



Stag Brewery, Mortlake

Environmental Statement: Non-Technical Summary

For Reselton Properties

March 2022



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Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS OHSAS 18001:2007)

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A handwritten signature in black ink, appearing to read 'S. Brindle', is written over the printed name 'Stephen Brindle' in the 'Approved by' column.

Comments



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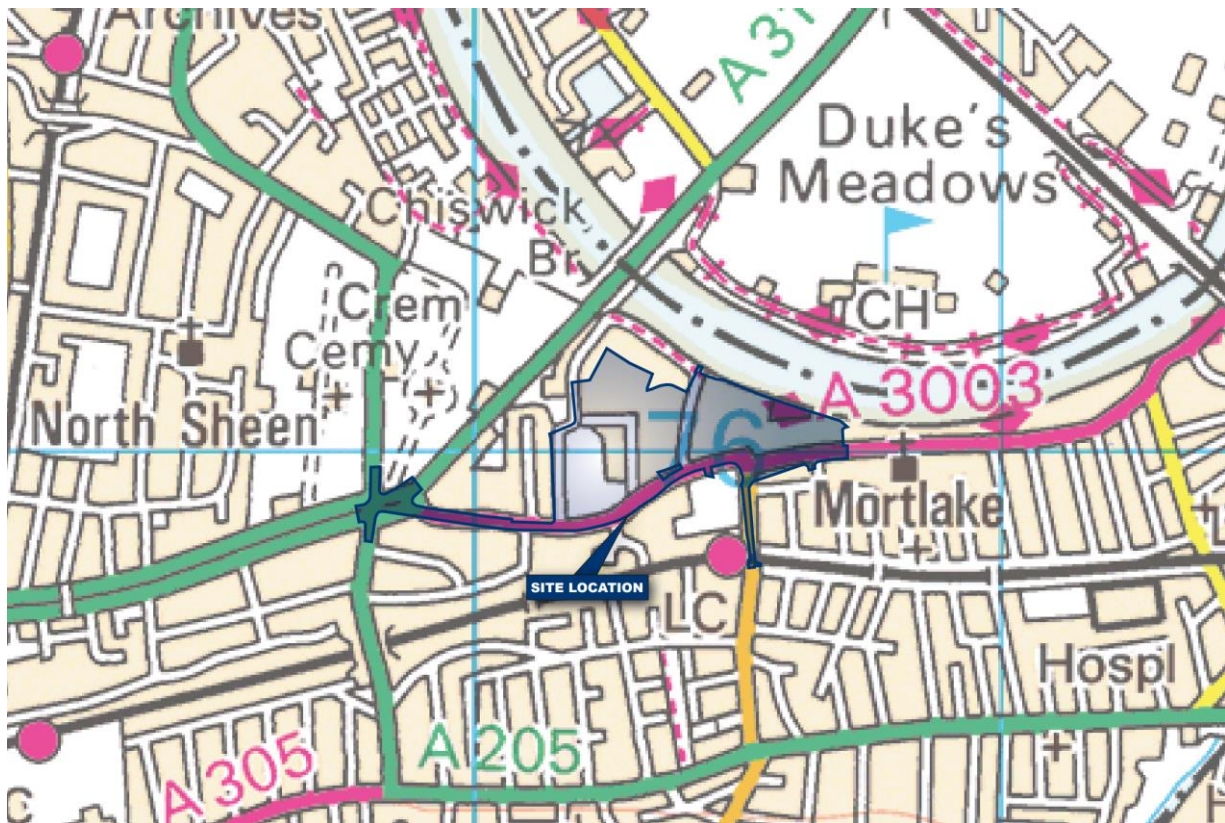
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1. Introduction

This Non-Technical Summary of the Environmental Statement has been prepared by Waterman Infrastructure & Environment Limited ('Waterman') on behalf of Reselton Properties Limited ('the Applicant') in relation to two linked planning applications and associated highways works for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ('the Site') within the London Borough of Richmond Upon Thames ('LBRuT'). The location of the Site is shown in **Figure 1**.

Figure 1: Site Location



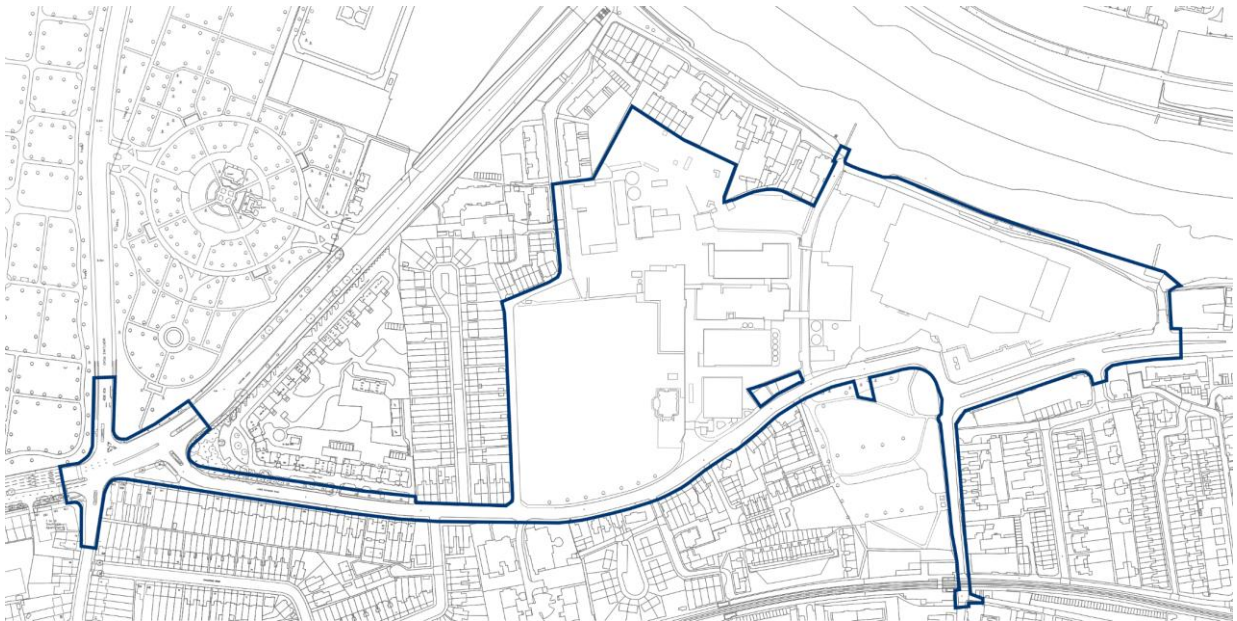
As shown in **Figure 2**, the former Stag Brewery Site is bounded by Lower Richmond Road to the south, the River Thames and the Thames Bank to the north, Williams Lane to the west and Bulls Alley (off Mortlake High Street) to the east. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large-scale industrial brewing structures, large areas of hardstanding and private playing fields.

The redevelopment (hereafter referred to as 'the Development') will provide homes (including affordable homes), complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Lower Richmond Road and Chalkers Corner junction, to be delivered under a Section 278 agreement (a legal agreement with LBRuT to make changes to public highways as part of a planning approval).

An Environmental Impact Assessment (EIA) has been undertaken by Waterman to assess the environmental effects of the Development. The findings of the EIA are reported in an Environmental Statement (ES), which has been prepared to accompany the planning applications. The ES describes the likely significant environmental effects of the Development.

This document provides a summary of the ES in non-technical language.

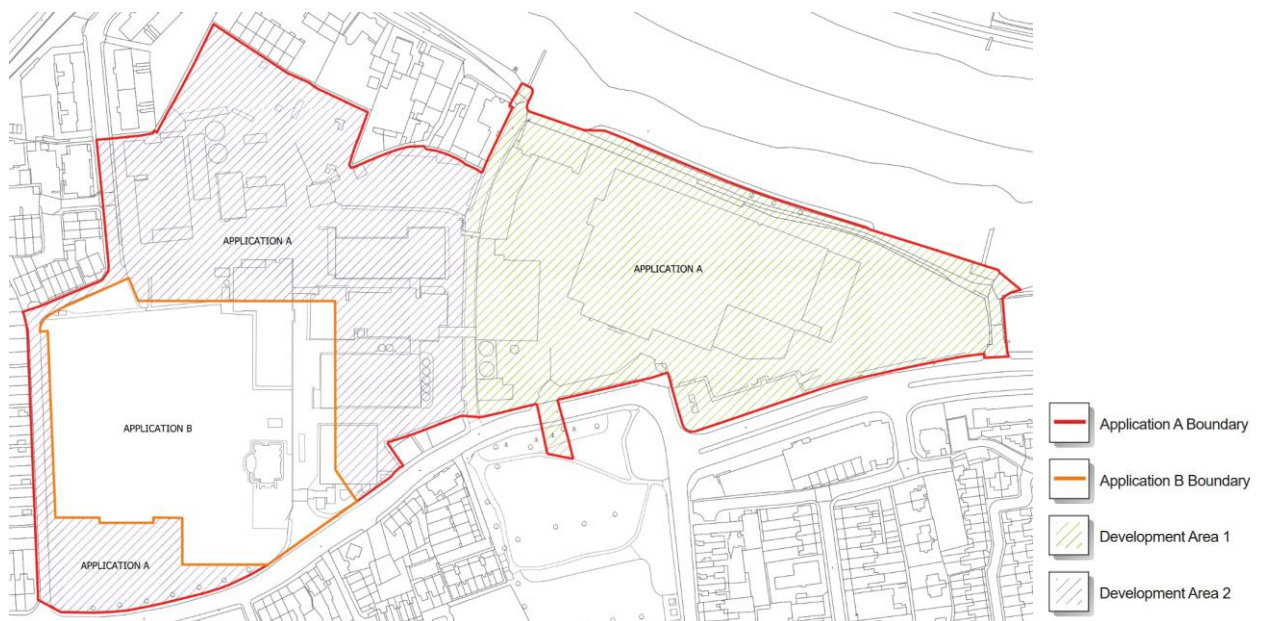
Figure 2: Site Boundary (including the associated highways works)



The two planning applications (which form the Development along with the associated highways works) are as follows and their boundaries indicated on **Figure 3**:

- Application A – hybrid (i.e. part in detail and part in outline) planning application for comprehensive mixed use redevelopment of the former Stag Brewery site consisting of:
 - i. Land to the east of Ship Lane applied for in detail (referred to as Development Area 1); and
 - ii. Land to the west of Ship Lane (excluding the school) applied for in outline (referred to as Development Area 2).
- Application B – detailed planning application for the school (on land to the west of Ship Lane).

Figure 3: Planning Application Boundaries (Applications A and B)



2. Planning Background

In February 2018, the Applicant submitted three planning applications set out in a similar planning format to the above, with Applications A (hybrid) and B (the school) as well as Application C (Chalkers Corner highways and landscape works). The 2018 Planning Applications were accompanied by one ES which considered all three planning applications as one comprehensive redevelopment proposal ('the 2018 Development').

Minor amendments were made to the design of the 2018 Development, and the environmental effects were reviewed and presented in an ES Addendum in May 2019. On 29 January 2020, the 2018 Planning Applications were heard by LBRuT's Planning Committee, with a recommendation for approval. The Committee resolved to grant Applications A and B, and refuse Application C. Following LBRuT's resolution to approve Applications A and B, the Mayor of London called-in the applications and became the determining authority. The amended Applications ('the 2020 Planning Applications') aimed to address the Mayor's concerns on the low percentage of affordable housing and the need to secure a highways solution for the Development following LBRuT's refusal of Application C. This resulted in:

- an increase in residential unit provision from up to 813 units to up to 1,250 units;
- an increase in affordable housing provision from up to 17% to 30%;
- an increase in height for some building of up to three storeys;
- change to the layout of Blocks 18 and 19, conversion of Block 20 from a terrace row of housing to two four storey buildings;
- reduction in the size of the western basement, resulting in an overall car parking spaces reduction of 186 spaces and introduction of an additional basement storey under Block 1;
- internal layout changes and removal of the nursing home and assisted living in Development Area 2;
- landscaping amendments, including canopy removal of four trees on the north west corner of the Site; and
- alternative options to Chalkers Corner in order to mitigate traffic impacts through works to highway land only and allow the withdrawal of Application C.

Application A was amended to reflect these changes. Despite GLA officer's recommending approval, the Mayor refused the 2020 Planning Applications in August 2021. Reasons for refusal included height and massing, heritage impact and neighbouring amenity issues.

This third iteration of the Development seeks to respond to the Mayor's reasons for refusal and also address concerns raised by LBRuT. The amendments can be summarised as follows:

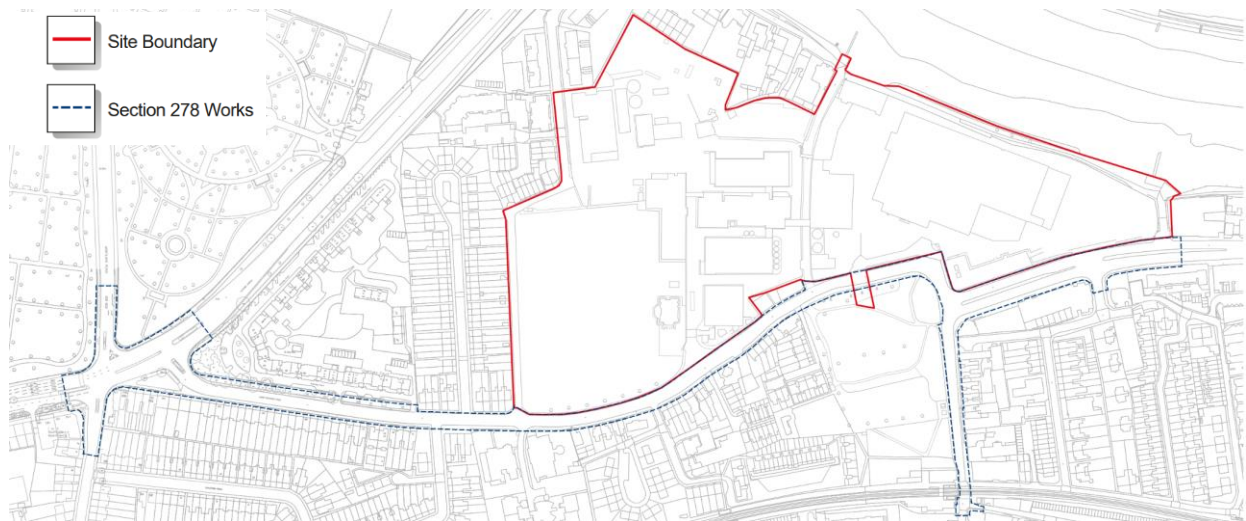
- a revised energy strategy is proposed in order to address the London Plan (2021) requirements;
- several residential blocks have been reduced in height to better respond to the listed buildings along the Thames riverfront and to respect the setting of the Maltings building, identified as a Building of Townscape Merit (BTM) by LBRuT;
- reconfiguration of layout of Buildings 20 and 21 has been undertaken to provide lower rise buildings to better respond to the listed buildings along the Thames riverfront; and
- Chalkers Corner highways mitigation works.

3. The Existing Site and Its Surrounding Context

The Site comprises a parcel of land extending to approximately 9.25 hectares (ha), predominantly occupied by the former Stag Brewery. This includes 16 industrial buildings (including the Maltings, former Hotel and Bottling Buildings, which are locally designated as Buildings of Townscape Merit) typically surrounded by hard-standing. An area of approximately 2.06 ha within the Site is occupied by the private playing fields. A disused wharf is situated within the north-east of the Site with limited access via Bulls Alley. Photographs of the existing conditions of the Site are shown in **Photographs 1-6**.

The Site (as defined by and assessed in the EIA) also comprises highway land including Lower Richmond Road towards Chalker Corner junction, to be delivered as Section 278 Highways Works. The maximum extent of these highways works is shown on **Figure 4**.

Figure 4: Extent of Section 278 Highways Works



The Site is bound by a mix of uses and areas, with the River Thames bounding the north-east of the Site (refer to **Photographs 1-6**). The land uses surrounding the Site are varied and include residential properties, retail, office, community, educational and open and amenity space.

Photograph 1: View of the Site with surrounding properties adjacent to the River Thames



Photograph 2 (left image): View of sports pitch looking towards brewery buildings

Photograph 3 (right image): Former Hotel and Former Bottling Building



Photograph 4: The southern façade of the Maltings



Photograph 5 (left image): View of Chalkers Corner looking west

Photograph 6 (right image): View of towpath and existing northern boundary wall of the Site



4. What are the Proposals?

The Development comprises the following:

Masterplan (Application A)

A hybrid planning application for the demolition of the majority of buildings and structures (with the exception of the Maltings and the façades of the former Hotel and Bottling building) and the redevelopment of the majority of the former Stag Brewery.

Planning permission is sought in detail for alterations and extensions to existing buildings and the erection of new buildings to comprise 558 residential dwellings, flexible retail use floorspace, office, cinema, and community use, within 12 buildings varying in height from 3 to 9 storeys, plus a single storey basement (with a double basement under the cinema building). Detailed permission is also sought for flood defence works, towpath works, landscaping, amenity space, play space, public open space, car and cycle parking, and installation of plant.

Planning permission is sought in outline (with all matters reserved) for the erection of new buildings to comprise up to 527 residential dwellings within 9 buildings varying in height from 3 to 8 storeys, a single storey basement and various associated works.

School (Application B)

A detailed application for the construction of a six-form entry secondary school plus associated sports pitch and play space, floodlighting, landscaping, car and cycle parking, new access routes and associated works.

Chalkers Corner Works

Highway works are proposed at Chalkers Corner and Lower Richmond Road which include amendments and reconfiguration to the Chalkers Corner junction to alleviate traffic congestion. The reconfiguration of the Chalkers Corner junction, would introduce a new left-hand turn from Lower Richmond Road onto the A316, resulting in three lanes on Lower Richmond Road. This would involve moving the road 4.2m closer to properties 137-171 to the south of Lower Richmond Road and the reconfiguration of the informal parking area used by residents at this location, resulting in the loss of approximately six undesignated parking spaces.

It is currently anticipated that the demolition, alteration, refurbishment and construction works (the Works) required to facilitate the Development would be carried out over a period of approximately 7 years. The Works are anticipated to commence in March 2023 and therefore for the purposes of the ES, the year of completion and full operation of the Development is considered to be 2029.

A Framework Construction Management Statement (FCMS) (including a draft Construction Logistics Plan (CLP)) supporting the Planning Applications) sets out how the Works would be carried out. The Applicant's intentions for managing environmental effects during the Works would be addressed through a site-specific Construction Environmental Management Plan (CEMP).

The ground floor layout of the Development is shown in **Figure 5** and illustrative views (showing one way the Development could be brought forward within the Parameters) of the Development are shown in **Figures 6** and **7**. A consolidated land use and accommodation schedule for the Development is presented in **Table 1**.

Table 1: Proposed Land Use and Accommodation Schedule of the Development

Land use	
Residential	Up to 1,085 units
Office	4,547 Gross Internal Area (GIA)
Cinema	1,606 GIA
Hotel	15 bedrooms
Flexible uses – café / restaurant / bar / public house / shops / financial and professional services / office / community / boathouse	4,839 GIA
School	Approx. 1,200 pupils
Car parking spaces	Up to 516 spaces (plus 48 motorbike spaces) 20% commitment to electric vehicle charging, to become 100% in the future
Cycle parking spaces	Up to 2,697 spaces

Figure 5: Ground floor layout of the Development

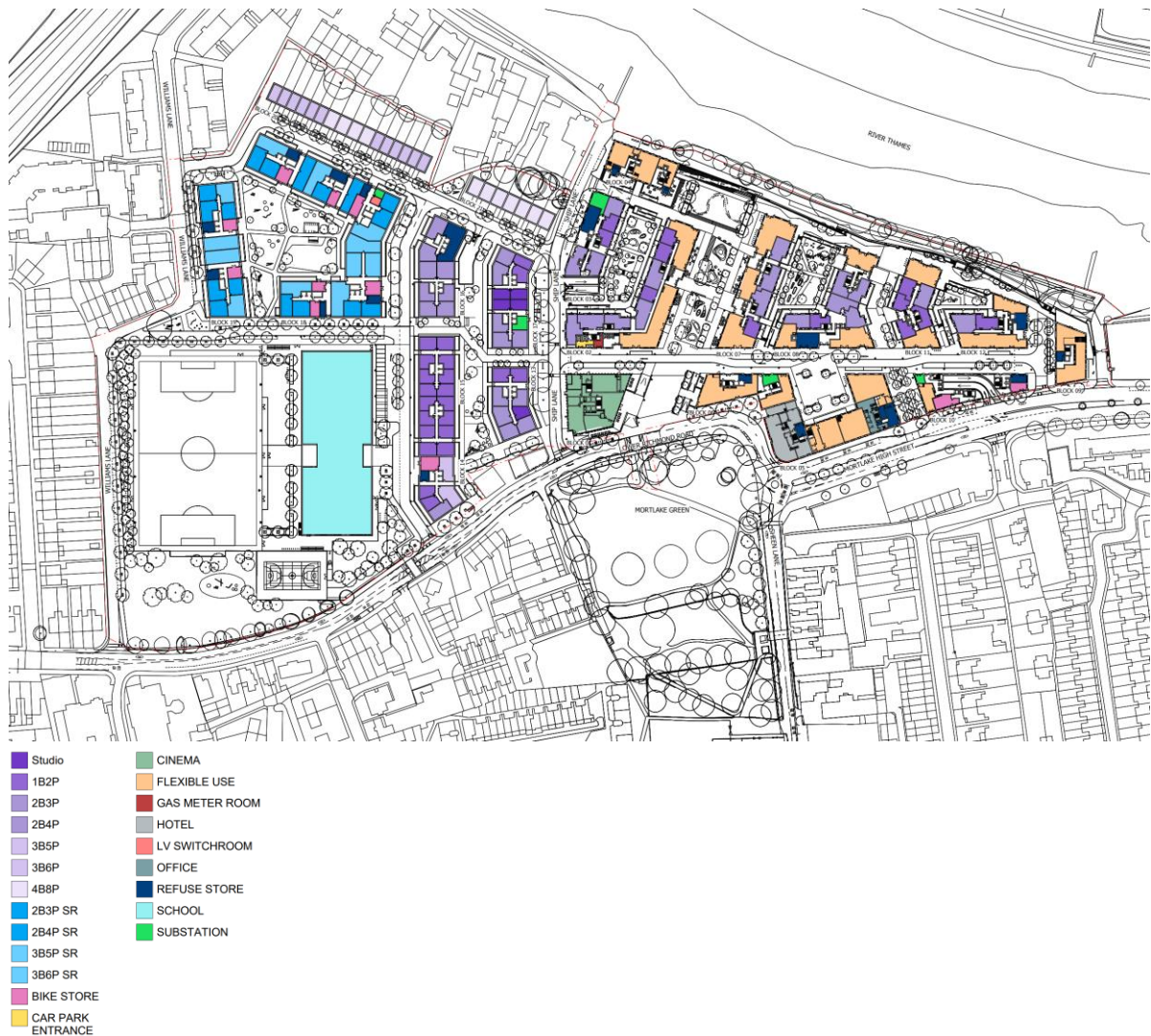


Figure 6: Illustrative Birds Eye View of the Development



Figure 7: Illustrative View of the Development from the riverside



5. Alternatives

In line with the regulations which relate to EIA, the ES provides a description of the main alternatives to the Development which were considered by the Applicant. In addition, a description of how the design of the Development evolved over time is presented. The main reasons for the choices made to achieve the final design (i.e. the Development) is provided in the ES, taking into account the likely significant environmental effects.

Guidance on the undertaking an EIA suggests that it is good practice to consider 'alternative sites'. However, it is reasonable that alternative sites were not considered by the Applicant given that the Site has already been identified as a key site for redevelopment by LBRuT's Stag Brewery Planning Brief.

EIA good practice also suggests that the option of doing nothing (the 'No Development' scenario) is also considered. The 'No Development' scenario would entail leaving the Site in its current vacant state. It is considered that under this scenario, the Site would remain underutilised and without redevelopment would lead to several missed opportunities for the Site and no new village heart for Mortlake. This would not accord with relevant National, Regional and Local planning policies, including those of The London Plan and LBRuT's Planning Brief.

On establishing the need and acceptability for a residential-led mixed use scheme, the Applicant and their design team worked up a Development in which the overall design, massing, external materiality and landscaping was informed by the Site's constraints and opportunities. The key constraints and opportunities concerned townscape and visual matters, traffic and transportation, microclimate and pedestrian permeability. The final Development design emerged as a result of these factors together with an extensive programme of consultation with officers at LBRuT, the Greater London Authority (GLA) and other statutory and non-statutory consultees.

The design of the Development has been informed by a range of environmental considerations, including:

- Townscape and Visual: Reducing massing and refining façade treatment of proposed buildings to complement surrounding setting;
- Built Heritage: Retaining and refurbishing historic assets within the Site and incorporation of heritage interpretation boards in the Maltings Plaza;
- Traffic: Reducing the western basement car park and therefore the number of car parking spaces;
- Daylight, sunlight and overshadowing: Changes in orientation and massing to increase sunlight, reduce overshadowing and improve light levelled within existing buildings adjacent to the Development;
- Wind: Changes to the proposed landscaping plans to provide greater levels of shelter and improve wind conditions;
- Flood risk: Ensuring the flood defence wall and ground levels are above the statutory flood level for protection from tidal flooding from the River Thames and provision of Sustainable Drainage Systems;
- Energy: Change from gas fired boilers to air source heat pumps;
- Ecology: Provision of bird nesting boxes and bat roost boxes;
- Socio-economics: Community use agreement with the school for the use of the sports facilities and the amount of children's play space, public and private amenity space required to accommodate the additional demand from the residential population of the Development; and
- Noise: Provision of enhanced noise protection adjacent to the sports fields.

Highways works at Chalkers Corner have been developed to provide suitable mitigation for additional traffic generated by the Development, but with lesser impacts on existing residential receptors, particularly Chertsey Court in comparison to the previous proposals known as Application C.

6. Approach and Environmental Impact Assessment Methodology

EIA is a process which aims to ensure that the likely significant environmental effects of a proposed development (which can be beneficial and / or adverse) are given due consideration in the determination of a planning application. In accordance with the relevant legislative requirements and best practice guidelines, the EIA was undertaken using established methods and assessment criteria. This involved visits to the Site, along with surveys, data reviews, consultation with several relevant statutory authorities, computer modelling and specialist assessment undertaken by a team of qualified and experienced consultants.

The first stage of the EIA process involved preparing an EIA Scoping Report. The purpose of the EIA Scoping Report was to identify the potentially significant environmental effects associated with the Development and, therefore, provide the focus of the EIA. As part of the 2018 Planning Applications, an EIA Scoping Report was submitted in March 2017 to LBRuT to support a request for their EIA Scoping Opinion. LBRuT issued their draft EIA Scoping Opinion in May 2017. A letter of response from Waterman, dated 26th June 2017, provided clarification and confirmation of the matters to be addressed. LBRuT subsequently issued their formal Scoping Opinion on 30th June 2017.

The EIA for the Development has been undertaken to comply with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the '2017 EIA Regulations'). The 2018 ES was prepared under the 2011 EIA Regulations, and therefore did not consider some of the additional topics under the 2017 EIA Regulations (such as climate change and human health which have been sign-posted within the new ES).

Given the Development would provide broadly similar scale and uses, construction activities and phasing as the 2018 Planning Applications, it is considered that the scope of assessment and methodologies previously employed would remain suitable for the current Application. Thus, this ES assesses the same topics with the same scope of assessment (with revisions to respond to updated policy and guidance) as those previously agreed with LBRuT, and reported in the 2018 ES (as amended), which was suitable for determining the 2018 Planning Applications.

It was agreed with LBRuT that the EIA would need to include an assessment of the following environmental topics (note Greenhouse Gases has been included as an additional topic since the 2018 ES given this ES has been prepared under the 2017 EIA Regulations rather than the 2011 EIA Regulations):

- Socio-Economics;
- Transport and Access;
- Noise and Vibration;
- Air Quality;
- Ground Conditions and Contamination;
- Surface Water Drainage and Flood Risk;
- Ecology;
- Archaeology;
- Built Heritage;
- Townscape and Visual;
- Wind Microclimate;
- Daylight, Sunlight, Overshadowing and Light Pollution;
- Climate Change (sign-posted in the ES);
- Human Health (sign-posted in the ES);
- Greenhouse Gases; and
- Cumulative Effects.

Each of the above topics are addressed in the ES, with a chapter dedicated to each topic. In each chapter, a description of the assessment methodology is given together with, the relevant environmental conditions on and adjacent to the Site and the likely significant effects of the Development. The significance of likely effects is graded on a scale as either insignificant, minor, moderate or major (note, this NTS does not include this terminology of effects as its purpose is to present the findings of the ES in non-technical language). Each of the technical Chapters outlines the criteria, including sources and justifications, for quantifying the different levels of effect. Where possible, this is based upon quantitative and accepted criteria together with the use of value judgements and expert interpretations, where necessary, to establish to what extent an effect is environmentally significant.

Each chapter also describes a range of measures that would be incorporated to avoid, reduce, or offset any identified likely adverse effects, and / or enhance likely beneficial effects. Such measures are referred to as 'mitigation measures'. The resulting effects (known as 'residual effects'), following the implementation of mitigation measures, are also described.

7. What are the Likely Environmental Effects and how would they be minimised?

7.1 Socio Economics

A socio-economic assessment has been undertaken using a wide range of information sources. These sources include a detailed review of planning policies, guidance and standards and population Census data. A quantitative approach was undertaken where possible, with certain assessments such as community safety and wellbeing undertaken qualitatively using professional judgement.

During the Works, the Development would provide economic benefits to the local area, creating an average of up to 1,140 jobs per year during the duration of the Works.

Once completed, the Development would generate up to 364 gross new jobs, depending on the exact nature of the commercial uses provided on the Site.

The provision of up to 1,085 residential dwellings as part of the Development would contribute significantly to the housing target of LBRuT. A proportion of dwellings would be affordable and suitable for families.

It is estimated that the Development would have an additional resident population of around 2,472. The provision of a sixth-form entry secondary school with sixth form capacity for up to 1,200 pupils would meet the additional demand for secondary school places. There would be additional future demand for early years and primary school places. It is considered that a proportion of this additional demand could be met through existing providers for early years places. The demand for primary school places could be met through existing and forecast capacity elsewhere in the borough.

In terms of demand on local primary health services, the increased population of the Development would impose additional demands and costs upon the existing health provision. However, mitigation in the form of financial contribution is likely to off-set the potential pressures faced by existing providers in accommodating the additional demand arising from the Development.

The Development would provide 17,631m² of children's play space and a total of 4.24 hectares of publicly accessible amenity space including play space on Site. As such, there will be sufficient children's play space and open space within the Development for the population size and child yield predicted. Provision of a cinema and flexible community uses on-Site, in addition to provision of school facilities for multi-use via a Community Use Agreement, would result in beneficial effects on community facilities.

7.2 Transport and Access

An assessment of the transportation effects of the Development in terms of traffic, pedestrians, cyclists and public transport was undertaken. This has been based upon a range of information sources and includes a detailed assessment of future traffic using baseline traffic surveys and computer modelling.

The Works would generate the need for HGV traffic associated with general plant and material deliveries and the removal of waste from the Site. To effectively manage this, a Framework Construction Management Plan, including an outline Construction Logistics Plan, has been submitted with the planning applications. A detailed Construction Logistics Plan would be agreed with LBRuT and would include measures such as the use of agreed appropriate routes to and from Site for construction vehicles, provision for loading and unloading of vehicles off the public highway; and keeping local residents informed of activities.

The Development would provide up to 516 car parking spaces, of which 438 would be dedicated for the residents and 78 would be non-residential spaces. The operational Development would result in an increase in vehicle numbers using the local highway, however it is considered that the proposed highway

mitigation package along Lower Richmond Road, Mortlake High Street and Sheen Lane, together with the Chalkers Corner highways proposals sufficiently alleviate the impact of the Development.

A Framework Delivery and Servicing Management Plan was prepared and appended to the Transport Assessment which forms an appendix to the ES. The Framework Delivery and Servicing Management Plan aims to ensure that servicing and deliveries to the operational Development would be managed effectively. A Framework, School and Residential Travel Plans have been prepared which aims to encourage sustainable modes of transport, in particular walking and cycling.

There would be an increase in pedestrian and cycle movements at the Site compared to the existing situation. The Development provides for improved public realm with new pedestrian and cycle routes through the Site. A new high street would run east to west in the east part of the Site and a new green link through the Site would link Mortlake Green to the riverside. The existing towpath would be enhanced and a new riverside walk would run adjacent to the towpath, on the other side of the new flood defence wall within the Site.

It is also proposed to provide new cycle parking facilities across the Site for residents, visitors and people who work within the Development.

Further highways improvements would be undertaken surrounding the Site to improve conditions for pedestrians and cyclists. This would include:

- Improvements to Ship Lane, which would continue as a public highway but would be enhanced as a pedestrian route through the provision of a wider footway on the west side and a new footway (3 m) on the east side;
- A new pelican crossing at the southern end of the Green Link along Lower Richmond Road directly north of Mortlake Green. The existing signalised crossing point adjacent to Ship Lane would be relocated to align better with the Green Link;
- A new crossing provided just to the west of the new access road to the school to improve access for pupils needing to cross Lower Richmond Road. This is currently shown as a zebra crossing but could potentially be upgraded to a pelican crossing; and
- Provision of a new zebra crossing to serve a desire line to the eastern portion of the Development.

There would be an increase in the number of people at the Site using public transport compared to the existing situation. The requirement for increased bus capacity would be determined and secured via a Section 106 Agreement.

7.3 Noise and Vibration

The noise and vibration effects of the Development have been established in accordance with published guidelines and included a comprehensive baseline monitoring survey at the Site. The assessment used computer modelling based on the baseline monitoring survey, existing and future traffic flow data and the proposed layout of the Development. Where specific details of the Development are unknown (e.g. the end users of the commercial elements of the Development), a qualitative assessment was undertaken based on standard noise and vibration criteria.

The Works are likely to include activities that would be likely to increase noise levels and potentially cause vibration within and immediately adjacent to the Site. In particular, when activities are occurring closest to the Site boundary, this could result in temporary effects on occupants in surrounding properties.

The implementation of noise and vibration control and management measures through a Construction Environmental Management Plan for the Works would help to reduce noise disturbance to occupants of existing and future properties. Such measures would include using low-noise machinery and equipment, enclosing and screening machinery and using low-vibratory foundation methods. Demolition and construction traffic is not predicted to result in significant noise increases on local roads, however, a

Construction Traffic Logistics Plan would also be implemented.

Any items of fixed building services plant installed as part of the Development would have the potential to generate noise. Suitable noise level limits have therefore been proposed to ensure that noise from plant does not cause disturbance to existing receptors in the surrounding area or future occupants of the Development. Noise levels resulting from traffic associated with the completed Development would be insignificant on all local roads.

Noise break-out from non-residential uses should not cause noise disturbance to existing receptors in the surrounding area or future occupants within the Development provided the building fabric provides appropriate attenuation. Servicing and deliveries associated with the Development could cause localised noise disturbance to the future occupants depending on number and time of day. Use of a servicing delivery plan to control the management and timing of deliveries would mitigate any adverse effects.

An assessment on noise from the sports pitch and multi-use games area found the noise levels would be relatively low and in general not be of concern (insignificant). Noise would be mitigated by a 2.5m high acoustic barrier set back from the mesh weld fence adjacent to the northern and western boundary of the sports pitch and a 3m fence and retaining wall around the multi-use games area (MUGA).

7.4 Air Quality

The air quality in the LBRuT exceeds national air pollution objectives and as a result LBRuT have designated the majority of the Borough as an Air Quality Management Area. An assessment was undertaken to determine the likely effects of the Development on local air quality using computer modelling of predicated traffic flow to identify the likely resultant changes to local air quality. This used baseline air quality monitoring data from LBRuT. Project specific air quality monitoring was also undertaken between July 2018 and January 2019 and was found to be comparable to LBRuT's own monitoring data.

The main likely effects on local air quality during the Works would relate to dust. A range of measures to minimise or prevent dust would be implemented through the CEMP so that no significant dust effects would result.

The computer modelling undertaken determined the impact of exhaust emissions from construction traffic for the year of the peak construction activities (in 2028). The modelling has shown the effect of construction vehicles associated with the Development would be insignificant for all pollutants assessed. All construction plant would meet the Emissions Standard set out in the London Plan and therefore construction plant emissions on local air quality would be insignificant.

The Development would be served by non-combustion plant, primarily air source heat pumps and, therefore, would not produce on-site emissions related to provision of heating and hot water. Heating plant has, therefore, not been considered within the air quality assessment.

Computer modelling has also been carried out to predict the future traffic related emissions arising from the operation of the completed Development and the likely resultant changes that this would bring about to local air quality. Overall, the results of the computer modelling demonstrate that the Development would not give rise to a significant air quality effect that would adversely affect the occupants of existing sensitive locations surrounding the Site or future residential and school users of the Development.

7.5 Ground Conditions and Contamination

A desk-based study of ground contamination at the Site indicates that there is a medium risk of ground contamination at the Site. Intrusive ground investigation undertaken for the land to the east of Ship Lane identified localised contamination hotspots.

A Remediation Strategy would be developed and agreed with the relevant statutory authorities, including

LBRuT and the Environment Agency, and would be implemented during the early stages of the Works. Further and more detailed ground investigations are proposed and would be conditioned on the western area of the Site, which would also inform the Remediation Strategy.

Implementation of the Construction Environmental Management Plan would minimise the potential risk to controlled waters and human health during the Works.

It is likely that the Site and surrounding area suffered bomb damage during the Second World War and unexploded devices could be encountered during excavation works. A detailed specialist survey of the Site has been recommended which would be undertaken prior to any intrusive works. Mandatory health and safety requirements would ensure all construction workers are provided with necessary awareness training to recognise potential unexploded ordnance and provided with safety instructions detailing actions to take should unexploded ordnance be encountered.

In addition to any specific remediation measures, the provision of buildings and hardstanding across the majority of the Site and the provision of clean topsoil in soft landscaping areas would result in a low risk of harm to human health and the wider environment following completion of the Development. Furthermore, the inclusion of green roofs, interceptors and silt traps would provide more effective control of potential contaminants entering the River Thames than the current situation, leading to beneficial effects.

7.6 Surface Water Drainage and Flood Risk

The effects of the Development upon water resources and drainage have been informed by a review of various information sources including those made available through consultation with the Environment Agency and Thames Water; as well as the results of a Site investigations for ground conditions and contamination. A Flood Risk Assessment and Drainage Strategy has also been prepared to accompany the planning applications and is included as part of the ES. Based on this information, effects were qualitatively assessed using professional judgement.

During the Works, changes in the Site conditions have the potential to result in a temporary risk of surface water flooding. However, measures would be put in place to control surface water runoff from the Site in line with industry standards. Where appropriate, temporary drainage would be provided around the Site during the Works when there is no on-Site drainage network in place.

The Development would involve replacing and upgrading the flood defence wall, which forms the north east boundary of the Site. Given the works to the flood defence wall would be behind the existing flood defence wall within the Site, the existing flood defence wall would still be accessible from the towpath for maintenance access during the Works. Furthermore, given the new flood defence wall (incorporating the external building walls of the existing Maltings building at the north-western end of the Site and a new building to be used as a water sports centre at the north-eastern end of the Site as part of the flood defence) would follow the existing alignment, there would be no loss of flood plain storage.

Localised groundwater flooding could also occur during the excavation works required to construct the basements within the Development. Appropriate dewatering and disposal, using standard practices such as sumps and pumps, would be employed to prevent groundwater flooding of excavation areas.

Although the Site is located within Flood Zones 2 and 3 (medium and high probability of tidal flooding), the Site is protected by the River Thames flood defences, and as such, the risk of flooding from the River Thames is considered to be low. In the unlikely event of overtopping of defences or a breach, part of the Site is predicted to experience flooding. To address this, the Development has been designed to ensure the safety of occupiers and users of the proposed buildings, for example by land raising and installing flood barriers.

A surface water drainage strategy for the Development has been developed, which includes measures to reduce water runoff from the Site and control the rate of discharge of this water to the local sewer

network. Surface water runoff would discharge to the River Thames via three outfalls, as well as to the existing sewer network. Sustainable urban drainage (SuDS) methods, such as attenuation tanks, permeable paving and rain gardens would be used, allowing for the likely future increase in rainfall owing to climate change. The Development would not increase flood risk on the Site or elsewhere beyond the Site boundary, which is in line with national and local policy.

The Development would introduce new land uses on the Site resulting in an increase in foul water discharges from the Site. It is Thames Water's statutory duty to ensure that sufficient capacity exist in the foul water drainage system to cope with the demands of existing and future population demands.

There would be an increased demand for water supply resulting from the Development, however, the implementation of water efficiency measures would be incorporated into the Development to minimise the demand as far as possible.

7.7 Ecology

The ecological assessment is based on a Preliminary Ecological Appraisal (PEA) and Protected Species Report (PSR). The PEA presents the findings of an ecological data search, Habitat Survey and preliminary roost assessment and the PSR presents the findings of a suite of roosting bat and bat activity surveys. Consideration has been made to the full suite of ecological surveys for birds (black redstart) and bats undertaken in 2016 and 2019 respectively that accompanied the 2018 Planning Applications.

The Site is not located within the boundary of any Statutory or Non-statutory Designated Sites, however, the River Thames and Tidal Tributaries Site of Metropolitan Importance (SMI) is located adjacent to the northern boundary of the Site, and other designated sites are located further afield. Given the consultation received in response to the formal EIA Scoping Opinion from both LBRuT and Natural England in 2017, the ecological assessment predominantly focuses on the potential effects to the River Thames and Tidal Tributaries SMI.

The results of the bat surveys assessed that the habitats at the Site and adjacent to the River Thames along the northern boundary of the Site are predominantly used by urban bat species typically not sensitive to light. A bat roost recorded in the Maltings building was assessed to comprise a low bat count, and be of low conservation significance during the bat surveys undertaken in 2019 as part of the 2018 Planning Applications. Whilst no roosting bat were recorded at this building in 2021, a precautionary approach is taken, and updated monitoring surveys and a bat license would require approval by Natural England prior to any works that could impact on the roost commencing. In addition, a survey at the Site in 2021 also recorded the presence of a single roosting peregrine falcon at the Maltings. Further monitoring surveys will be required prior to any demolition and construction works commencing on Site.

A Construction Environmental Management Plan would be adhered to, to ensure appropriate environmental controls to protect the bat and peregrine falcon roost and River Thames and Tidal Tributaries SMI from dust, noise, vibration, surface water run-off and lighting. The main hours of demolition and construction works would be undertaken during typical working hours, minimising the requirement for additional lighting during the night and therefore no excessive light spill on these habitats for bats.

The Development would avoid light spill on the River Thames and the massing of the completed Development would also not result in any significant overshadowing effects on the River Thames and towpath. The floodlighting for the sports pitch would be located away from any designated sites. The drainage system would be designed to incorporate filters or silt traps to avoid the discharge of any fuels or oil pollution entering the river. Furthermore, the provision of green space within the Development would provide amenity space for the future residents, alleviating pressure on the adjacent non-statutory sites.

The proposed Development would provide ecological enhancements, including the provision of bat and bird nesting boxes, use of native tree species and biodiversity roofs. A Landscape and Environment

Management Plan would be implemented to manage and ensure the permanence of the roosting, foraging and commuting habitats provided within the proposed Development.

7.8 Archaeology (Below Ground)

An assessment of the effects of the Works on the archaeological (below ground heritage asset) resource within the Site was undertaken. This was assessed qualitatively based on professional judgement using a desk study and archaeological fieldwork undertaken at the Site.

The Site is located within the Mortlake and Barnes Archaeological Priority Area as designated by LBRuT. The Site is known to have been previously occupied by a Medieval bishops palace (the Archbishop of Canterbury) and parish church, to the east of Ship Lane, and by a Post Medieval mansion (owned by Thomas Cromwell, Earl of Essex) to the west of Ship Lane. These potential archaeological remains are considered of national importance. There is a low to moderate potential for prehistoric, Roman and Anglo-Saxon archaeological remains of local importance.

Archaeological evaluation and monitoring across the Site have revealed evidence of extensive truncation by previous and existing development associated with the brewery. However, a large carved stone moulding considered to relate to either the mansion or the palace was recovered from a modern context (see below).

The likely effects of the Development would be associated with excavation, piling and foundation works required to facilitate the Development. Accordingly, archaeological mitigation has been proposed in the form of a phased archaeological evaluation programme, which would take place following demolition and site clearance. The archaeological mitigation would be secured by means of an appropriately worded standard planning condition.

There would be no likely effects on archaeological assets once the Development is complete and occupied.

Photograph 7: Carved stone recovered from archaeological fieldwork undertaken at the Site.



7.9 Built Heritage

The built heritage assessment was undertaken following a Site visit and review of archival material and Historic England's historic data. Heritage assets were identified on the Site and the effects of the Development on the relevant heritage assets on and surrounding the Site were qualitatively assessed based on the value of the heritage asset and the magnitude of impact.

There are no listed structures located within the Site, although there are seven listed buildings located immediately adjacent to the Site. Three structures (known as the Maltings Building, former Hotel and former Bottling building) within the Site are specifically identified by LBRuT as 'Buildings of Townscape Merit'. Other non-designated heritage assets within the Site include railway tracks, granite paving, river moorings, memorial plaques and historic gates.

Part of the Site, running along Mortlake High Street and the Thames shoreline, is located within the Mortlake Conservation Area. The Maltings building, former Bottling building, former Hotel and parts of the surviving boundary wall of the Site are identified by LBRuT as contributing to the significance of the Conservation Area. To the south of the Site is the Mortlake Green Conservation Area.

The demolition and removal of the modern brewery buildings existing on the Site would result in beneficial effects to the setting of the identified heritage assets. Implementation of the Construction Environmental Management Plan would ensure that measures are taken to limit the extent of vibration and dust, including easements from the Buildings of Townscape Merit, reducing the effect upon heritage assets.

All buildings on the Site that have been identified as being of historic interest would be retained or partially retained (i.e. The Maltings and the facades of the former Hotel and former bottling buildings), with certain historic elements of these buildings re-instated. The demolition of historic fabric within the Site would result in some adverse effects, however, a programme of archaeological building recording will be carried out prior to the commencement of the Works and any harm weighed against the public benefits of the Development.

Once the Development is completed, the change to the setting of the heritage assets within and surrounding the Site would be uniformly beneficial. Whilst the Development would see the industrial use of the Site cease, it would seek to retain and promote the Site's industrial past through information boards, the reuse of the Maltings building and the retention of the Former Hotel and Bottling building. Retention and improvement to the setting of the railway tracks, paving and moorings within the Site would result in beneficial effects. The proposals also include the reinstatement of the former Brewery Gates and Stag Brewery sign within the Site, and as much of the existing boundary walls that can be appropriately accommodated within the Development.

7.10 Townscape and Visual

The Site does not feature within any of the London Strategic Viewing Corridors. However, the Site forms part of the backdrop of local views designated by LBRuT. Seven townscape character areas have been identified by LBRuT within or surrounding the Site. The local views to be assessed were agreed with LBRuT and visualisations of the Development from these local viewpoints were prepared. The townscape and visual effects were qualitatively determined based on professional judgement and review of the visualisations of the Development.

During the Works, there would inevitably be a visual intrusion to the local townscape and views from locations close to the Site as a result primarily of large construction plant and machinery, including tower cranes, and the presence of partially completed built form of the Development. However, this is unavoidable for the redevelopment of the Site and would only be temporary in nature.

Consideration of the visual effect of the Development, once completed, has been an integral part of the Applicant's design approach. The design of the Development has been developed throughout the design

process to take account of likely townscape and visual impact. The intention of the Applicant is for the Development to promote buildings of the highest architectural and urban design quality, which would contribute positively to the local townscape.

The Development would result in a significant improvement to the Site and the surrounding townscape in terms of architectural quality and urban design, particularly within the Site. Whilst the sports ground (locally designated as Other Open Land of Townscape Importance) would be reduced in area to facilitate the new school building and residential blocks, a substantial portion of the open space would be available for public access.

The majority of local views would also experience beneficial effects once the Development is completed. Recreational users of the Thames Path National Trail and road users on Thames Bank would experience some adverse effects as there would be the addition of further buildings where there were previously gaps at the riverside. However, views along and across the river would continue to remain distinctive and form a key element of local visual amenity.

7.11 Wind Microclimate

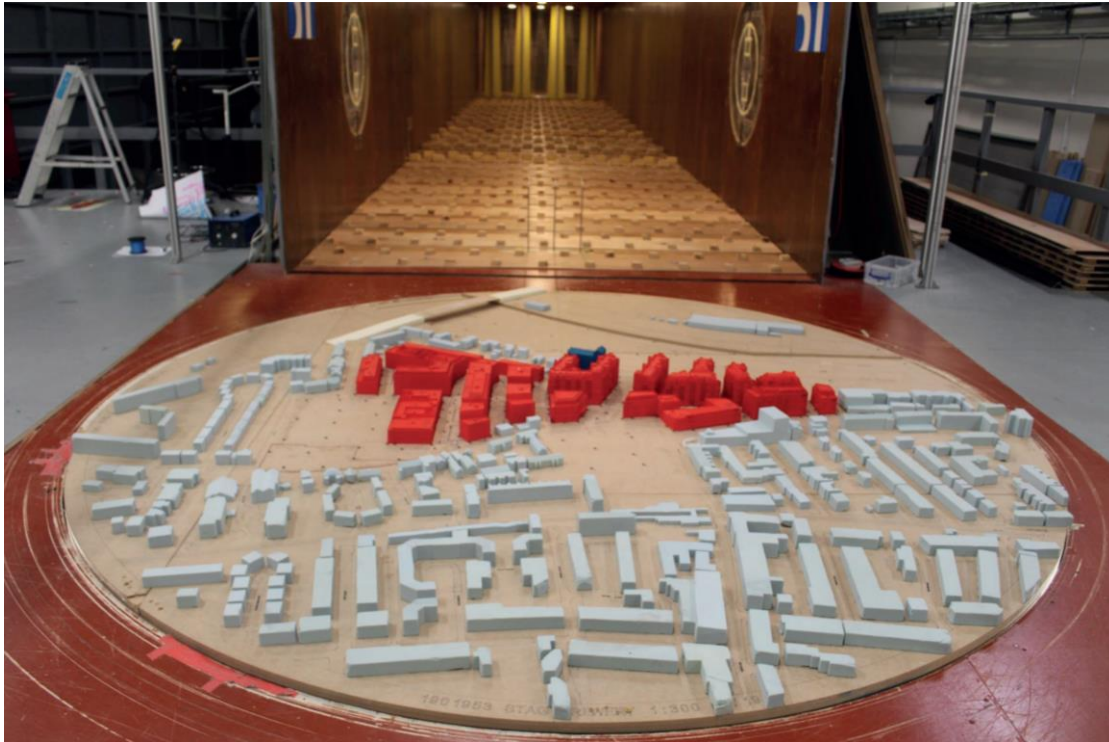
An assessment of the likely wind conditions as a result of the Development and the suitability of these in terms of pedestrian comfort has been undertaken. The assessment has been informed by appropriate meteorological data and detailed wind tunnel testing.

The wind effects during the Works have been assessed using professional judgement, informed by an analysis of the background windiness of the Site based on the meteorological data. The demolition of the existing buildings would not be expected to have a significant effect on the wind conditions within, and immediately surrounding, the Site. As construction of the Development proceeds, the wind conditions of the Site would gradually adjust to the conditions of the completed Development.

The assessment of completed Development effects has demonstrated that even in the absence of mitigation, the majority of the Development would be suitable for its intended pedestrian activities. Wind tunnel testing undertaken shows that with the landscaping in situ, wind conditions would be suitable for the intended use throughout Development Area 1. There would also be no significant wind effects on off-Site receptors, including Mortlake Green, the towpath and the River Thames.

For the outline components of the Development (Development Area 2), wind conditions may require mitigation post-planning during the detailed design stage to consider the wind effects on some of the potential building entrances on Buildings 15, 16, 18 and 19. However, as this part of the Development is proposed in outline only, it is considered that this issue be deferred to subsequent reserved matters applications. This issue could be addressed in the future by either not proposing a building entrance at these locations, recessing the building entrance, or tree planting.

Photograph 8: Wind tunnel test of the Development with existing surrounds.



7.12 Daylight, Sunlight, Overshadowing and Light Pollution

An assessment has been made of the likely effect of the Development on the daylight, sunlight, overshadowing and light pollution on neighbouring properties and amenity spaces near to the Site. The technical analysis has been undertaken quantitatively via the creation of a digital three-dimensional model of the Site and surroundings, based on laser scan measured survey data.

As existing buildings are demolished, some temporary improvements to daylight, sunlight and overshadowing are predicted at the closest residential receptors to the Site. During the construction phase, a number of tall cranes would be present on-Site. However, their size and temporary presence would lead to generally imperceptible effects to local reductions in daylight and sunlight. Construction of the Development would have a gradually increasing effect on the levels of daylight, sunlight, overshadowing and light pollution to residential properties and amenity spaces surrounding the Site as the construction progresses. The effects that are perceptible as the superstructure progresses would be similar, albeit less, to those of the completed Development.

As would be expected with a Development of this scale, there are isolated significant effects to the neighbouring residential properties in terms of daylight. In this case, the Development replaces relatively low rise buildings and as such the proportional reduction of daylight, on which significance is based, is large to the residential receptors nearest to the Site. Properties adversely affected include the Boat Race House, Rann House, 31 Vineyard Path, 2 to 6 Williams Lane, Churchill Court, Jolly Gardeners, Butler House, Vineyard Heights, 3-9 Richmond Road, Reid Court, and Aynescombe Cottage. Overall, the number of properties that experience significant effects with the Development in place is low and the majority of effects are to windows that are placed beneath overhanging balconies, which inhibit levels of daylight.

There would be an adverse effect to Boat Race House and Churchill Court House in terms of sunlight, however, there would be no other significant effects in terms of levels of sunlight to existing surrounding properties. There would be no significant effects in respect of overshadowing to existing surrounding

amenity areas. The Development has been designed to allow suitable light penetration to proposed amenity areas where possible, with only a small number of areas showing deviations from the suggested targets.

As is usual at the planning stage, a final and fixed lighting scheme has not been developed for the Development. The provisional lighting scheme has been designed in order to ensure that standard guidelines are met. Full consideration has been given within the lighting strategy to ensure lighting does not adversely affect ecological receptors (e.g. bats) along the River Thames, nor properties along Williams Lane as a result of the floodlighting for the proposed sports pitch.

7.13 Greenhouse Gases

The Development will lead to greenhouse gas (GHG) emissions in the extraction, manufacture and transport of construction materials ('embedded carbon') as well as from construction and operational transport and operational energy use.

The GHG assessment has determined a GHG footprint for the Development which provides the estimated contribution of the Development to GHG emissions, during construction and operation. The assessment calculates emissions for the year of opening but also considers emissions over the lifetime of the Development.

Guidance recommends that due to global importance and severity of climate change, that any increase in GHG emissions resulting from a development will have a significant effect, and that focus should be placed on providing appropriate mitigation to minimise GHG emissions.

The Development is expected to introduce additional GHGs and therefore the effects have been determined to be significant. Mitigation is provided, principally for operational energy and transport, which are policy compliant and work to minimise the on-site GHG emissions and reduce the lifetime GHG emissions of the Development. The residual GHG emissions are very small in the context of regional GHG emissions, but nonetheless are judged to be significant in accordance with guidance.

7.14 Cumulative Effects

There are no planning applications at the time of the planning applications submission before the Council or extant permissions in place within 1 km of the Site that would give rise to significant environmental effects owing to their small scale and location within established residential areas.

As such, only in-combination cumulative effects (the combination of a number of individual effects resultant from the Development upon one receptor) likely to arise during the Works has been considered. This is because the greatest likelihood of effect interaction, and hence potential adverse cumulative effects, would arise during the Works.

During the Works, a combination of nuisance effects from noise and vibration together with townscape, visual, built heritage, daylight and sunlight effects could be experienced by receptors. The implementation of environmental control measures through a Construction Environmental Management Plan would minimise the nuisance effects on local residents, historic assets and conservation areas and pedestrians and other road users during the Works.

Once the Development is operational, certain local residential and non-residential occupiers surrounding the Site would experience adverse effects from a reduction in daylight and sunlight levels as well as an increase in demand for social infrastructure (early years and primary school places), road traffic noise and intermittent noise from use of the sports pitch and MUGA. However, local residential and non-residential occupiers will benefit from an increase in job opportunities and boost to the local economy, tidal flood risk, improvements to views and townscape character, improvements to pedestrian and cyclist routes, improvements to crime and community safety, public open space provision, use of the community facilities within the Development and pedestrian wind comfort within the Site.

8. What will happen next?

Following the submission of the detailed planning application, there would be an opportunity for any interested parties to comment on the proposals. The ES and a set of documents supporting the planning applications can be viewed on LBRuT's planning portal – http://www2.richmond.gov.uk/plandata2/Planning_Search.aspx

A hard copy ES will also be available for viewing by the public by appointment in the planning department of LBRuT at the address below:

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Civic Centre
44 York Street
Twickenham
TW1 3BZ
020 8891 1411

Additional copies of this Non-Technical Summary can be obtained free of charge. Electronic copies of the ES on a CD can be purchased from Waterman on request (contact details below).

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