helping to reduce the visual impact of new buildings or structures where appropriate
- It provides an environment, which meets the reasonable needs of all potential users
- It helps to reduce the potential for crime
- It helps to minimise water and energy consumption
- It has regard to guidance on layout and design adopted as supplementary planning guidance to the development plan
- It helps to reduce waste production and encourages recycling and reuse
- It minimises the environmental impact on neighbouring properties by appropriate mitigating measures.

[redacted] (last accessed July 2023)

- It would not have a materially adverse effect on the reasonable occupation and enjoyment of a residential or other sensitive property, as a result of loss of privacy, loss of daylight, overbearing impact or overshadowing

Note: The adopted Local Plan does not set out a minimum sustainability standard (such as a BREEAM standard) that commercial development or specifically Stansted Airport should achieve.

Uttlesford Council Supplementary Planning Document - Energy Efficiency and Renewable Development.

Adopted in 2007, this states that the Council will encourage developers to provide at least 10% of the predicted energy requirements for the development from on-site renewables or low carbon energy sources in all developments larger than 1,000m² or five homes.

Uttlesford District Council Interim Climate Change Planning Policy¹⁰

To bridge the gap between the adopted 2005 Uttlesford Local Plan and a new Local Plan being prepared (expected later in 2023), the Uttlesford District Council Interim Climate Change Planning Policy was published in 2021. The document was not subject to consultation prior to publication and does not form part of the statutory development plan and hence carries limited weight in decision making. It outlines interim 'policy criteria; that are based on other established policies, guidance, and good practice – these are set out in full later on in this Statement. Like the adopted Local Plan, the Interim Policy does not set out an overall minimum sustainability standard for commercial development or specifically Stansted Airport to achieve.

¹⁰ Uttlesford District Council (2021), *Uttlesford District Council Interim Climate Change Planning Policy*, available at [REDACTED]

[REDACTED] (last accessed July 2023)

¹¹ Essex Planning Officers Association (2022), *The Essex Design Guide, Climate Change*, available at [REDACTED] (last accessed July 2023)

3.5 Essex County Guidance

3.5.1 Essex Design Guide¹¹

Renewable Energy for Developments¹²

This guide recommends the use of the London Energy Transformation Initiative (LETI) Climate Emergency Design Guide for energy targets as well as the energy hierarchy, highlighting the importance of efficient heating of buildings and conflict management between elements such as daylight and overheating, referring to CIBSE guidance Technical Memoranda 59 (TM59) Design Methodology for the Assessment of Overheating Risk (2017).

Solar Orientation¹³

The Essex Guide on Solar orientation is primarily for housing, but some principles are still applicable to the terminal extension project, including that “A building’s form, orientation and window proportions are all aspects that do not add extra construction cost, but if optimised within the design can significantly improve the building’s efficiency”. Supporting the conflict management mentioned in the renewable design section, the guide highlights the risk of overheating particularly as part of a building’s climate resilience, providing best practice advice to reduce this effect.

3.6 Other Relevant Documents

3.6.1 Part L Building Regulations 2021

Part L 2021 is interim policy prior to the Future Building Standard that is expected to be implemented in 2025. These are Government regulations on the conservation of fuel and power, which includes non-domestic Buildings.

3.6.2 WELL Building Standard

¹² Essex Planning Officers Association (2022), *The Essex Design Guide, Renewable Energy for Developments*, available at [REDACTED]

[REDACTED] (last accessed July 2023)

¹³ Essex Planning Officers Association (2022), *The Essex Design Guide, Solar Orientation*, available at [REDACTED]

[REDACTED] (last accessed July 2023)

The WELL Building Standard is a performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort, and mind.

3.6.3 London Energy Transformation Initiative (LETI)

LETI is a self-governing network of built environment professionals from across the industry, voluntarily working together to drive the industry regarding action on climate change. The group have produced a series of documents that provide best practice guidance authored by industry leaders on low carbon energy and buildings that has been broadly consulted on by the Built Environment Sector. These documents are targeted more specifically at residential and commercial properties, however, where applicable the best practice guidance on energy and carbon targets will be followed as well as components of best practice performance to achieve the sustainable outcomes for the terminal extension.

3.7 Conclusion

Whilst there are no minimum sustainability standards in either national planning policy or in the adopted Local Plan, the terminal extension has taken into account a range of policy and guidance in developing a bespoke sustainability strategy for the policy.

The following key conclusions are drawn:

- The terminal extension will comply with the 2021 update to Part L that came into force in June 2022.
- The terminal extension is not seeking to achieve full certification but will adopt the principles included in the WELL Building Standard that are relevant and apply to the scope of this project, which include the guidance on Volatile Organic Compounds (VOCs), monitoring and control of CO₂ levels internally and quality of indoor spaces to improve passenger's connectivity with nature and greenery indoors.

4.0 Specific Sustainability Regulations and Proposed Response

4.1 Key Performance Indicators

In the absence of a minimum sustainability standard set out in national or local planning policy for a project such as the application proposals, Key Performance Indicators (KPIs) have been developed for the terminal extension to monitor the performance of the design and construction processes to ensure the project delivers MAG's commitments through the project lifecycle. These KPIs have been broken down into the following areas of focus.

Figure 4.1 Project Sustainability Areas of Focus



4.2 Building Research Establishment Environmental Assessment Method (BREEAM)

Targeting BREEAM Excellent is a core requirement of MAG's CSR strategy as this ensures the development of a terminal extension that optimises whole life carbon, and therefore this forms the basis of the sustainability approach for the application proposals. Where the unique nature of some airport buildings makes BREEAM excellent unachievable, the minimum standard will be 'Very Good'.

BREEAM is a well understood, externally verified sustainability accreditation system which is commonly used in the planning system as a way of holistically assessing the sustainability credentials of newly constructed building developments. It is the leading benchmarking system for buildings in the UK and allows comparison with similar projects with national and international recognition.

Our approach is to use the BREEAM certification system as a baseline where there is direct alignment with MAG's CSR commitments, enhanced by specific additional requirements in places where BREEAM considers the correct elements but requires less than MAG's aspirations, and finally to propose elements which go beyond BREEAM where necessary to meet MAG's objectives.

Figure 4.2 BREEAM Approach



4.3 Project Response to Uttlesford District Council Interim Climate Change Planning Policy

This section will set out how the project responds to Uttlesford District Council's (UDC) Interim Climate Change Planning Policy¹⁴.

Interim Policy 1

Developers should demonstrate the path that their proposals take towards achieving net zero carbon by 2030, and all the way their proposals are working towards this in response to planning law, and also to the guidance set out in the NPPF and Planning Policy Guidance. This should include: i) locating the development where the associated climate change impacts and carbon emissions, including those derived from transport associated with the intended use of the development can be minimised, and ii) promoting development which minimises carbon emissions and greenhouse gas emissions and maximises the use of renewable or low carbon energy generation.

MAG is targeting a BREEAM Excellent rating for this project. This target has been designed to achieve MAG's target of a net zero airport in operation by 2038. It is also targeted that systems established in this extension can, in time, will be used to uplift the existing terminal infrastructure and enable more sustainable operations in other areas of the airport.

By the nature of this project as an extension, the associated climate change impacts and emissions of the development are located within existing physical boundaries of the airport and the approach to achieving net zero described above will minimise additional emissions.

Interim Policy 2

Developers should demonstrate how site surroundings and heritage have influenced their choices over climate change mitigation and adaptation proposals.

In order to target a BREEAM Excellent rating, a climate adaption strategy will be developed to ensure that the proposed extension is tested against future climate conditions and that proposed adaptation measures are identified to

prevent detrimental impacts on the site surroundings and geography. The position of the additional passenger facilities in an extension to the existing terminal rather than a standalone facility elsewhere is the most logical one.

Interim Policy 3

Development should be designed to minimise consumption of water and should make adequate and appropriate provision for water recycling. Development should also protect and enhance local water quality including measures to support improvement to a water body's Water Framework Directive status.

A reduction in potable water usage will be achieved in accordance with BREEAM initiatives such as low water use and incorporating water monitoring and leak detection systems. Water recycling and grey/rainwater harvesting will be considered and may be provided where feasible within the scheme.

Interim Policy 4

Development should be designed to provide adequate mitigation against flood risk and to embed suitable water recycling, wastewater, and waste management so as not to cause contamination of groundwater, particularly in recognised protection zones, of surface water or run-off to river catchments. Where there is the potential for contamination, effective safeguards should be put in place to prevent any deterioration in current standards. A maintenance plan will be required detailing who will be responsible for maintenance of SuDS and how they will be maintained. This to ensure that SuDS are maintained for the lifetime of the development.

The project has produced a specific Flood Risk and Drainage Statement. Surface water drainage for the extension will utilise the airport's existing drainage network including an existing on-airport (but not within the application site) attenuation pond. Due to the 'airside' location of the application site and the need to avoid natural drainage features for aerodrome safeguarding reasons, it will not be possible to provide sustainable drainage systems (SuDS) directly around the terminal extension as these could attract birds and increase the risk of bird strike for aircraft.

¹⁴ Uttlesford District Council, *Interim Climate Change Planning Policies*, available at:

[REDACTED] (last accessed July 2023)

It's proposed that the surface water for proposed extension will discharge directly to the existing surface water network. Due to the limited availability of space, in particular undeveloped areas on site, the required volume of attenuation and the corresponding area required to facilitate the volume it is therefore deemed not feasible to restrict rates to greenfield runoff rates. Storage shall be provided within the airport balancing ponds where all surface water ultimately conveys and discharges into.

Interim Policy 5

Developers should demonstrate how their proposals would not lead to any material decrease in air quality or to significant adverse effects on the environment or amenity and, where relevant, how they would comply with the Saffron Walden Air Quality Action Plan to minimise effects on local air quality and reduce CO₂ emissions.

This project is incorporating all electric building systems during operation, with back-up power prioritising sustainable fuels. Additionally, building systems will target the use of refrigerant with a low Global Warming Potential (GWP).

The airports passenger number and aircraft movement limits are governed by separate planning permissions, which include mitigation measures for impacts arising from passenger growth including air quality. The application proposals are for physical infrastructure to accommodate the approved passenger numbers and hence the application will not of itself affect the existing air quality.

Interim Policy 6

Developers should demonstrate how their proposals prioritise the natural environment and how through the design, planning and delivery would result in a biodiversity net-gain and enhances multifunctionality and multiple benefits for people, wildlife, and habitats.

The project will deliver a 10% biodiversity net-gain. Due to the terminal's location within a live operational environment, this will be provided at a specifically designated 'landside' location on the western edge of the airport site off Bury Lodge Lane. Further detail is provided in the separate Preliminary Ecological Assessment and the Biodiversity Net-Gain Statement submitted with the application. A map of the planning application boundary, including the BNG area can be seen in Appendix B.

Interim Policy 7

Developers should demonstrate how the level of tree and/or hedgerow planting that has been proposed is sufficient to i) contribute towards reducing the impact of the proposals on the environment, and ii) improve living conditions for residents, workers and those using any public areas.

As this development is an extension onto an existing building within an 'airside' location where there is a risk of bird-strike, no tree or hedgerow planning is proposed. However, as stated above, the proposals will deliver a 10% Biodiversity Net-Gain in a 'landside' location elsewhere on the airport site.

Interim Policy 8

Developers should demonstrate to what extent density and the mix of uses of their developments contribute towards climate change mitigation and adaptation.

The density of the proposed development is influenced by the need to extend terminal infrastructure to accommodate future passenger growth. This growth (to 43 million passengers per annum) has already been granted planning permission. The proposals do not include a mix of uses as the application site is for operational infrastructure in the heart of the airport.

Interim Policy 9

Developers should demonstrate what opportunities have been taken at a neighbourhood level to design-in renewable energy infrastructure and community energy schemes for renewable energy as an integral part of the development, how they have been incorporated, or why they have been rejected.

The completed project will operate on an energy balance of either the renewable energy from the 14.3 MW Stansted Airport solar farm or offsite renewable energy Power Purchasing Agreements (PPA) / 'green tariffs' from an energy supplier.

Alongside a renewable energy supply to the terminal, MAG also aims to reduce regulated energy demand through both passive and active measures, thereby reducing the overall demand for energy from the site where possible.

Interim Policy 10

Developers should demonstrate how the sustainability of their proposals has been enhanced by landform and the selected landscape network.

The application site is a small area with established landform immediately adjacent to existing airport infrastructure. There is limited ability for landform to influence the sustainability of the proposed extension.

Interim Policy 11

Developers should demonstrate how future proofing at the layout level has been catered for in their developments.

The development of the airport infrastructure is managed over the long-term and within the existing operational area for the airport. This approach is set out in the airport's masterplan – the Sustainable Development Plan 2015.

Interim Policy 12

Developers should demonstrate how green and intelligent design and green infrastructure have contributed to the sustainability of their proposals by reference to the themes in Paragraph 5.1, the general recommendations set out in Paragraph 5.3 and the energy hierarchy in Paragraph 5.37.

Following the recommendations in Paragraph 5, this project aims to procure 80% of the material and products used from verified sustainable sources, waste will be minimised, passive heating operations will be considered, BNG will be implemented, and renewable energy will be used. This will be done to embed sustainability throughout the development.

Interim Policy 13

Developers should demonstrate how their proposals would promote travel by sustainable transport modes in a manner and to a degree proportionate to the significance of the development proposed, particularly active travel modes (walking and cycling).

The planning application is for physical terminal infrastructure to accommodate future passenger growth that has already been separately granted planning permission in 2021. That 2021 planning permission controls the surface access obligations for the whole of the airport's operation, including public transport (rail, bus and coach) and active travel modes. The pedestrian access to the 'landside' surface access options from the terminal extension will remain unchanged.

Interim Policy 14

Taking into account current national policy, new development should comply with the additional electric vehicle parking and charging standards below:

- *All new parking spaces should be adaptable for electric vehicle fast charging (7- 22 kW), including through local electricity grid reinforcements, substation design and ducting.*
- *All new homes with on-plot parking should be provided with at least one installed charging point; and*
- *At least 20% of parking spaces in new developments should be provided with installed fast charging points, increasing in accordance with the Road to Zero Strategy (see main policy text).*

No additional car parking is proposed as part of the terminal extension project as the application does not seek an increase to passenger numbers. The overall level of airport car parking will therefore remain unchanged. This includes the provision of electric vehicle (EV) charging stations that will be operational from mid-2024. These were a condition of the 2021 planning permission which permitted the growth of the airport to 43 million passengers per annum.

The table in Appendix A provides more detailed breakdowns of the responses above to the UDC Interim Climate Change Policy with cross reference to the nine Key Performance Indicators.

5.0 Conclusion

National, regional, and local planning policy does not prescribe a minimum sustainability 'standard' that projects such as the terminal extension should achieve. This Statement therefore has considered all the available policy and guidance and outlines in broad terms how the project will deliver sustainability from a variety of perspectives. It has explained how the BREEAM Excellent standard will be targeted with the terminal extension achieving net zero in operation by 2038 in relation to the airport company's scope 1 and 2 emissions, defined by the World Resources Institute Greenhouse Gas Protocol. The extension will meet key performance indicators that consider BREEAM standards and address guidance, or policy set out in the LETI Climate Design Guide¹⁵, the Uttlesford Local Plan and supplementary guidance and the Essex Design Guide – Net-Zero Carbon Viability and Toolkit Study¹⁶.

¹⁵ LETI (2020), *Climate Design Guide*, available at: [REDACTED] (Last accessed July 2023)

¹⁶ Essex Climate Action Commission (2022), *Net-Zero Carbon Viability and Toolkit Study*, available at: [REDACTED] (last accessed July 2023)

Appendix A

Table 2 Detailed project response to planning commitments.

Key Sustainability Focus Area	Planning Policy and Guidance	Project response
Delivering a Low Embodied Carbon Terminal Extension	<p>NPPF Chapter 14 Paragraph 152 - ... and support renewable and low carbon energy and associated infrastructure.</p> <p>UDC Interim Policy 1: ii) <i>promoting development which minimises carbon emissions and greenhouse gas emissions and maximises the use of renewable or low carbon energy generation.</i></p>	<p>Whole Life Carbon - To promote low carbon development, the terminal extension will develop a baseline of Whole Life Carbon (WLC) with calculated WLC reductions included within detailed design, in line with the industry standard of BS EN 15978 and RICS' Whole Life Carbon Assessment guidance.</p> <p>Low embodied carbon - To continue a low embodied carbon profile post construction, the development of a facilities management strategy will ensure emissions associated with replacement, repair and maintenance are minimised. Carbon emissions associated with replacement and maintenance of equipment, main plant and interior finishes can add up to 25%+ of WLC - it's important that the facilities management strategy works to prolong the operational life wherever feasible.</p> <p>Sustainably sourced materials - The project shall target 30% of materials (by cost) to have EPDs and 80% of key materials (by volume) to be certified with relevant responsible sourcing specifications where possible to align with full BREEAM credits (in line with bullet points noted below).</p> <p>Materials should be responsibly sourced with BES 6002 (Ethical labour) standards certification. The project is seeking to ensure that all construction products used on site have no REACH SVHC¹⁷ compounds (or are certified to an equivalent scheme i.e., C2C, HPD, Declare). The project is targeting that the following certification expectations for different materials are met:</p> <ul style="list-style-type: none"> • Timber: FSC or PEFC Certified • Steel: CARES Sustainable Constructional Steel Scheme or Responsible Steel Certification with recycled content disclosure • Steel Reinforcement: Eco Reinforcement Responsible Sourcing Standard, Steel Products for the Reinforcement of Concrete

¹⁷ REACH SVHC – UK REACH (Regulation, Evaluation, Authorisation and Restriction of Chemicals) is a regulation that applies to the majority of chemical substances that are manufactured in or imported into Great Britain (GB). Substances of very high concern (SVHC) are substances that have hazards with serious consequences. For example, they cause cancer, or they have other hazardous properties and/or remain in the environment for a long time with their amounts in animals gradually building up. Health and Safety Executive, (n.d) UK REACH substances of very high concern (SVHCs), available at: [REDACTED] (last accessed July 2023)

- Concrete: BES 6001 (Responsible Sourcing) with recycled content disclosure or Concrete Sustainability Council (CSC) certification
- Aluminium: Aluminium Stewardship Initiative (ASI) Performance Standard
- Thermal insulation: BES 6001 (Responsible Sourcing)
- All other materials: BES 6001, ISO 14001

BREEAM credit alignment

To support developing low carbon infrastructure, the terminal extension will look to target credits in the following BREEAM categories:

Management:

- Man 02 – Life Cycle Cost and Service Life Planning – Elemental LCC
- Man 02 – Life Cycle Cost and Service Life Planning – Component Level LCC Options Appraisal

Materials:

- Mat 01 – Environmental Impacts from Construction Products – Building life cycle assessment (LCA)
- Mat 02 – Environmental Impacts from Construction Products – Environmental Product Declarations (EPD)
- Mat 03 – Responsible Sourcing of Construction Products
- Mat 06 – Material Efficiency

Waste:

- Wst 02 – Use of Recycled and Sustainably Sourced Aggregates

The project will also use GLA, LETI and Soft Landings as best practice to go beyond BREEAM credits as required to support the transition to a net zero airport in operation by 2038.

Reducing operational energy and carbon

Uttlesford Local Plan - The Council will encourage developers to provide at least 10% of the predicted energy requirements for the development from onsite renewables or low carbon energy sources in all developments larger than 1,000m² or five homes.

Zero carbon operations - MAG's commitment is to deliver a net zero airport in operation by 2038. This will be achieved through a reduction in energy demand and carbon emissions through passive measures, efficient active systems, and renewable energy via a plant enclosure with air source heat pumps and the airport's solar farm, ensuring that the terminal extension is built to remain low carbon.

(Contributing to a Zero Carbon Airport in Operation by 2038)

Uttlesford District Council Interim Climate Change Planning Policy - In 2019, the District Council declared a climate and ecological emergency which committed to achieving net zero carbon status by 2030.

Essex Design Guide: With technological advances come opportunities to integrate renewable energy systems into developments, increasing the sustainability of homes, reducing the pressure on fossil-fuel provisions and cutting running costs.

UDC Interim Policy 9: *Developers should demonstrate what opportunities have been taken at a neighbourhood level to design-in renewable energy infrastructure and community energy schemes for renewable energy as an integral part of the development, how they have been incorporated, or why they have been rejected.*

Uttlesford Local Plan - GEN2 - It minimises the environmental impact on neighbouring properties by appropriate mitigating measures.

High operational energy performance - To reduce energy demands within operation, the design is seeking to minimise operational energy. Operational energy levels will be monitored throughout the design stages and into operation. What is included and not included in the scope of this aim has been carefully considered and detail of this is included within Section 2.0.

The design is aligned with industry best practice, such as London Energy Transformation Initiative (LETI) guidance and is aiming to achieve BREEAM Excellent to ensure significant reduction in the Energy Usage Intensity of building services.

Decarbonised operations and renewable energy - to decarbonise terminal operations meet Building Regulations and ensure alignment with policy and guidance, all the systems within the building are targeted to be electric, notwithstanding emergency back-up power.

The completed project will operate on an energy balance of either the renewable energy from the 14.3 MW Stansted Airport solar farm or offsite renewable energy Power Purchasing Agreements (PPA) / 'green tariffs' from an energy supplier.

Alongside a renewable energy supply to the terminal, MAG also aims to reduce regulated energy demand through both passive and active measures, thereby reducing the overall demand for energy from the site where possible.

In operation monitoring and reporting - the terminal extension will look to target full credits for BREEAM Ene 02 Energy monitoring, by installing energy sub-metering systems across all key building services and high energy load and tenancy areas, these shall then be connected to a Building Energy Management System (BEMS). This system shall compare actual performance with predicted and inform required activities to eliminate any performance gap during the operation of the building.

BREEAM credit alignment

To meet the renewable energy and net zero requirements, the terminal extension will look to target credits in the following BREEAM category:

Energy:

- Ene 01 – Reduction of Energy Use and Carbon Emissions – Energy Performance
- Ene 01 – Reduction of Energy Use and Carbon Emissions – Prediction of Operational Energy Consumption
- Ene 02 – Energy Monitoring
- Ene 04 – Low Carbon Design
- Ene 06 – Energy Efficient Transportation Systems

<p>Delivering a Biodiversity Net-Gain</p>	<p>NPPF Chapter 15: Conserving and enhancing the natural environment, part d) minimising impacts on and providing net-gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.</p> <p><i>UDC Interim Policy 6: Developers should demonstrate how their proposals prioritise the natural environment and how through the design, planning and delivery would result in a biodiversity net-gain and enhances multifunctionality and multiple benefits for people, wildlife, and habitats.</i></p>	<p>Biodiversity net-gain – The application proposals will provide 10% biodiversity net-gain required by the Environment Act 2021. This will wholly be undertaken at a 'landside' site within the airport's ownership, away from the terminal extension area to also ensure effective risk management for aerodrome safeguarding purposes.</p> <p>The BNG calculation shall follow the methodology laid out in the new 2023 Defra Biodiversity Metric 4.0, as well as aligning to the BREEAM Strategic Ecology Framework (SEF), where BREEAM Credits are sought for BNG.</p> <p>Develop and implement a management strategy for securing the biodiversity net-gain over 30 years.</p> <p>BREEAM credit alignment To meet the biodiversity net-gain requirements, the project will look to target credits in the following BREEAM category: Land Use and Ecology:</p> <ul style="list-style-type: none"> • LE 02 – Ecological risks and opportunities • LE 03 – Managing impacts on ecology • LE 04 – Ecological change and enhancement • LE 05 – Long term ecology management and maintenance
<p>Reduce waste production and environmental impact</p> <p><i>(Minimising waste to Landfill)</i></p>	<p>Uttlesford Local Plan - GEN2 - It helps to reduce waste production and encourages recycling and reuse.</p> <p>NPPF Chapter 14, Paragraph 93-part b - ... encourage the reuse of existing resources, including the conversion of existing.</p> <p>Uttlesford Local Plan - GEN2 - It minimises the environmental impact on neighbouring properties by appropriate mitigating measures.</p>	<p>BREEAM credit alignment To meet GEN2 requirements the terminal extension proposals will look to target credits in the following BREEAM category: Waste:</p> <ul style="list-style-type: none"> • Wst 01 – Construction Waste Management • Wst 02 – Use of Recycled and Sustainably Sourced Aggregates • Wst 03 – Operational waste, • Wst 06 – Design for Disassembly and Adaptability <p>See details below for more information.</p> <p>Resource efficiency - Production of a Resource Management Plan looking to achieve at least one BREEAM credit under Wst 01. Development of specific targets for different materials streams at the design stage is industry best practice.</p> <p>Reduce waste and promote recycling throughout the project by looking to target 100% of non-hazardous demolition, excavation, and construction waste for reuse/ recycling/recovery (diversion from landfill).</p>

	<p>The operational waste facilities should be fully compliant with BREEAM Wst 03 and as such the following shall be provided in order that this is achievable (see BREEAM Wst 03 for full guidance on sizing requirements).</p> <p>Environmental impact management - Main Contractors should have Environmental Management Certification to ISO14001, BREEAM Man 03 Responsible construction practices.</p> <p>Material efficiency and reuse - the terminal extension will be designed for longevity, flexibility, adaptability, and recoverability. To do this, it is proposed that the Greater London Authority New London Plan Policy Si 7 requirements are followed with a circular economy statement being produced. GLA New London Plan Si 7 'Reducing waste and supporting circular economy' promotes re-use, resource efficiency, innovation (i.e., Design for Manufacture and Assembly), and waste minimisation (during construction and long-term).</p> <p>This mirrors the embodied carbon hierarchy of design principles that are in line with best practice guidance, and additionally supports BREEAM Mat 06 Material efficiency and Wst 06 Design for disassembly and adaptability.</p>
<p>Minimising Water Usage</p> <p>Uttlesford Local Plan - GEN2 - It helps to minimise water and energy consumption.</p> <p><i>UDC Interim Policy 3: Development should be designed to minimise consumption of water and should make adequate and appropriate provision for water recycling.</i></p>	<p>BREEAM credit alignment Minimisation of water consumption through BREEAM credits, the terminal extension proposals will look to target credits in the following BREEAM category: Water:</p> <ul style="list-style-type: none"> • Wat 01 – Water Consumption • Wat 02 – Water Monitoring • Wat 03 – Water Leak Detection <p>Water efficiency - to minimise water consumption, a reduction in potable water usage against the existing terminal's levels will be targeted through BREEAM compliant initiatives such as specification of low water use fittings and incorporating water monitoring and leak detection systems within the design to further minimise the wastage of fresh water. Appropriate provision for water recycling, including grey/rainwater harvesting, will be considered where feasible.</p>
<p>Minimising Pollution</p> <p>Local Plan Policy 1. h GEN2: It minimises the environmental impact on neighbouring properties by appropriate mitigating measures. b. It safeguards important environmental features in its setting, enabling their retention and helping to reduce the visual impact of new buildings or structures where appropriate.</p>	<p>BREEAM credit alignment Reduce the environmental impact of the terminal extension operations by looking to target credits in the following BREEAM category: Pollution:</p> <ul style="list-style-type: none"> • Pol 01 – Impacts of Refrigerants • Pol 02 – Local air quality • Pol 03 – Flood and surface water management

UDC Interim Policy 4: Development should be designed to provide adequate mitigation against flood risk and to embed suitable water recycling, wastewater and waste management so as not to cause contamination of groundwater, particularly in recognised protection zones, of surface water or run-off to river catchments.

UDC Interim Policy 5: Developers should demonstrate how their proposals would not lead to any material decrease in air quality or to significant adverse effects on the environment or amenity and, where relevant, how they would comply with the Saffron Walden Air Quality Action Plan to minimise effects on local air quality and reduce CO₂ emissions.

Uttlesford Local Plan - GEN2 - It minimises the environmental impact on neighbouring properties by appropriate mitigating measures.

- Pol 04 – Reduction of Night-Time Light Pollution
- Pol 05 – Reduction of Noise Pollution

Flood risk management -

It's proposed that the surface water for proposed extension will discharge unrestricted to the existing surface water network. Due to the limited availability of space, in particular undeveloped areas on site, the required volume of attenuation and the corresponding area required to facilitate the volume it is therefore deemed not feasible to restrict rates to greenfield runoff rates. Storage shall be provided within the airport's balancing ponds where all surface water ultimately conveys and discharges into, before being released into the public network at existing approved rates.

- The airport's existing drainage systems ensure protection of watercourses. Watercourse pollution is therefore minimised in-line with BREEAM Pol 03 requirements

Air quality and pollution minimisation - The design is incorporating all electric building systems so that there will be no combustion on site during normal operation, with back-up power prioritising sustainable fuels as a minimum.

In addition, building systems will use refrigerants with low global warming potential (GWP) within all HVAC systems, using the latest best practice guidance:

Specification of Heating Ventilation Air Conditioning (HVAC) systems to either possess no refrigerant or look to ensure that the refrigerants selected have a low Global Warming Potential (GWP).

Improving Passenger Wellbeing

NPPF Chapter, 8 Paragraph 93-part b: take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community.

BREEAM credit alignment

To improve the health and well-being for all users, the project will seek to target credits in the following BREEAM category:

Health and Wellbeing:

- Hea 01 – Visual Comfort – all relevant credits
- Hea 02 – Indoor Air Quality – all relevant credits
- Hea 04 – Thermal Comfort. – all relevant credits
- Hea 05 – Acoustic Performance
- Hea 06 – Security

	<p>Indoor air quality - MAG will maintain air quality and ventilation rates and meet BREEAM and WELL guidance on Volatile Organic Compounds (VOCs), putting in equipment to monitor and control CO₂ levels internally.</p> <p>Procurement of low/zero VOC materials including interior paints, internal finishes, wood products, sealants, and adhesives.</p> <p>Enhanced ventilation of building to minimise internal CO₂ levels within key occupied spaces, such as general departure lounges, arrivals, offices etc.</p> <hr/> <p>Climate resilience - Thermal modelling will ensure temperatures are in line with CIBSE Guide A for air-conditioned buildings, for all occupied spaces. Modelling shall also account for future hotter climate scenarios as defined in the BREEAM guidance document.</p> <p>Provision of appropriate thermal zoning and control systems in-line with BREEAM Hea 04 criteria.</p> <hr/> <p>Quality of indoor spaces - improve passenger's connectivity with nature and greenery indoors through biophilic design using WELL guidance to go beyond BREEAM requirements. Examples of this can include green walls, plants, organic materials and patterns etc, to improve sense of wellbeing of staff and passengers.</p>
<p>Mitigating against the impacts of climate change</p> <p>UDC Interim Policy 2: <i>Developers should demonstrate how site surroundings and heritage have influenced their choices over climate change mitigation and adaptation proposals.</i></p> <p>UDC Interim Policy 11: <i>Developers should demonstrate how future proofing at the layout level has been catered for in their developments.</i></p>	<p>Climate adaptation - Develop a climate change adaptation strategy to account for future climatic weather conditions and passenger flow which will look to target full credits for the following BREEAM categories:</p> <p>Materials:</p> <ul style="list-style-type: none"> • Mat 05 – Designing for Durability and Resilience <p>Waste:</p> <ul style="list-style-type: none"> • Wst 05 – Adaptation to Climate Change <p>Climate resilience - Thermal modelling will ensure temperatures are in line with CIBSE Guide A for air-conditioned buildings, for all occupied spaces, that also accounts for future hotter climate scenarios as defined in the BREEAM guidance document.</p> <p>Flood risk management – Ensure that the proposed extension cater for increases in extreme rainfall and does not result in increasing flood risk under future climate conditions:</p>

Drainage measures specified so that the peak rate of run-off from the site to the watercourses (natural or municipal) shows no increase for the developed site compared with the pre-developed site. This should comply at the 1-year and 100-year return period events, including allowance for climate change.

**A Project
Which
Generates
Positive
Social Value**

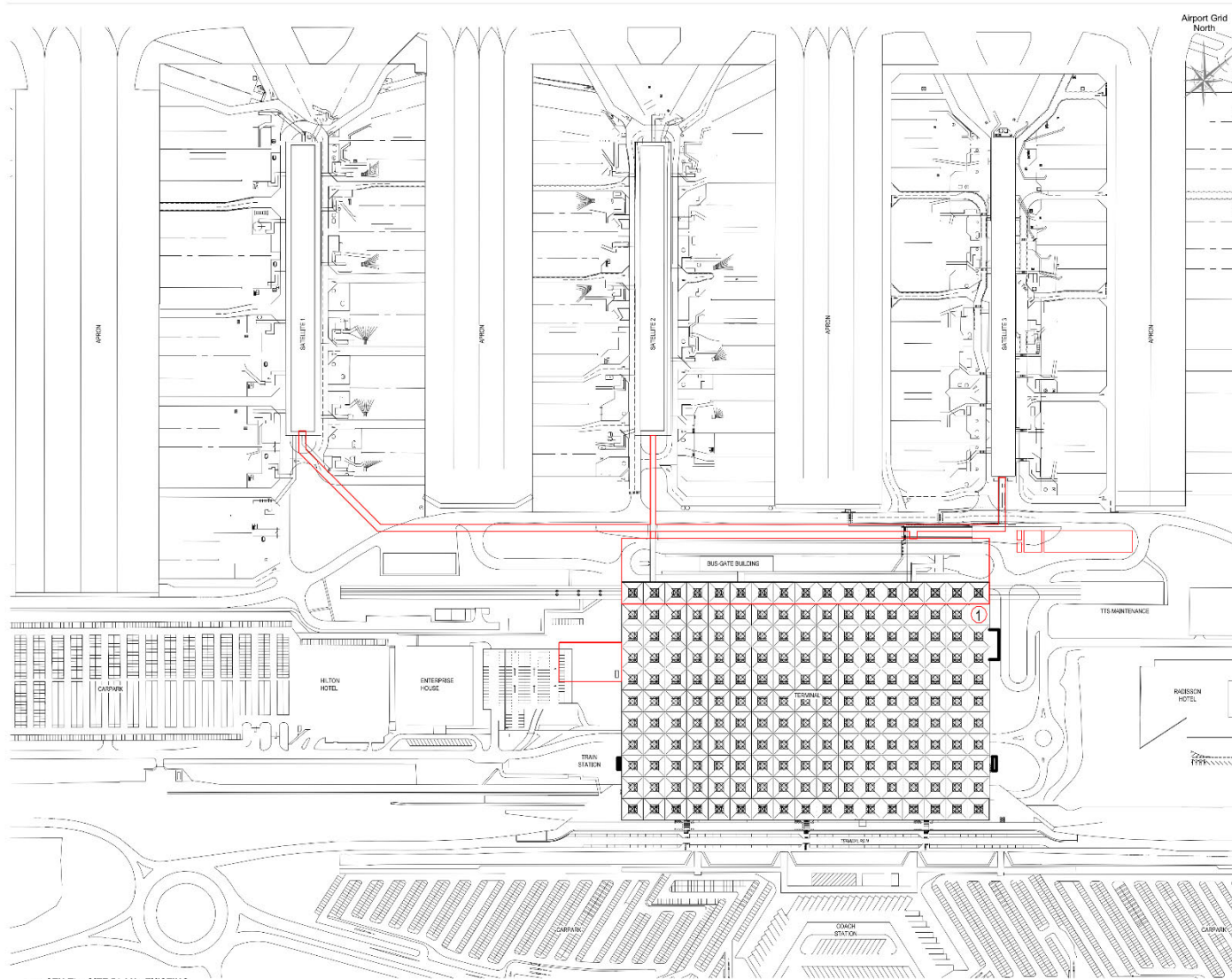
NPPF Chapter 8, Paragraph 93-part b: take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;

Social Value – the project is to follow MAG CSR commitments that go beyond BREEAM requirements, A dedicated Social Value Lead for the project will be nominated to ensure the project delivers on the MAG CSR priorities of Zero Carbon, Opportunity for All and Local Voice.

The approach to social value will include the following:

- Developing a specific social value strategy for the terminal extension project
- Developing a standardised framework and utilise a monitoring tool to collect, handle and manage reporting of social value performance data throughout the contract.
- Ensuring that all tenders / contracts made available through the programme will contain a social value question (UK Social Value Model 2021) and apply a minimum of weighting to the overall tender score (considering PPN 06/recommendations and industry best-practice).
- Ensuring that all Tier 1 and Tier 2 supply chain complete and return a social value method statement and timed project plan as part of the Invitation to Tender process.
- Ensuring that all Tier 1 and Tier 2 supply chain provide quarterly reporting on their social value delivery and impact against commitments made.
- Organising an Annual Social Value review, audit, and report, outlining key impacts, opportunities and risks related to social value delivery.
- Sharing good news and create quarterly case studies with the supply chain, highlighting delivery of social benefits through the programme.

Map 2 - Terminal area

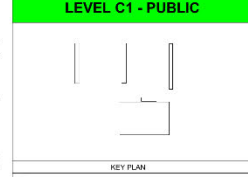


- GENERAL NOTES**
- DO NOT SCALE FROM THIS DRAWING.
 - CONTRACTOR TO TAKE AND CHECK ALL DIMENSIONS ON SITE BEFORE WORK COMMENCES.
 - MISCREPANCIES TO BE REPORTED TO ENGINEER.
 - CONTRACTOR TO VERIFY ALL DIMENSIONS AND UTILITIES ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE.

Rev	Detail	Date	CHKD	APPR

MAG London Stansted Airport

MOTT MACDONALD **PASCALL +WATSON**



Airport
Stansted Airport
 Project Name
Stansted Airport Terminal
 Title
Stansted Airport Terminal
 Architectural Site Plan
 Existing

Discipline	Project Phase		
Architecture	Planning Application		
Drawing Originator	Originator's Job No.		
	6953		
Drawn By	Drawn Date	Checked By	Plot Date
EWI	20.06.23	JW	
Approved By	Approved Date	Scale and sheet size	@A1
EB	07.07.23		
Building British National Grid Reference			

Project Number	Location Code	Origin			
6953	STN, TL, XX, XX	PAW			
Disc	Disc Type	ACC	Unique ID Number	Status	Rev
A	GA	BLDSTR	2901	S2	

1 STN.TL - SITE PLAN - EXISTING
 1:100

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DISP0002 14.02.23 C:\P\Work\Local_Files\Drawings\10101 STN.TL_XX_XX.PAW A 10 000 000_Terminal 01 (Workset_001) (Drawing_000001) (Drawing_000001) (Drawing_000001) (Drawing_000001) (Drawing_000001)

EXISTING ROOFING KEY
 1 ALUMINIUM AIRFOIL-SHAPED ROOF FAVES PROFILE

KEY
 - PLANNING APPLICATION BOUNDARY