Allianz Stadium, Twickenham

Environmental Impact Assessment (EIA) Scoping Report

March 2026

Applicant
Rugby Football Union

Our reference
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Turley

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1. Introduction

Overview

1.1 The Rugby Football Union (the 'Applicant') is preparing an application for planning permission (the 'Application') to increase the number of major non-sporting event days (the 'Proposed Scheme') at Allianz Stadium, Twickenham (the 'Site'). The Application will be submitted to the London Borough of Richmond upon Thames (LBRuT) as the local planning authority (LPA).

1.2 The Applicant has instructed Turley to lead, manage and control the Environmental Impact Assessment (EIA) process for this project in line with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)[1] (the 'EIA Regulations').

1.3 A request for EIA Screening Opinion (**Appendix 1.1**) was submitted to the LBRuT in May 2025. Further information (**Appendix 1.2**) was submitted to the LBRuT in June 2025 following some queries in relation to transport and socio-economics predominantly. The LBRuT provided a formal Screening Opinion (**Appendix 1.3**) in July 2025, which confirmed the requirement for a focussed EIA to be undertaken for the Proposed Scheme and the provision of an ES alongside the Application. This EIA Scoping Report has been informed by the EIA Screening process.

Request for a Scoping Opinion

1.4 To inform the EIA process, in accordance with Regulation 15 of the EIA Regulations, Turley requests a Scoping Opinion from the LBRuT informed by this report.

1.5 In line with Regulation 15(2) of the EIA Regulations, this report contains the following:

- A plan sufficient to identify the land (**Figure 1.1**);
- A description of the Proposed Scheme, including its nature, purpose, location, and technical capacity (**Chapter 4**);
- An explanation of the likely significant effects of the development on the environment (**Chapter 6**); and
- Such other information or representations as the person making the request may wish to provide or make.

1.6 This report has been prepared in line with common EIA practice, whereby the appointed project team, based on an understanding of the Site and the Proposed Scheme (as set out in **Chapter 4**), have:

[1] The Town and Country Planning (EIA) Regulations 2017 No. 571 (as amended).

- Established the existing technical baseline, either through desk-top studies/reviews, surveys, and evaluation of available technical data;

- Identified the topics and effects which are unlikely to be significant, due to the absence of a receptor (due to the location of the Site) or source of an effect due to the nature of the Proposed Scheme (as defined in **Chapter 4**), or through the commitment to mitigation;

- Identified the effects which are likely to be significant and the sensitive receptors that will be assessed in the ES; and

- Established the methodology for assessing the effects in the ES which are likely to be significant.

1.7 The above is documented in **Chapter 5** and **Chapter 6**.

1.8 The Scoping Opinion is sought on the breadth of the technical topics and associated effects to be considered within the EIA and reported in the ES, as well as the scope and methodology for assessment.

1.9 In accordance with Regulation 15(4) of the EIA Regulations, it is anticipated that the statutory timescales will be met, and that Turley will be in receipt of a Scoping Opinion no later than five weeks from the date of receipt of this request. Any deviation from this will be subject to a request from the LBRuT and subsequent agreement by the Applicant

1.10 Furthermore, in line with Regulations 28, it is anticipated that the LBRuT will make available this report and their corresponding EIA Scoping Opinion, with accompanying consultee comments where applicable, for public inspection, either through the LBRuT planning portal website or by other means.

Definition of EIA

1.11 The term 'EIA' has the meaning given by Regulation 4 of the EIA Regulations, as *'a process consisting of -*

(a) the preparation of an environmental statement;

(b) any consultation, public and notification required by, or by virtue of, these Regulations or any other enactment in respect of EIA development; and

(c) the steps required under regulation 26' (consideration of whether planning permission or subsequent consent should be granted).

1.12 Under Regulation 4, Paragraph 2 an EIA must *'identify, describe, and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors -*

(a) population and human health

(b) biodiversity, with particular attention to species and habitats protected under any law that implemented Directive 92/43/EEC[2] and Directive 2009/147/EC[3];

(c) land, soil, water, air and climate;

(d) material assets, cultural heritage and the landscape; and

(e) the interaction between the factors referred to in sub-paragraphs (a) to (d)'.

1.13 EIA is a procedure that must be followed for certain types of projects before 'development consent' (i.e., planning permission) can be given. The procedure is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects and the scope for reducing or mitigating them are properly understood by the public and the relevant Local Planning Authority (in this case, the LBRuT) before it makes its decision.

1.14 The aim of EIA, as defined by national Planning Practice Guidance (PPG), is to *'protect the environment by ensuring that a local planning authority when deciding to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process….' and '..also to ensure that the public are given early and effective opportunities to participate in the decision making procedures*'[4].

Requirement for EIA

1.15 The Proposed Scheme has been compared to descriptions of development set out within Schedule 1 and Schedule 2 of the EIA Regulations. It is considered that the Proposed Scheme falls under Schedule 2, Paragraph 13(b) – *Changes and extensions*, in that it is proposed to change a Schedule 2 10 (b) – Urban development project (i.e. the existing Allianz Stadium).

1.16 Whilst the applicable thresholds are met, this does not determine the requirement for EIA, but requires a subsequent stage to determine "*…likely significant effects on the environment by virtue of factors such as its nature, size or location"*.

1.17 As set out above, the LBRuT issued a positive EIA Screening Opinion concluding a proportionate EIA was required for the Proposed Scheme. Therefore, an EIA will be undertaken, the outputs of which will be reported in an Environmental Statement (ES).

[2] OJ No. L 206, 22.7.1992, p. 7.
[3] OJ No. L 20, 26.1.2010, p. 7.
[4] Department for Levelling Up, Housing & Communities (DLUHC) and Ministry of Housing, Communities & Local Government (MHCLG), PPG, Paragraph 002 Reference ID: 4-002-20140306 [Online].

Stakeholder Engagement

1.18 Consultation is an important part of the EIA process. It is the responsibility of the LBRuT to undertake the appropriate level of consultation, including the identification of relevant and applicable statutory and non-statutory consultees, required to inform their Scoping Opinion.

1.19 In advance of preparing this report, consultation with several of the above consultees has already been undertaken and continues, to inform specifics of the Proposed Scheme, baseline data collection and assessment methodologies. A summary of consultation undertaken to date is set out in **Appendix 1.4**.

2. Approach to EIA

Objectives

2.1 This report supports a formal request for a Scoping Opinion from the LBRuT as to the scope and methodology for assessment to be adopted in the EIA and reported in the ES. It aims to ensure that there is a clear and agreed scope for the EIA, including the relevant baseline studies, that will be required to ensure a robust assessment of likely significant effects.

2.2 The Scoping Opinion is sought on the technical breadth of the technical topics considered within the EIA and the specific effects within each of these technical topics (**Chapter 5** and **6**).

2.3 The Institute of Sustainability and Environmental Professionals (ISEP) has issued guidance on the interaction of design and EIA as part of their 'Implementing the Mitigation Hierarchy from Concept to Construction'[5] guidance. The principles of these documents have been adopted for the EIA.

Iterative Approach to Scoping

2.4 Whilst this report seeks to establish the overall framework for the EIA in relation to the technical topics and associated likely significant effects that will be subject to detailed assessment, iterative 're-scoping' will continue as the design and strategy are refined, principles are developed and additional technical work is completed. Whilst the EIA will be based on the EIA Scoping Opinion (as required by Regulation 18, (4,) (a)), it will take account of the continued understanding of environmental effects and development of primary and tertiary mitigation (see 'Defining Mitigation and how this will be Controlled'). This iterative 're-scoping' process will continue up until the point when the assessments within the ES are in their first draft, in advance of submission.

2.5 Any deviation between the scope of effects considered within this report, EIA Scoping Opinion (when received), and the ES will be clearly communicated in the ES. This is in accordance with the PPG[6], which states that *'…where it becomes evident during the assessment process...that a particular environmental factor is absent or unlikely to be significantly affected by a proposed development, there should be no need for further assessment of that factor even though it was identified in the scoping process…'*.

2.6 It is requested that such an approach is clearly endorsed within the Scoping Opinion issued by the LBRuT.

Approach to the Consideration of Alternatives

2.7 Schedule 4, Paragraph 2 of the EIA Regulations states that an ES should include:

[5] ISEP (2024). Implementing the Mitigation Hierarch from Concept to Construction. Available at: iema-mitigation-in-eia-guidance-final.pdf

[6] DLUHC and MHCLG, PPG, Paragraph: 038 Reference ID: 4-038-20170728 [Online].

"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".

2.8 PPG[7] states that 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 the environmental effects*".

2.9 The EIA Regulations and PPG do not require an Applicant to consider alternatives but instead where reasonable alternatives have been considered by the Applicant, these should be described and an indication of the main reasons for selecting the chosen option, including a comparison of the environment effects, should be provided.

2.10 The EIA Regulations and PPG do not identify a specific methodology for the consideration of reasonable alternatives nor any associated criteria. Therefore, the methodology to be adopted will be based on professional experience of similar projects and an understanding of the Proposed Scheme and its characteristics as well as a focus on the delivery of a proportionate report, in line with PPG.

2.11 The consideration of alternatives has followed a two-step approach, with Step 1 completed as part of this report:

- **Step 1**: Consideration of 'factors' that constitute alternatives based on the EIA Regulations (i.e., alternative sites, alternative designs, alternative technologies and the 'do nothing' scenario) and justification / discussion of their inclusion / exclusion from further reporting; and

- **Step 2**: Qualitative appraisal of the 'factors' brought forward from Step 1 and, where appropriate, a comparison of the environmental effects.

Step 1 – Consideration of Factors

2.12 The relevant factors have been considered to determine the need for further reporting:

- Alternative sites – The Applicant owns the Allianz Stadium and it is in their control, when other sites would not be. The Site is already permitted to host sporting events at its full 82,000 capacity on any of the 365 days in a year and up to 3 major non-sporting events per year with a capacity of 55,000 spectators at each event. The Proposed Scheme would be an extension to these existing operations with only minor construction works required. Therefore, alternative sites will not be considered further.

- Alternative designs – Not considered relevant for the Proposed Scheme because there is limited 'development' to be designed. The Allianz Stadium is already in

[7] DLUHC and MHCLG, PPG, Paragraph 041 Reference ID: 4-041-20170728 [Online].

place and the Proposed Scheme is simply and increase in non-sport events. Therefore, alternatives designs will not be considered further.

- Alternative technologies – Not considered relevant for the Proposed Scheme because generally these relate to industrial processes. The Allianz Stadium is already in place and the Proposed Scheme is simply and increase in non-sport events. Therefore, alternatives technologies will not be considered further.

- 'Do Nothing' Scenario – Schedule 4, Paragraph 3 of the EIA Regulations requires an ES to include a description of the relevant aspects of the current baseline environment which are likely to evolve without the implementation of development, subject to the availability of environmental information and scientific knowledge. The assessments of environmental effects presented in the ES[8] will include the determination of the Site's 'Future Baseline', being the likely condition of the Site in the absence of the Proposed Scheme or other development. As such, the 'Do Nothing' Scenario will be taken forward to Step 2.

2.13 As set out above, the 'Do Nothing' scenario will be taken forward into Step 2 and reported in the ES.

Study Boundaries for Data Collection

2.14 The Site, upon which baseline data has been collected is defined in **Figure 1.1**. It is noted there are limited physical works associated with the Proposed Scheme within this boundary.

2.15 Where required, technical specific study areas (informed by relevant best practice and guidance) will be based upon the Site (i.e. radius of searches will be from the Site).

Baseline Environment

2.16 Schedule 4, Paragraph 3 states that an ES should include:

"A description of the relevant aspects of the current state of the environment (baseline scenario)…"

2.17 The baseline environment will comprise the existing environmental characteristics and conditions based on surveys undertaken and information / data available at the time of the technical assessments.

2.18 The origin of all data, the dates of surveys and the dates when data sources have been accessed will be clearly outlined alongside any limitations and assumptions.

[8] It is not deemed necessary to consider the future baseline of environmental topics scoped out of the ES given that the Proposed Scheme is not expected to generate likely significant effects in relation to these topics.

Consideration of Future Baseline

2.19 Schedule 4, Paragraph 3 states that an ES should include:

2.20 "*…an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge."*

2.21 As required by the EIA Regulations, the ES will report the future baseline scenario. This will consider potential changes to the Site and study area assuming no further development and the continuation of the existing management regime.

Identification of Sensitive Receptors

2.22 Schedule 4, Paragraph 4 states that an ES should include:

"A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape."

2.23 Informed by baseline information and data, a series of receptors or receptor groups are identified, which are subject to likely significant effects arising from a project. These receptors are then subject to assessment within the EIA.

2.24 Details of the receptors which are considered likely to be affected at this stage are set out in **Chapter 6**.

Defining Mitigation and how this will be Controlled

2.25 Schedule 4, Paragraph 7 of the EIA Regulations states that an ES should include:

'A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases'.

2.26 Through the EIA process different types of mitigation have been / will be identified and developed and these are defined as:

- **Primary mitigation** – modifications to the location or design of the Proposed Scheme made during the pre-application phase that are an inherent part of the project;

- **Secondary mitigation** – actions that will require further activity in order to achieve the anticipated outcome and secured by planning condition / and or obligation; and

- **Tertiary mitigation** – actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

2.27 The assessment of the effects of the Proposed Scheme within the ES will be based on the information contained within a development specification, which will include primary and tertiary mitigation. Examples of primary and tertiary mitigation include the staggered grouping of events and the implementation of the Event Management Plan.

2.28 Within the ES, following the conclusion of the likely significant effects based on the Proposed Scheme (inclusive of primary and tertiary mitigation), any further mitigation (secondary mitigation) to reduce an adverse effect or enhance a beneficial one will be identified.

2.29 Secondary or tertiary mitigation measures are only considered appropriate if there is a high level of confidence in their mechanism for implementation (by the Applicant or third party).

Consideration of Off-Site Mitigation

2.30 Off-site improvements / mitigation, will be considered as 'secondary mitigation' and appropriately considered within the assessment of residual effects within the ES.

2.31 Where appropriate, the EIA will consider such works as far as reasonably possible to identify any potential secondary effects and report these within the ES. The level of assessment will be based on the information available on the form, extent, and scale of such works.

2.32 Off-site improvements are likely to be limited to the package of transport interventions being developed to improve and optimise the existing transport management and support the application. This package will benefit the management of all events at the Allianz Stadium, not just the additional major non-sport events. At a high level, the package includes an enhanced digital and ticketing strategy, optimisation of pre-match road closures and traffic management, a review of Twickenham Station operations, improved management of the A316 crossing, a refined wayfinding strategy, promotion of additional rail stations, enhanced shuttle bus management, improved taxi and private hire vehicle (PHV) strategies, and improved event-day on-site travel information.

Information to Inform the Assessments within the ES

2.33 The ES is required to provide sufficient information about the Proposed Scheme to meet the requirements of the EIA Regulations and to ensure that the LBRuT can reasonably be satisfied that they have sufficient information of the likely significant environmental effects of the Proposed Scheme. The assessment undertaken as part of

the EIA and reported in this ES will be based on the Development Specification which will contain all information required to inform the EIA in a single location. The Development Specification is set out in **Chapter 4** of this EIA Scoping Report.

Assessment Scenarios

2.34 The EIA will assess the likely effects arising from the Proposed Scheme.

2.35 As the Proposed Scheme relates to the event planning and licensing application, which is forecast to result in only limited construction-related activity, a construction stage scenario will not be assessed as it is not likely to be significant (see **Chapter 5**).

2.36 The operational scenario to be assessed in **Chapter 6: Transport** will primarily compare the environmental impacts of an existing, 55,000 capacity non-sporting event (which have previously been held at the Stadium on both weekdays and weekend days), with those of the proposed 75,000 capacity non-sporting events. This will include contextualisation against a non-event day and the annual effect.

Approach to Defining Level of Effect and Significance

2.37 A stepped approach will be adopted to define effects for the operational stages of the Proposed Scheme. The steps comprise the following, which are discussed further below:

- Step 1: Define environmental sensitivity;
- Step 2: Define magnitude of change;
- Step 3: Define level of effect; and
- Step 4: Conclude on significance.

2.38 The method for assessing the level of effect will be based on:

- The environmental sensitivity of a receptor or receiving environment to change, including aspects such as adaptability and tolerance; and
- The magnitude of change (or impact) from the baseline conditions, including aspects such as probability / likelihood of occurrence, geographical extent, complexity, duration, and frequency.

2.39 Sensitivity (or value, importance, etc.) will be assessed on a scale of high, medium, low and negligible and the magnitude of change (or impact) will be assessed on a scale of large, medium, small and negligible.

2.40 Where relevant, other factors such as feedback from stakeholders, relevant legislation, international / national / regional / local standards and guidance and the inter-relationship between effects will also be considered.

2.41 The interpretation and use of the above will be set out within the assessment methodology of each technical topic within the ES.

2.42 The assignment of the level of effect will be based on professional judgement with the support of the matrix below (**Table 2.1**), which is seen as a tool to assist with the process. Whilst the matrix within **Table 2.1** provides ranges, this is to guide the competent expert and a definitive level of effect will be provided, where possible, for each effect.

Table 2.1: Matrix to support determining the level of effect

Magnitude of change (or impact)		Sensitivity (or value, importance, etc.)			
		High	Medium	Low	Negligible
	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

2.43 The terms set out in **Table 2.1** used to define the level of effects identified are described as follows and these can be 'beneficial' or 'adverse':

- **Major effect** – where the Proposed Scheme is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity;
- **Moderate effect** – where the Proposed Scheme is likely to cause either a considerable change from the baseline conditions at a receptor that has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability;
- **Minor effect** – where the Proposed Scheme is likely to cause a small, but noticeable change from the baseline conditions on a receptor that has limited adaptability, tolerance or recoverability or is of the highest sensitivity or a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change and / or can recover from the change; and
- **Negligible** – where the Proposed Scheme is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor that is not considered sensitive to a change.

2.44 For each effect, a binary judgement will be made as to whether the effect is 'Significant' or 'Not Significant'. This determination will be based on professional judgement and / or relevant guidance and standards, where applicable. Significance will only be concluded for residual effects (i.e. following the identification of secondary mitigation or enhancement).

2.45 Effects will also be described in line with the requirements of the EIA Regulations (i.e. as direct or indirect; short (<1 year), medium (1 – 10 years) or long-term (10+ years); permanent or temporary).

2.46 Summary of effect tables that outline the likely significant effects, receptors, residual level of effect and whether this is considered to be 'Significant' or 'Not Significant' will be provided at the end of each Technical Chapter within the ES.

2.47 Cumulative effects will be considered as a single co-ordinated assessment as outlined in **Chapter 7**.

Format of the ES

2.48 The ES will comprise three volumes:

- **Volume 1: Primary Report and Supporting Graphics;**
- **Volume 2: Technical Appendices to the Primary Report; and**
- **Volume 3: Non-Technical Summary.**

Competent Expertise

2.49 Regulation 18, Paragraph 5(a) of the EIA Regulations requires the ES to be prepared by competent experts.

2.50 The EIA will be led by Turley. ISEP has awarded Turley the EIA Quality Mark in recognition of our technical quality and commitment to improvement in practice.

2.51 All technical assessments within the EIA will be undertaken by a suitably qualified project team, inclusive of a thorough technical review to assure technical credibility, followed by a subsequent procedural review by the EIA co-ordination team and EIA Project Director.

2.52 In line with the EIA Regulations, all contributors to the EIA are competent experts in EIA and this will be demonstrated in the ES with an overview of each key expert's qualifications, professional accreditations, and experience.

Interaction of the ES with Other Application Documents and Plans

2.53 The Application will be accompanied by a number of documents and plans. At this stage, none of the application reports are anticipated to be appended to the ES. Where application reports contain information of relevance to the EIA, this will be summarised in the ES to ensure sufficient and robust data is included.

3. Site Context

Overview

3.1 This Chapter summarises the location of the Site and its wider setting. Technical baseline information is provided in **Chapter 5** (for those topics for which no likely significant effects are identified) and in **Chapter 6** (in relation to transport for which potential likely significant effects have been identified).

Location and Land Use

3.2 The Site (**Figure 1.1**) comprises the existing and operational Allianz Stadium located within the LBRuT. The Site is bound to the north by Whitton Dene (with Mogden Sewage Works further to the north), to the east by Rugby Road, to the south by Whitton Road and to the west by the Duke of Northumberland River with Chase Bridge School and the Cardinal Vaughan Playing Fields on the opposite side of the river. Whilst the Stadium is located within the LBRuT, the opposite side of Whitton Dene and Rugby Road are within the London Borough of Hounslow (the LBH). The surrounding area to the Site is characterised by commercial uses, with low rise residential areas present to the north-east and south of the Site.

3.3 Currently, Allianz Stadium has permission for an unrestricted number of sporting events throughout the year at a capacity of 82,000 spectators, and three non-sporting events (concerts) a year at a capacity of 55,000 spectators.

4. High Level Development Specification

Scheme Principles

4.1 The Proposed Scheme is to increase the number of major non-sporting event days at Allianz Stadium from the existing 3 per annum to 15 per annum (permanent permission, to be grouped, see 'Timescales' below). A major non-sporting event will include set up days (up to five days[9]) for the erection and provision of equipment and infrastructure; activities (e.g. music, shows and rehearsals) within the bowl of the stadium; and take down days (up to three days[10]) for the dismantle and removal of equipment and infrastructure following the event. The capacity for these major non-sporting event days is proposed to be increased from 55,000 to 75,000 spectators.

4.2 The timings for the major non-sporting events would remain as existing, which is a finish time of 22:30. There will be an added provision to allow for irregular extension of up to 10 minutes as required (under exceptional circumstances).

4.3 During the major non-sporting events, in line with current arrangements, any promoters compound (including car parking / drop off and pick up areas) will be within the Site boundary. Arrival and departure of the heavy vehicles carrying rigs will be via Rugby Road to the north of the stadium.

4.4 An Event Management Plan will be in place that will include:

- Preferred routes for arrival and departure of heavy vehicles;
- Timing of arrival and departure of heavy vehicles;
- Timing of rigging and de-rigging activity outside the stadium bowl but within the Site perimeter; and
- Crowd management procedures.

4.5 A Noise Management Plan for major non-sport events will be in place that will include:

- Procedures for the monitoring of music noise from concerts;
- Determining noise monitoring locations representative of community impacts; and
- Description of how members of the public can make complaints and how these will be responded to on the day of the major non-sport event.

4.6 A package of transport interventions is being developed to improve and optimise the existing transport management and support the application. This package will benefit the management of all events at Twickenham, not just the additional major non-sport events. At a high level, the package includes an enhanced digital and ticketing strategy,

[9] This is as per the existing arrangements for major non-sporting events.
[10] This is as per the existing arrangements for major non-sporting events.

optimisation of pre-match road closures and traffic management, a review of Twickenham Station operations, improved management of the A316 crossing, a refined wayfinding strategy, promotion of additional rail stations, enhanced shuttle bus management, improved taxi and private hire vehicle (PHV) strategies, and improved event-day on-site travel information. Further details are set out under 'Secondary Mitigation' in **Chapter 6: Transport**.

4.7 No physical works are required to Allianz Stadium in order to accommodate the Proposed Scheme, therefore no construction is proposed. The exception to this is minimal works within the stadium bowl and any works required to implement the transport interventions, which are subject to refinements and agreement with the LBRuT.

Timescales

4.8 There will be a staggered introduction up to the maximum number of major non-sporting events, as follows:

- **2027** – 6 major non-sporting days with no more than 4 separate events and 1 event outside of summer months[11];
- **2028** – 12 major non-sporting days with no more than 6 separate events and 2 events outside of summer months; and
- **2029** – 15 major non-sporting days with no more than 8 separate events and 3 events outside of summer months.

4.9 There will be no more than 4 consecutive major non-sporting event days in any two-week period across all years.

[11] Summer months are defined as May – September.

5. Technical Topics which are Not Significant

5.1 As part of the EIA process and based on the information available to date, there are several technical topics for which a further detailed assessment as part of the EIA is not justified and these topics (and related effects) will not be reported within the ES (i.e., 'scoped out').

Construction Stage

5.2 No physical works are required to Allianz Stadium in order to accommodate the increase in major non-sporting event days, therefore no construction is proposed. The exception to this is minimal works within the stadium bowl and any works required to implement the transport interventions, which are subject to refinements and agreement with the LBRuT. Any such interventions will result in very limited disturbance due to the scale and nature of the interventions proposed (e.g. signage to improve wayfinding).

5.3 Therefore, construction stage effects for all topics are not considered to be significant and will not be considered further in the EIA or reported in the ES.

Operational Stage

5.4 The technical topics for which no likely significant environmental effects during operation have been identified are:

- Air Quality;
- Noise and Vibration;
- Biodiversity;
- Water Environment;
- Ground Conditions and Contamination;
- Archaeology;
- Built Heritage;
- Townscape and Visual;
- Artificial Lighting;
- Climate Change;
- Socio-Economics and Human Health;
- Major Accidents and/or Disasters; and
- Waste.

5.5 The technical topics listed above are considered in turn below, with a factual evidence base provided. This reflects and builds upon the evidence set out in the EIA Screening Report (**Appendix 1.1**) and the further screening information submitted to LBRuT (**Appendix 1.2**), as well as responses to items raised in the LBRuT's EIA Scoping Opinion (**Appendix 1.3**).

Air Quality

Technical Baseline

5.6 The Site is located within the Richmond Air Quality Management Area (AQMA) which was declared by the LBRuT for exceedances of the annual mean nitrogen dioxide (NO_2) air quality objective. Albeit, the AQMA designated is borough-wide, and specific and recent data as set out below demonstrates air quality is good in the area.

5.7 Monitoring undertaken by the LBRuT and London Borough of Hounslow (LBH) demonstrates that the annual mean NO_2 objective of 40µg.m^{-3} was not exceeded at any monitoring locations near the Site since 2021. A number of monitoring locations recorded exceedances of the objective prior to 2021 however, the data demonstrate a strong downward trend in concentrations indicating that air quality in the vicinity of the Site has improved significantly over the past seven years.

5.8 Since 2018, not one hour of any calendar year has recorded concentrations of the 1-hour mean objective for NO_2 greater than 200µg.m^{-3} at any analyser operated by the LBRuT or LBH[12].

5.9 The annual and daily mean PM_{10}, and the annual mean $PM_{2.5}$ objectives were met at all automatic analysers in all years in the LBRuT and LBH for which data were available for review[13].

Effects Unlikely / Not Significant

<u>Changes in air quality pollutant concentrations due to exhaust emissions from traffic generated by the Proposed Scheme</u>

5.10 Existing air quality in the area is good, with background concentrations below objectives.

[12] Up to 18 hours are permitted per year to exceed concentrations of 200µg.m^{-3}. Monitoring for this objective is undertaken using automatic analysers, none of which are located close to the Site. The analysers are located in areas experiencing greater volumes of traffic and therefore higher levels of pollution relative to those experienced near the Site. It is therefore considered that 1-hour mean NO_2 concentrations near the Site would be lower than those recorded at the analysers, and the 1-hour mean NO_2 objective is also achieved at the Site and the surrounding area.

[13] No analysers recording PM_{10} or $PM_{2.5}$ concentrations are located near the Site. Given that the analysers in the LBRuT and LBH are located in areas experiencing greater exposure to pollutant sources than the area around the Site, it is considered that PM_{10} and $PM_{2.5}$ concentrations around the Site would be lower than those at the analysers, and therefore also compliant with the relevant air quality objectives.

5.11 Capacity for non-sporting event days will be lower than for existing sporting events; traffic levels reduce on event days due to non-attendees avoiding the area during event times or choosing to retime or not travel during events; and non-sporting events generate lower traffic levels than sporting events. Given there are no significant effects associated with current uses of the Allianz Stadium, and baseline trends show improvements in air quality, no significant effects from the non-sport events are anticipated.

5.12 The traffic mitigation measures (existing and proposed, as set out in **Chapter 4**) also represent a benefit to local air quality through not only minimising the impact of the proposed additional non-sporting event days, but also reducing the existing impact of the consented sporting and non-sporting events at Allianz Stadium.

5.13 Given the above, it is considered highly unlikely that the Proposed Scheme would give rise to an increase in local pollutant levels such that there would be a significant effect. Therefore, air quality will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**) which stated: *"The Council considers that all concerns for air quality can be adequately addressed through an Air Quality Assessment. As such, it will not require an EIA to be undertaken to accompany any planning application for this development."*

Noise and Vibration

Technical Baseline

5.14 The wider area around the Site comprises the residential areas of Twickenham, Isleworth and Hounslow.

5.15 Nearby noise sensitive receptors include (but are not limited to) residential properties located along Varsity Drive to the east; Whitton Road; Palmerston Road; Chudleigh Road; Tayben Ave; and Talma Gardens to the south, and along Harlequin Close and Whitton Dene to the north.

Effects Unlikely / Not Significant

Changes to the noise environment as a result of rigging and de-rigging within Allianz Stadium

5.16 Noise from rigging and de-rigging of staging, lights and PA etc. associated with major non-sport events within the Allianz Stadium will be substantially screened from nearby sensitive receptors by the structure of the stadium. Arrival and departure of heavy vehicles carrying rigs will be routed via the north car park to avoid the majority of residential receptors to the south of the Site. Measures to control noise from rigging and de-rigging will be managed through the Environmental Management Plan as set out in **Chapter 4**.

5.17 Overall, the noise from rigging and de-rigging activities associated with the Proposed Scheme is not considered to be significant and will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**), which stated: "*In terms of the impact of rigging and de-rigging within Allianz Stadium, the continuous nature of the structure in terms of enclosure is noted with beneficial*

screening. With suitable conditions, this element can be controlled to ensure there will not be a significant noise impact."

Changes to the noise environment as a result of traffic generated by the Proposed Scheme

5.18 A 20% reduction in traffic flow or 25% increase in traffic flow is required for a 1 decibel change in traffic noise level. This is rated by the DMRB[14] as a negligible to minor impact in the short term which would not be significant. Trip generation, congestion levels and the overall transport impact of a non-sporting event is likely to be less or equal to a full capacity sporting event, any effect will be short term and not significant. Contextualised, an increase of traffic flows in the vicinity of Allianz Stadium from the non-sporting events compared to the previous non-sporting event day capacity will not increase traffic flows by more than 25%, nor is there a decrease of 20% when compared to a rugby event. Therefore the noise will not be significantly worse than existing events, the frequency of these will just increase.

5.19 Overall, changes to the noise environment as a result of traffic from the Proposed Scheme is not considered to be significant and will not be considered further in the EIA or reported in the ES.

Changes to the noise environment as a result of crowd noise

5.20 As set out in **Chapter 3**, large crowds already arrive and depart from Allianz Stadium for sporting events. This occurs without significant adverse noise effects. Whilst the crowds from the additional non-sporting events will depart later in the evening than most sporting events, the crowds will be smaller (7,000 less people) and the duration of crowd dispersal shorter. Crowd management procedures will be set out in the Event Management Plan (as per current arrangement for events), as set out in **Chapter 4**.

5.21 Further analysis of the noise from crowds travelling to/from the Site from Twickenham Station is being undertaken, in agreement with the EHO. However, the effects are not considered to be significant due to the existing levels of noise; enhanced sound insultation in place at properties in the vicinity of Twickenham Station; and event noise management procedures.

5.22 Overall, the noise from crowds arriving/departing non-sporting event days is not considered to be significant. The further analysis will be presented as an appendix to the ES.

Changes to the noise environment as a result of music noise

5.23 Whilst the increase in non-sporting event days will result in additional days throughout the year where there will be music noise from concerts, the stadium is now a contiguous bowl which effectively contains noise within it and substantially reduces the breakout of noise. This is an improved position from when concerts were first permitted at Allianz Stadium when the bowl was more open and 'leaked' considerably more noise. Consequently, the noise levels from non-sporting events at the nearest

[14] LA 111 revision 2 Noise and vibration-web.pdf

receptors i.e. the most affected, are currently (and will be) below the limits on the existing planning permission and premises licence.

5.24 Planning Practice Guidance includes the long-established principle that for non-continuous sources of noise (such as concerts at the stadium) the number of noise events, and the frequency and pattern of occurrence of the noise are important factors in assessing the impact. The proposal for non-sporting events at the stadium is for the grouping of small number events (as set out in **Chapter 4**) so that impacts are confined to defined periods separated by episodes of respite, rather than drawn out over a much longer period i.e. the concentration of events over a shorter cycle rather than the extending of events over much longer period.

5.25 In addition to the above, music concerts are not permanent, are transient and any adverse noise impacts will reverse as soon as the event is over. Whilst the Proposed Scheme is to increase the number of non-sporting event days, they will still only occur for a small minority of the year and for the substantial majority of the year there will be no music concerts at the stadium.

5.26 As set out in **Chapter 4**, a Noise Management Plan will be in place for non-sporting events which control music noise effects.

5.27 Overall, change to the noise environment from music noise is not considered to be significant and will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**) which stated: "*Similarly, in terms of the Allianz Stadium the use for music events has not resulted in significant noise complaints highlighting the original thresholds based on frequency of occurrence, while cautious at the time, may have been unduly limiting in context. As such, there is scope to adjust the thresholds for a contextual increase in Music Noise Level or event days without causing unacceptable disturbance to affected communities in the Stadium environs."*

Biodiversity

Technical Baseline

5.28 The nearest statutory designated sites are as follows:

- Syon Park Site of Special Scientific Interest (SSSI), located 2.3km north-east;
- The Richmond Park National Nature Reserve (NNR), Special Areas of Conservation (SAC), and SSSI, is located 2.8km east;
- Bushy Park and Home Park SSSI, located 3.1km south; and
- The Kempton Park Reserves SSSI and Local Nature Reserves (LNR), and the South West London Waterbodies SPA and Ramsar is located approximately 4.5km south-west of the Site.

5.29 The closest Local Nature Reserve (LNR) to the Site is the Ham Lands LNR, 1.5km south-east.

5.30 The Duke of Northumberland's SINC is located on the western boundary of the Site.

5.31 Habitats on Site primarily comprise of hardstanding/building (i.e. the stadium), with some trees.

Effects Unlikely / Not Significant
Disturbance to habitats, species and designated sites

5.32 No habitat removal or alterations are proposed. The Proposed Scheme will be implemented at the established Allianz Stadium, which already hosts major non-sporting events. There will be no change to the baseline. The Site will continue to be hardstanding and drain by existing mechanisms so there will be no effect on the nearby designated sites.

5.33 Overall, there will be no significant effects to biodiversity and this will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**), which stated: "*Overall, it is not considered that significant effects to biodiversity will occur that can't be mitigated and is therefore not likely to result in significant effects.*"

Water Environment

Technical Baseline

5.34 The Duke of Northumberland's River, an Environmental Agency Main River, is located adjacent to the Site boundary to the west. Additionally, a tributary from the River Crane is located to the east (just beyond Rugby Road) and passes through the Site culverted.

5.35 The Site is located within Flood Zone 2 (a medium probability of flooding).

5.36 The Site largely has a 1 in 100 to 1 in 1000 annual likelihood of surface water flooding, with some limited areas around the edges of the stadium within a 1 in 30 likelihood.

Effects Unlikely / Not Significant
Increased risk of flooding or contamination of water bodies

5.37 No physical works are proposed and therefore the flood risk of the Site and surrounding area will not be changed by the Proposed Scheme. No potentially polluting uses are proposed that would affect the quality of the adjacent watercourses.

5.38 Overall, there will be no significant effects to the water environment and this will not be considered further in the EIA or reported in the ES.

Ground Conditions and Contamination

Technical Baseline

5.39 There are no potentially contaminating uses on Site currently.

5.40 The potential for Radon within the Site is low, with less than 1% of homes being at or above the Action Level.

5.41 The Site is at very low risk of UXO.

Effects Unlikely / Not Significant
Potential release or migration of contamination

5.42 No physical works are proposed, and therefore the ground will remain as per the existing baseline.

5.43 Overall, there will be no significant effects to ground conditions and this will not be considered further in the EIA or reported in the ES.

Archaeology

Technical Baseline
5.44 The Site is currently developed and comprises hardstanding, suggesting any archaeological remains that may have previously present have been truncated.

Effects Unlikely / Not Significant
Disturbance to potential archaeological remains

5.45 No physical works are proposed, and therefore the ground will remain as per the existing baseline.

5.46 Overall, there will be no significant effects to archaeology and this will not be considered further in the EIA or reported in the ES.

Built Heritage

Technical Baseline
5.47 No conservation areas are located within/adjacent to the Site. The closest is the Rosecroft Gardens Whitton conservation area approximately 380m south west of the Site.

5.48 No scheduled monuments are located nearby (the closest being over 1km away).

5.49 There are no listed buildings within or adjacent to the Site. Several Listed Buildings are located in the wider surrounding area, the closest being:

- Church of All Hallows, a Grade I listed building located approximately 350m south-east of the Site;
- Kneller Hall And Boundary Walls Royal Military School Of Music, a Grade II listed building located 520m west of the Site; and
- Gatepiers To Royal Military School Of Music, located 545m west of the Site.

5.50 The Royal Botanical Gardens, Kew World Heritage Site is located approximately 1.5km north east.

Effects Unlikely / Not Significant
Change to the setting of built heritage assets

5.51 No additional massing is proposed that would change the setting of any built heritage assets (the surrounding listed buildings and conservation areas).

5.52 Whilst the number of major non-sporting event days would increase, thus increasing the frequency of activity on Site (which could influence visual amenity surrounding built heritage assets), this would be in a similar manner to the events which already occur. Furthermore, activity on Site would be temporary, over a maximum number of four consecutive event days (up to the total 15 across the year).

5.53 Overall, there will be no significant built heritage effects and this will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**) which stated: *"Given the temporary nature of the proposal, heritage assessments and views analysis will not be necessary, and this impact is not deemed complex, or significant."*

Townscape and Visual

Technical Baseline

5.54 The Site is located within the 115 Thames Valley National Character Area (NCA)[15].

5.55 The Site is not located within or near a protected vista in London.

Effects Unlikely / Not Significant

Change to the townscape character or visual amenity

5.56 No additional massing is proposed that would change the townscape character or change the visual amenity for surrounding receptors.

5.57 Whilst the number of major non-sporting event days would increase, thus increasing the frequency of activity on Site (which could influence visual amenity), this would be in a similar manner to the events which already occur. Furthermore, activity on Site would be temporary, over a maximum number of four consecutive event days (up to the total 15 across the year).

5.58 Overall, there will be no significant townscape and visual effects and this will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**) which stated: *"Given the temporary nature of the proposal, heritage assessments and views analysis will not be necessary, and this impact is not deemed complex, or significant."*

[15] The NCA Profile 115 notes that this '*provides a unifying feature through a very diverse landscape of urban and suburban settlements, infrastructure networks, fragmented agricultural land, historic parks, commons, woodland, reservoirs and extensive minerals workings..'* Available at: https://publications.naturalengland.org.uk/publication/3865943

Artificial Lighting

Technical Baseline

5.59 Existing lighting installations are on Site to enable the use as a sport stadium (i.e. lighting onto the pitch and in the stands; and street lighting for the public areas surrounding the stadium). The surrounding road network includes street lamps.

5.60 The Environmental Zone of the Site is likely to be E3[16], which reflects the suburban area with a medium district brightness.

Effects Unlikely / Not Significant

Increase in lighting disturbance

5.61 No new permanent lighting installations are proposed. Lighting arrangements will be as per the existing regime for sporting events and the three permitted non-sporting event days. Additional temporary lighting may be required during the non-sporting events (including event lighting in the stadium bowl and for wayfinding / public concourse areas outside the stadium bowl), however this will be temporary to the event day and duration (i.e. up to a total of 15 days throughout the year).

5.62 Overall, effects of artificial lighting will not be significant and this will not be considered further in the EIA or reported in the ES.

Climate Change

Technical Baseline

5.63 There are existing greenhouse gas emissions associated with the operation of the Allianz Stadium, albeit these have not been quantified.

Effects Unlikely / Not Significant

Increase in greenhouse gas emissions

5.64 The increase in the use of the stadium for non-sporting event days would result in only a small uplift in greenhouse gas emissions.

5.65 Overall, there will be no significant effects associated with greenhouse gas emissions and this will not be considered further in the EIA or reported in the ES. This is in accordance with the Screening Opinion (**Appendix 1.3**) which stated: *"If the above are achieved, it is not considered that the proposed development would have a significant impact on climate change and greenhouse gas emissions."*

Resilience of the Proposed Scheme to climate change

5.66 The Allianz Stadium is already operational and the Proposed Scheme will not change any of the existing development (with the exception of minor works as set out in **Chapter 4**). The Proposed Scheme is not considered to be vulnerable to changes in the climate as it relates to an increase in the use of the stadium for non-sport events, for which the Allianz Stadium already has permission for three a year, as well as non-

[16] Institution of Lighting Professionals (2021). Guidance Note 01/21: The Reduction of Obtrusive Light.

sporting events. As set out above, the flood risk will not be changed by the Proposed Scheme.

5.67 Overall, there will be no significant effects associated with resilience of the Proposed Scheme to climate change and this will not be considered further in the EIA or reported in the ES.

Socio-Economics and Human Health

Technical Baseline

5.68 The socio-economic baseline is set out in Annex 1 of **Appendix 1.2**. A summary is provided below:

- The total value of the tourism sector baseline in Richmond and Hounslow is £600.4 million;
- Within Richmond and Hounslow the percentage of all employees in the accommodation and food services sector is 10% and 7.3% respectively. The percentages of all employees in the arts, entertainment and recreation sector is 8.9% and 1.8% respectively; and
- The existing Allianz Stadium is estimated to have a baseline Gross Value Added (GVA) of £91 million for Richmond and Hounslow, 1,270 jobs and 1.2 million venue attendees.

Effects Unlikely / Not Significant

Change to economic productivity

5.69 The increase in the number of non-sporting event days would result in an increase to economic productivity (e.g. from sales and spending in the local area) and creation of additional jobs associated with operation of the stadium. Details of the productivity uplift is set out in Annex 1 of **Appendix 1.2**. Whilst a beneficial effect, in the context of Allianz Stadium already operating events, the increase in economic productivity would not be significant.

5.70 Where relevant, the human health effects related to the increase in traffic and noise are considered under 'Transport' (**Chapter 6**), and 'Noise and Vibration' and 'Air Quality' above.

5.71 Overall, there will be no significant socio-economic and human health effects and this will not be considered further in the EIA or reported in the ES.

Major Accidents and/or Disasters

Technical Baseline

5.72 The Site is not within a zone on which the Health and Safety Executive would need to be consulted.

5.73 The nearest COMAH establishment is the Mogden sewage treatment works, approximately 80m north of the Site, which is a lower tier establishment.

Effects Unlikely / Not Significant

Increased risk of major accidents and/or disasters

5.74 Sporting events are permitted at Allianz Stadium throughout the year, as well as three major non-sporting event days, all of which already have the correct procedures in place to ensure safety and are not considered to be at risk from the nearby Mogden sewage treatment works.

5.75 The existing crowd management regime will be implemented for the proposed non-sport events, including on weekdays and evenings. This includes hiring stewards, local authority staff and police officers for security within the area.

5.76 The risk of major accidents and/or disasters will be controlled as per the current regime to avoid significant effects, and this will not be considered further in the EIA or reported in the ES.

Waste

Technical Baseline

5.77 The existing operations of the Allianz Stadium will result in waste generation, albeit this has not been quantified.

Effects Unlikely / Not Significant

Increased generation of waste

5.78 Whilst the number of major non-sporting event days will increase, any waste associated with this will be managed in accordance with the current regime at Allianz Stadium.

5.79 The RFU currently employ the LBRuT for post-event clean up, including at Twickenham Station, which happens overnight following an event. A contract will be agreed with the LBRuT for the non-sport events proposed so this service is continued.

5.80 Overall, there will be no significant waste effects and this will not be considered further in the EIA or reported in the ES.

6. Transport

Technical Baseline

6.1 A summary of the key characteristics of the Site and surrounding area for transport is as follows:

- The Site is located approximately 1km from Twickenham station and 2.5km from Hounslow East station which is the closest station with London Underground services;
- The Site is well-connected by road, situated immediately north of the A316, which links directly to the national highway network via the M3 and M25 motorways;
- The closest bus stops to the Stadium are located on Whitton Road and Rugby Road, to the south and east of the Site respectively; and
- To control the traffic from the existing events, Allianz Stadium has a proven and robust event-day transport strategy which was developed in coordination with local authorities and transport operators. This implements measures such as temporary road closures, Restricted Zones on event days (triggered by crowds of >30,000 attending events at Allianz Stadium), stewarding, traffic management, shuttle bus services, and enhanced public transport operations.

Proposed Scope of Assessment

6.2 The below sets out the proposed scope of assessment based on an understanding of the characteristics of the Site, surrounding area and the Proposed Scheme (**Chapter 4**).

Effects Unlikely/Not Significant

6.3 The following effects are considered unlikely to be significant and therefore will not be considered further within the EIA or reported in the ES. A factual evidence base has been provided below to support this.

Hazardous loads

6.4 'Hazardous Loads' are not considered relevant to the nature of the Proposed Scheme. This topic typically relates to developments involving the manufacture, storage or transport of dangerous substances, such as industrial facilities or freight depots. As the Proposed Scheme relates to an uplift in stadium event capacity and frequency, it is not likely to give rise to the movement of hazardous materials on the transport network.

6.5 Therefore, hazardous loads will not be considered further in the EIA or reported in the ES.

Effects Likely/Significant

6.6 **Table 6.1** outlines the effects (and associated receptor) that are considered to be potentially likely and significant and therefore will be assessed within the EIA and reported in the ES.

Table 6.1: Effects Considered Potentially Likely to be Significant

Potential Significant Effect	Receptors	Applicable Development Stage
Severance of communities	Users of the local residential street network	Operation
Road vehicle driver and passenger delay	Users of the local highway network	Operation
Non-motorised user (NMU) delay	Users of the local residential street network	Operation
Non-motorised user (NMU) amenity	Users of the local residential street network	Operation
Fear and intimidation on and by road users	Users of the local residential street network	Operation
Road user and pedestrian safety	Users of the local highway and residential street network	Operation
Public transport delay	Users of local bus services, rail stations, and the London wide train/tube network	Operation

6.7 As set out in **Chapter 5**, a construction stage scenario will not be assessed as the proposals relate to the event planning and licensing application, which is forecast to result in only limited construction-related activity (as set out in **Chapter 4**).

6.8 While no operational effects (with the exception of hazardous loads) have been scoped out at this stage, this does not imply that all such effects will ultimately be significant as a result of the Proposed Scheme; rather, in the interest of providing a robust assessment, the potential impacts of the Proposed Scheme against each of these criteria have been considered within this ES.

6.9 It also should be recognised that the transport-related effects associated with this planning application for non-sporting events at the Stadium are temporary in nature and would not result in any permanent effects on the local highway/transport network. The events would occur on a limited number of days each year, with defined start and end times, and would be managed through established event-day procedures already operating for current events at the Stadium, including regular events on a larger scale (the maximum capacity at Rugby events is 82,000 spectators).

Assessment Methodology of Effects Likely/Significant

6.10 The assessment of effects in the ES will be informed by the following Institute of Environmental and Sustainability Professionals (ISEP, formerly IEMA) guidelines: 'Environmental Assessment of Traffic and Movement'[17].

6.11 The EIA Screening Report (**Appendix 1.1**) sets out the road links that will be considered as part of the traffic flow analysis in the ES. This consists of the following links:

- A316 Chertsey Road (west of the A316 / Whitton Road roundabout);
- A316 Chertsey Road (east of the A316 / Whitton Road roundabout);
- London Road (north of the London Road roundabout); and
- Whitton Dene (east of the Rugby Road roundabout).

6.12 Baseline traffic flows will be derived from existing DfT traffic count data within the study area, supported by a first principles distribution assessment. Where required, DfT counts will be factored to a current baseline year and to future assessment years using TEMPRO 8.1. No new traffic surveys are proposed, as the DfT point count dataset is considered a robust and appropriate basis for the assessment.

6.13 In addition to the links included in the traffic flow analysis, the ES Study Area will also cover several links that are closed to traffic during major events at the Stadium. These links will be qualitatively included in the assessment, although no traffic data will be obtained for them due to event-day road closures. These additional links are as follows:

- London Road (closed from York Street to the London Road roundabout);
- Whitton Road (closed from London Road to Kneller Road); and
- Rugby Road (closed from Whitton Road to Mogden Lane).

6.14 Within the ISEP Guidelines, two broad rules are suggested that can be used as a screening process to limit the scale and extent of the assessment:

- **Rule 1** – include highway links where annual average daily traffic (AADT) flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
- **Rule 2** – include any other specifically sensitive areas where AADT traffic flows have increased by 10% or more (examples of these areas in Twickenham include community uses such as schools, colleges, libraries and religious buildings).

[17] Institute of Sustainability and Environmental Professionals Guidelines (July 2023). *Environmental Assessment of Traffic and Movement*. [Online]. Available at: iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf [Accessed 02/01/2025].

6.15 Where the predicted increase in traffic flows is lower than the above thresholds, the ISEP Guidelines suggest that the magnitude of impact and therefore the resulting level of the effect can be stated to be Negligible (not significant) such that further detailed assessments are not warranted. Furthermore, increases in traffic flows below 10% are generally considered to be insignificant in environmental terms given that daily variations in background traffic flow may vary by this amount. Therefore, any effect below this threshold is considered to be negligible.

6.16 When applying the 'Rule 1 and 2' guidance, none of the identified highway links in the vicinity of the Stadium exceed the relevant thresholds and therefore would not typically require further assessment; however, given the unique characteristics of the Proposed Scheme, including a concentrated peak in travel activity during both arrival and departure periods associated with major events at the Stadium, a full assessment of each criteria will be undertaken. This approach ensures a comprehensive and robust evaluation of the potential environmental effects.

6.17 This assessment will primarily compare the environmental impacts of an existing, 55,000 capacity non-sporting event (which have previously been held at the Stadium on both weekdays and weekend days) with those of the proposed 75,000 capacity non-sporting events. This enables a focused assessment of the incremental effects associated with the uplift in capacity to 75,000 and allows for the identification of any additional mitigation measures that may be required to satisfactorily accommodated the increase in travel demand.

6.18 A direct comparison between a proposed event day and a non-event day will not be undertaken for each environmental effect. It is noted that this would identify significant impacts across many criteria (for example, NMU delay and amenity, road vehicle and passenger delay, and public transport delay); however, it is important to contextualise such effects within the current operational baseline of the stadium. Major events are currently held regularly at the stadium each year, with up to 82,000 spectators generated by each major sporting event (primarily held on weekend days) and up to 55,000 spectators generated by major non-sporting (concert) events (held historically on both weekend and weekdays). Robust, tried and tested management and mitigation measures implemented by the RFU help to reduce the potential for significant residual effects and minimise impacts on the local community.

6.19 On this basis, comparing a proposed 75,000 capacity event to a non-event day is not considered to provide a fair or appropriate assessment given the stadium already exists and regularly generates these impacts; indeed, the impact of hosting major events at the stadium has been managed for well over 100 years.

6.20 The assessment of likely significant effects to sensitive receptors will consider the sensitivity of the receptor (on a scale of high, medium, low and negligible) and the magnitude of change (on a scale of large, medium, small and negligible) to determine the level of effect on a scale of major, moderate, minor and negligible. Significant effects will be determined following this through professional judgment.

Limitations and Assumptions

6.21 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- Use of historic mode share data: mode share data from the 2013 Rihanna concert at the Stadium will inform the assessment. While the data is considered older, no significant changes to local transport infrastructure have occurred since. It is acknowledged that broader travel behaviours, such as the expansion of the Ultra Low Emission Zone or increased cycling uptake, may have evolved, but the data remains a robust worst-case basis for assessing car use. This approach is consistent with industry practice, particularly given that the 2011 Census continues to be widely used in Transport Assessments due to the limitations of the 2021 Census data as a result of COVID-19 pandemic impacts;

- Event type assumptions: concerts will be used as a proxy for assessing the transport impacts of non-sporting events, as they are expected to form the majority of future events. Analysis of comparable London venues suggests that over 90% of non-sporting events are concerts, with other entertainment types (for example, comedy, festivals) making up the minority. Concert profiles, including gradual arrivals due to support acts, are not expected to significantly alter overall transport demand;

- Parking data limitations: a high proportion of unallocated parking, particularly private driveway rentals, falls outside RFU control and cannot be accurately mapped. This prevents meaningful vehicle routing analysis and limits the feasibility of detailed junction level modelling; however, in the interest of providing a robust assessment, all car trips associated with the Stadium (including unallocated parking) will be assumed to use the A316 at some point in their journey;

- Traffic modelling constraints: due to the nature of event day operations (which include road closures, rerouting and communications in advance), traditional traffic modelling would not reliably reflect real world conditions. Drivers frequently re-time or reroute based on event day messaging, resulting in variable baseline and future traffic patterns. A worst-case routing analysis will be included to ensure a conservative assessment; and

- Speed data availability: in the absence of available average speed data for all links assessed, assumed vehicle speeds will be based on posted limits. This may not reflect actual speeds during event days, when traffic conditions and management measures typically result in slower movements.

6.22 Despite the limitations and assumptions outlined above, the trip generation assessment for proposed non-sporting events at Allianz Stadium will draw on a comprehensive range of data sources. These include detailed ticket distribution analysis, observed travel patterns from previous concerts and rugby matches, as well as extensive engagement with key transport stakeholders. This robust evidence base will support a clear understanding of transport impacts and highlight where interventions can most effectively manage event-related travel demand.

7. Approach to the Assessment of Cumulative Effects

Overview

7.1 This chapter establishes the methodology for the assessment of cumulative effects arising from the Proposed Scheme.

7.2 The EIA Regulations, through Schedule 4, Paragraph 5e and Regulation 4, Paragraph 2, requires the consideration of the culmination of effects with other *"existing and/or approved projects"*, as well as the interaction between effects identified at the project level.

7.3 To accord with the EIA Regulations and best practice guidance, the following types of cumulative effects will be considered within the EIA:

- **Effect interactions** (to accord with Regulation 4, Paragraph 2): the interactions and combination of environmental effects of the Proposed Scheme affecting the same receptor, either within the Site or in the local area; and

- **In-combination effects** (to accord with Schedule 4, Paragraph 5(e)): the interaction and combination of environmental effects of the Proposed Scheme with other existing or approved project (s) affecting the same receptor (hereinafter referred to as 'Cumulative Projects').

Assessment Methodology

7.4 PPG refers to the need for cumulative effects to be assessed as part of an ES, but at present, there is no widely accepted current methodology or best practice. As such, the methodology has been based on previous experience and knowledge at Turley, the types of receptors being assessed and the nature of the Proposed Scheme.

Effect Interactions

7.5 The requirement for an EIA was confirmed in the LBRuT's Screening Opinion (**Appendix 1.3**) which identified the potential for likely significant effects in relation to transport. Consequently, the only potential for effect interactions is from transport related effects. These will be reported in the transport chapter in the ES by identifying common receptors which experience effects above negligible. Where this is the case a qualitative assessment will be undertaken.

7.6 The qualitive assessment will include the following:

- Clear identification of specific receptor(s) considered for each effect 'contributing' to a potential effect interaction to understand the common receptor (and their attributes, such as location etc.).

- An appraisal where there are specific common receptors, considering.

- Magnitude of change (or impact) of each residual effect;
- Sensitivity (or value, importance, etc.) of the receptor / receiving environment to change;
- Duration (of the effects individually and collectively utilising the short / medium / long-term criteria set out in **Chapter 2**) and reversibility of the effect;
- If the effects are temporary and / or permanent;
- If the effects are experienced / occur concurrently or sequentially; and / or
- The geographical / spatial extent of the individual effects.

7.7 An overall qualitative assessment of the cumulative effects on the common receptors will then be made using the information contained within the transport ES Chapter and professional judgement.

7.8 Where possible, a conclusion on effect interactions will be provided discussing the likelihood of the effect interactions being 'Significant' or 'Not Significant'.

In-Combination effects

7.9 The assessment of potential in-combination effects will be undertaken using the methodology outlined below.

Step 1: Identification and evaluation of Projects for Consideration

7.10 A review of planning applications submitted to the LBRuT was undertaken in order to identify potential projects that could give rise to in-combination interactions with the Proposed Scheme. Applicable projects for consideration of in-combination effects were determined using the following criterion:

- Applications submitted within the last 5 years[18];
- Projects within 1km of the Site;
- Applications with a resolution to grant planning permission;
- Approved applications either under construction or not yet implemented; and
- Projects of a relevant scale (e.g. Nationally Significant Infrastructure Projects (NSIPs), Schedule 1 and 2 development[19]).

[18] It is assumed applications submitted prior to this has been built out and operational.

[19] Informed by the definition of major development by NPPF; the definition of Schedule 1 and Schedule 2 developments set out within the EIA Regulations; and developments that do not fall into the above but have notable implications due to location or scale.

7.11 This produced a shortlist of projects for further consideration in the in-combination assessment, termed as 'Cumulative Projects'. The Cumulative Projects are listed in **Table 7.1** and are outlined in **Figure 7.1: Cumulative Project Plan**.

Table 7.1: List of Cumulative Projects for In-Combination Assessment

Ref.	Application Number/Council ref/Location/Description	Status	Distance/Direction from Site	EIA/Not EIA
1	P/2019/3339 (LBH) 30 Rugby Road, Twickenham, TW1 1DG Demolition of existing buildings and redevelopment of the site to mixed use Class B8 (self-storage), Class B1 (office) and Class C3 (residential) arranged over two basement levels and six buildings arranged over ground and up to five storeys in height with associated landscaping, car parking and plant	Approved	24m east	Not EIA
2	22/3004/FUL (LBRuT) Kneller Hall Royal Military School Of Music Kneller Road Twickenham TW2 7DU The demolition of existing modern buildings on the site and the conversion of and extensions to Kneller Hall and other ancillary buildings associated with the former royal military music school to a day school (Use Class F1), together with the construction of associated new purpose-built buildings including teaching space, indoor sports facilities, sporting pavilion and forest school building. Alterations to the existing playing fields, to include an all weather pitch with fencingand floodlighting, flood lighting to existing tennis courts, sustainability measures and re-turfing. Provision of a new access from Whitton Dene, and other ancillary works including parking areas, hard and soft landscaping, lighting, access alterations and energy centre. Internal and external alterations to Kneller Hall and the curtilage listed buildings to facilitate the day school use, including demolition and rebuilding of single storey extension to the west wing of Kneller	Approved [20]	222m west	Not EIA

[20] This project and Cumulative Projects 3 and 4 were identified by the LBRuT to be considered in the transport analysis. To ensure alignment, they have been included here.

Ref.	Application Number/Council ref/Location/Description	Status	Distance/Direction from Site	EIA/Not EIA
	Hall, extension to the Band Practice Hall and re-opening of Whitton Dene site entrance.			
3	22/1168/FUL (LBRuT) Richmond Upon Thames College Langhorn Drive Twickenham TW2 7SJ Alterations and extension to existing Sports Hall including associated landscaping within the Tech Hub Development Zone to replace Tech Hub building as defined under application 15/3038/OUT (as amended), and erection of Sports Hall with associated car parking, landscaping, and other works within the Main College Development Zone including erection of a Science, Technology, Engineering and Maths (STEM) building as approved under application 19/2517/RES (as amended), retention of existing Main College building as approved under application 16/4747/RES (as amended), and associated on-site parking (non-residential) and access roads. Both Sports Halls to serve the college, schools and wider community. (Application accompanied by an Environmental Statement).	Under construction	150m south	EIA
4	21/3136/FUL (LBRuT) Richmond Upon Thames College Langhorn Drive Twickenham TW2 7SJ Demolition of existing college buildings, removal of hard-surfacing, site clearance and groundworks together with the redevelopment of the site to provide new residential units; together with associated parking, cycle parking, open space and landscaping.	Approved	360m south	EIA
5	WA010006 – Teddington Direct River Abstraction (TDRA) (NSIP) From Mogden Sewage Treatment Works to the River Thames upstream of Teddington Weir A Tertiary Treatment Facility with a peak output of 75Ml/d of recycled water; a recycled water drop shaft and approximately 4.5km	Pre-application stage Application expected to be submitte	25m north	EIA

Ref.	Application Number/Council ref/Location/Description	Status	Distance/Direction from Site	EIA/Not EIA
	pipeline with intermediate shafts located between Mogden Sewage Treatment Works and the River Thames upstream of Teddington Weir terminating in an outfall structure in or adjacent to the River Thames; a river water intake structure sized to abstract a maximum of 75Ml/d, located upstream of the outfall structure, a drop shaft, raw water pipeline and connection shaft to the Thames Lee Tunnel.	d in September 2026[21]		

7.12 In line with the EIA Regulations, this search has focused on projects and therefore is not inclusive of sites allocated within local plans, core strategy documents or supplementary planning documents.

Step 2: Assessment of In-combination Effects

7.13 Where available, consideration will be given to whether there is a concurrent construction or operational stage with the Proposed Scheme.

7.14 The sensitive receptors identified for the Proposed Scheme will be cross checked against the receptors identified within the potential approved projects. In order for there to be a potential in-combination effect, there needs to be a potential effect on the same receptor for a similar duration within the overall programme.

7.15 The qualitative evaluation at the receptor level will consider the following:

- Combined magnitude of change;
- Sensitivity/value/importance of the receptor/receiving environment to change; or/and
- Duration and reversibility of effect.

7.16 Through a combination of the qualitative evaluation and mitigation presented in the EIA, conclusions will be drawn as to the likelihood for significant in-combination environmental effects.

[21] Whilst this doesn't fit the criteria in the methodology set out above because no application has been submitted yet, given the proximity to the Site and the likely timings for the application to come forward, it has been included as a Cumulative Project to provide a comprehensive cumulative assessment.

8. Summary of EIA Scoping Report

8.1 **Chapter 5** identified a number of technical topics for which no likely or significant effects have been identified and are proposed to be 'scoped out' of the EIA and not reported in the ES, based on the technical evidence base provided. These are as follows:

- Air Quality;
- Noise and Vibration;
- Biodiversity;
- Water Environment;
- Ground Conditions and Contamination;
- Archaeology;
- Built Heritage;
- Townscape and Visual;
- Artificial Lighting;
- Climate Change;
- Socio-Economics and Human Health;
- Major Accidents and/or Disasters; and
- Waste.

8.2 The technical topic proposed to be 'scoped in' (see **Chapter 6**) is transport, which will assess the following effects in the ES:

- Severance of communities;
- Road vehicle driver and passenger delay;
- Non-motorised user (NMU) delay;
- Non-motorised user (NMU) amenity;
- Fear and intimidation on and by road users;
- Road user and pedestrian safety; and
- Public transport delay.

8.3 The effects above are scoped in for the operational stage only. No construction stage effects for any projects are considered to be significant as the Proposed Scheme relates to an increase in non-sport events, and only minor works are proposed.

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