

Direct Tel: 020 3356 4741  
Direct Email: [stephen.brindle@watermangroup.com](mailto:stephen.brindle@watermangroup.com)  
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Date: 04 August 2022

**Lucy Thatcher**

Strategic Applications Manager  
Richmond Council  
44 York Street  
Twickenham  
TW1 3BZ

Dear Lucy

**RE: Former Stag Brewery, Mortlake, Hybrid Planning Application (22/0900/OUT) & Detailed Application School (22/0902/FUL) – ES Statement of Conformity**

Waterman Infrastructure & Environment Limited has reviewed the amendments to the proposed design for the Hybrid Planning Application (22/0900/OUT) at the Former Stag Brewery in Mortlake. No amendments are proposed to the school application; however, those environmental impacts have been considered in this review as the Development comprises the two applications as a whole.

On the basis of the review, and following further assessment, it has been concluded that the findings of the Environmental Impact Assessment (EIA) presented in the March 2022 Environmental Statement (ES) in support of the Hybrid Planning Application (22/0900/OUT) & Detailed Application School (22/0902/FUL) remain unchanged as a result of the proposed modifications to the Development.

The Statement of Conformity has been lawfully undertaken in accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>1</sup> (as amended<sup>2</sup>) and, as such, this letter is to demonstrate our finding that no significant environmental effects arise from the proposed amendments to the planning application ref: 22/0900/OUT.

Consideration of each technical chapter of the ES is provided as **Annex 1** to this letter.

Should you have any queries or wish to discuss the conclusions of this letter, please do not hesitate to contact the undersigned.

Yours sincerely



Steve Brindle  
Associate Director  
For and On Behalf of Waterman Infrastructure & Environment Ltd

Enc. Annex 1: Review of the Amendments in relation to the Environmental Impact Assessment  
Annex 2: Air Quality Assessment Update  
Annex 3: Updated AVRs  
Annex 4: Updated Illustrative Masterplan Ground Floor Level

<sup>1</sup> HMSO, 2017. Town and Country Planning (Environmental Impact Assessment) Regulations (SI 2017/571).

<sup>2</sup> HMSO, 2018. The Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018.

## Annex 1 – Review of the Proposed Amendments in relation to the Environmental Impact Assessment

### Non-technical Summary

In March 2022, the Applicant submitted a hybrid planning application (planning ref: 22/0900/OUT) and detailed planning application school (planning ref: 22/0902/FUL) for redevelopment of the former Stag Brewery, Mortlake, in the London Borough of Richmond upon Thames (LBRuT). These two linked planning applications were accompanied by an Environmental Impact Assessment (EIA), with the findings presented in an Environmental Statement (ES), prepared by Waterman IE, dated March 2022 (hereafter referred to as the 'March 2022 ES').

The Development would provide residential, flexible use, office, cinema, hotel / pub, and community uses, and a new secondary school. Following the submission of the two planning applications in March 2022, the Applicant has received statutory consultee comments in particular from LBRuT officers, the Health and Safety Executive (HSE), Environment Agency (EA), Thames Water and Sports England. The Applicant has sought to respond to statutory consultee comments which has necessitated some minor scheme changes to the hybrid planning application. The proposed amendments include a reduction in 14 residential units (to up to 1,071) and minor reduction in office (79 sqm GIA) and flexible use (55 sqm GIA) at the ground floor. Two buildings (B01- the cinema and B10) have reduced by no more than one storey each, and another building (B02) facing the riverside has undergone further development of the proposed architectural treatment. Some minor changes have also been made to the drainage, landscape, fire, waste, energy and lighting strategies.

The March 2022 ES has been reviewed in light of the proposed amendments to the Development . On the basis of the review and following further assessment, it has been concluded that the findings of the EIA presented in the March 2022 ES in support of both the hybrid planning application (22/0900/OUT) and detailed application school (22/0902/FUL) are unchanged when the proposed modifications to the Development are considered. As such, an ES Statement of Conformity has been prepared to demonstrate the findings that no significant environmental effects arise from the proposed amendments to planning application (ref: 22/0900/OUT).

### Introduction

The Applicant intends to redevelop the former Stag Brewery, located in Mortlake, south-west London within the administrative boundary of the London Borough of Richmond upon Thames (LBRuT). To facilitate redevelopment of the land, the Applicant is seeking planning permission for the following:

- **Application A (22/0900/OUT):** a hybrid planning application for the demolition of the majority of buildings (except for the Maltings, the façade of the Former Bottling building and the façade of the Former Hotel) and structures within the Site and the redevelopment of the majority of the former Stag Brewery. To the east of Ship Lane, planning permission is sought in detail for the construction of 549 residential units (as amended), flexible use floorspace, office, cinema, hotel / pub with rooms, and community use, flood defence works, towpath works, landscaping, amenity space, play space, public open space, car and cycle parking, installation of plant and energy equipment, new accesses, internal routes, and various associated works (Development Area 1). To the west of Ship Lane, planning permission is sought in outline (with all matters reserved) for up to 518 residential units (as amended), and various associated works (Development Area 2).
- **Application B (22/0902/FUL):** a detailed planning application for the construction of a six-form entry secondary school with associated sports pitch and play space, floodlighting, landscaping, car

and cycle parking, new access routes and associated works to the west of Ship Lane in the area of the Site that is not covered by Application A.

The two Planning Applications are separate but will be linked through a S106 Agreement.

An ES was submitted in March 2022 (the March 2022 ES) in support of the two Planning Applications.

This letter provides a Statement of Conformity to the March 2022 ES which should be read in conjunction. This letter provides our professional opinion on whether the findings of the EIA remain valid as an assessment of the likely significant environmental effects of the Development as a result of the proposed amendments.

### **Proposed Amendments**

Following the submission of the two planning applications in March 2022, the Applicant received statutory consultee comments dated 27 May 2022, in particular from LBRuT officers, the Health and Safety Executive (HSE), Environment Agency (EA), Thames Water and Sports England. The Applicant has sought to respond to statutory consultee comments which has necessitated some minor scheme changes to the hybrid planning application (Application A). No changes are proposed to the school application or to the associated highways works to be secured by a Section 278 Agreement. The minor design changes and impact of these proposed amendments are summarised below:

- B01:
  - The cinema has been reduced in height by 700mm.
  - The top floor has been set back between 500mm and 1m more from the main façade.
  - Design changes to the office and cinema entrances.
- B02:
  - There has been a small change to the brickwork part of the tower.
- B10:
  - The building has been reduced by 1 storey by removing a typical floor.
  - Loss of 9 intermediate residential units.
- Total reduction of 14 intermediate residential units / 29 habitable rooms:
  - 9 of these units were in B10 which has been reduced to 6 storeys; and
  - 5 of the units were at the ground floor in Development Area 2 due to adding extra escape corridors and moving the refuse stores up from the basement.
- Loss of 79 sqm GIA of office use due to the changes to the top floor of B01.
- Loss of 55 sqm GIA of flexible use due to moving the refuse stores to ground floor, separating the residential stairs from the basement and adding additional lifts to the basement.
- Loss of 581sqm GIA of residential due to the reduction of B10 and the ground floor changes.
- Lighting strategy amended to avoid clashes with location of new trees and to improve the environmental performance, where possible removing uplighting of trees and buildings.
- Revised drainage strategy, such as enlarging attenuation tanks, to meet greenfield rate.
- Fire strategy amended, resulting in stairs and lifts servicing the basement car park independent from the stairs and lifts serving the residential levels. Internal changes to cores and corridors. Refuse stores moved from basement to ground level.

- Waste strategy amended, including the re-location of refuse stores within the basement to ground level (as above).
- Landscaping updates associated with the new lift lobbies and lighting strategy updates.
- Updates to the layouts of some wheelchair accessible units to respond to consultee comments.

The proposed amendments do not change the construction programme or activities. The effect of the proposed amendments on the EIA therefore focuses on operational effects only.

A summary of the amended land use and accommodation schedule of the Development is provided in **Table 1** with changes highlighted in **bold**.

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

Land use	
Residential	Up to <del>4,085</del> <b>1,071 (-14)</b> units Up to <del>444,954</del> <b>111,370 (-581)</b> sqm Gross Internal Area (GIA)
Office	<del>4,547</del> <b>4,468 (-79)</b> sqm GIA
Cinema	1,606 sqm GIA
Hotel	1,765 sqm GIA (15 bedrooms)
Flexible uses – café / restaurant / bar / public house/ shops / financial and professional services / office / community / boathouse	<del>4,839</del> <b>4,784 (-55)</b> sqm GIA
School	9,319 sqm GIA (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

### Effect of the Changes upon the Findings of the Environmental Impact Assessment

Each of the technical chapters of the March 2022 ES has been reviewed to determine if the changes described above are likely to affect the likely significant effects previously identified. The review is presented within the following paragraphs.

#### Socio-economics

The proposed amendments include a small decrease in the number of residential units and resultant very minor change to the overall tenure mix, and a decrease in the proposed office and flexible floorspace. The result of these changes would result in the following:

- A decrease in the overall population yield from 2,472 to 2,448 (-24 persons) and subsequently a slight reduction in demand on early years, primary and secondary education, GP services, community facilities, children's play space and open space. Therefore, the impact assessment presented in the March 2022 ES is robust and a reasonable worst-case for the Development.
- The decrease in the number of housing units will result in a minor reduction in contribution towards housing targets including affordable housing, and a slight decrease in household spending. These reductions do not result in any material changes to the magnitude of change and therefore the

assessment of the significance of effects on contribution to housing remains robust and as stated in the March 2022 ES.

- The decrease in office floorspace and flexible floorspace will result in a minor decrease in FTE jobs supported by the proposed Development in comparison with the March 2022 ES from 365 gross direct FTE jobs to 359 FTE jobs (a reduction of 5 net FTE jobs from 326 to 321 net FTE jobs). This does not result in any changes to the assessed magnitude of change and therefore the significance of effect on employment remains robust and as stated in the March 2022 ES.

The impacts of the proposed minor changes have been reviewed by Hatch (socio-economics assessor) and no changes to the likely residual effects reported in Chapter 7: Socio-economics of the March 2022 ES are anticipated as a result of the proposed amendments, hence the impact assessment presented in the March 2022 ES remain robust and valid for socio-economics.

### Transport and Access

The proposed amendments would not result in any change to the car or cycle parking spaces provided for the Development. The demand for cycle parking would, however, reduce by 26 long stay and 10 short stay spaces, meaning the provision of spaces would be even greater than the demand. There will also be a minor reduction in the trip generation for the Development, which equates to only 1 vehicle trip in the AM and PM peak periods. This change is, therefore, considered negligible and the previous analysis undertaken would remain valid.

In response to Transport for London (TfL) comments, new baseline traffic data has been collected, which has been used to test the impact of the closure of Hammersmith Bridge, together with the impacts of COVID-19 on the surrounding highway network. This 2022 data has been compared against 2017 data and shows an overall decrease in traffic flows on the surrounding highway network. The traffic assessment presented in the March 2022 ES, which used traffic data from 2017 baseline surveys, therefore presents a robust worst case assessment.

It is considered that there would be no material changes to the Transport and Access effects presented in Chapter 8 of the March 2022 ES. The likely effects, mitigation measures and likely residual effects therefore remain valid in the light of the proposed amendments.

### Noise and Vibration

Since the proposed amendments would result in only a very minor reduction in the trip generation rates as a result of the Development, the traffic data used for the previous noise modelling and assessment in Chapter 9: Noise and Vibration of the March 2022 ES remains valid. Given that no new or more sensitive land uses are introduced into the Development, the amendments would not materially alter the assessment of noise generated from traffic.

The new 2022 baseline traffic data has been reviewed, as a sensitivity test with respect to the closure of Hammersmith Bridge. In terms of road noise these data give rise to no significant changes compared to the 2017 traffic data (a 25% change in traffic data is required for a 1db change in traffic noise).

On the basis of the above, the overall findings of the likely effects, mitigation measures and likely residual effects associated with noise from the Development, as reported assessment in Chapter 9: Noise and Vibration of the March 2022 ES remains robust and valid.

## Air Quality

As set out above, the proposed amendments would result in only a very minor reduction in the trip generation rates forecasted to and from the Development. Consequently, the traffic data used for the previous air quality modelling and assessment of traffic emissions in the March 2022 ES remains valid.

The amendments do not result in any new or more sensitive land uses proposed, consequently, the most sensitive land uses within the Development have already been assessed.

A further sensitivity test has been undertaken with the new 2022 baseline traffic data which represents conditions with the Hammersmith Bridge closure in place. This sensitivity test has found that there would be no significant change in NO<sub>2</sub>, PM<sub>10</sub> or PM<sub>2.5</sub> concentrations. The predicted pollutant concentrations as a result of the Hammersmith Bridge closure, and associated model verification updates are provided in **Annex 2** of this document.

In light of the above, the likely effects, mitigation measures and likely residual effects associated with air quality at and surrounding the Development, as reported in Chapter 10: Air Quality of the March 2022 ES, remain unaltered and valid.

Further to the above a peer review, undertaken by AQE Global on behalf of LBRuT, has been undertaken on the air quality assessment. A separate response to this peer review has been provided to address the comments. The response document provides further justification with respect to the air quality modelling undertaken, and tests additional assessment methodologies as requested by AQE. A further assessment of the Development's air quality neutrality has been undertaken, using the April 2014 guidance, as opposed to the Draft 2021 Guidance which is reported in the March 2022 ES. As a result of the additional assessment works, no changes to the predicted significant environmental effects of the Development are identified, and the findings as presented in the March 2022 ES remain unaltered and valid.

## Ground Conditions and Contamination

The proposed amendments do not result in any new or more sensitive land uses than previously assessed, there would be no material change to the contamination risks identified in the March 2022 ES. Consequently, the likely effects, mitigation measures and likely residual effects of the Development as reported in Chapter 11: Ground Conditions and Contamination of the March 2022 ES would not be materially altered and would remain robust and valid.

## Surface Water Drainage and Flood Risk

The proposed amendments do not introduce any new land uses to the Development, nor are there any fundamental proposed changes to the strategy for managing storm water and foul water flows. The amendments do not materially affect vulnerability or flood risk previously assessed, and thus the conclusions and recommendations described in the Flood Risk Assessment (Appendix 12.1) remain robust and valid.

Following comments from the Lead Local Flood Authority (LLFA), the drainage strategy has been revised to achieve greenfield rate. The overall effect on surface water flood risk as a result of the revised drainage strategy would remain as reported in Chapter 12: Surface Water Drainage and Flood Risk of the March 2022 ES (i.e long-term, local, beneficial effect of minor significance).

The amendments do not result in any material changes to the assessment of the likely effects, mitigation measures and subsequent nature and significance of likely residual effects of the Development identified in Chapter 12: Surface Water Drainage and Flood Risk of the March 2022 ES which therefore remain robust and valid.

### Ecology

No significant changes are proposed to the ecological enhancements proposed as part of the landscaping strategy. The proposed amendments do not result in any material changes to the assessment of the likely effects, mitigation measures and subsequent nature and significance of likely residual effects of the Development identified in Chapter 13: Ecology of the March 2022 ES which therefore remains valid.

Following comments from LBRuT's ecological officer and agreement on next steps at a follow up meeting held on 7 July 2022, further bat and peregrine falcon surveys are currently underway. A further addendum to the March 2022 ES will be provided once these ecological surveys have been completed.

### Archaeology

No changes to below ground works are proposed and as such, there would be no material change to the archaeological impacts identified in the March 2022 ES. Consequently, the likely effects, mitigation measures and likely residual effects of the Development as reported in Chapter 14: Archaeology of the March 2022 ES would not be materially altered and would remain robust and valid.

### Built Heritage

No changes are proposed to the Buildings of Townscape Merit (BTMs) within the Site. The proposed amendments, including reducing the height of Buildings B01 and B10 and architectural refinement of Building B02 would improve the setting of the adjacent heritage assets, however, the overall effect would remain as reported in Chapter 15: Built Heritage of the March 2022 ES (i.e. insignificant to indirect, long-term, beneficial effects of minor significance).

Consequently, the likely effects, mitigation measures and likely residual effects of the Development as reported in Chapter 15: Built Heritage of the March 2022 ES are not materially altered and remain robust and valid.

### Townscape and Visual Assessment

The minor decrease to the height of B01 and B10, as a result of the proposed amendments, is not considered likely to materially alter the nature or significance of the townscape and visual effects, as reported in Chapter 16: Townscape and Visual of the March 2022 ES. This is because the proposed decrease in scale would not noticeably alter the composition or quality of the townscape of the Development as a whole, nor the composition and quality of any of the views that contribute to local visual amenity. Views in which the proposed amendments would be visible have been updated and appended to this ES Soc, refer to **Annex 3**. The architectural treatment to B02 is considered to enhance the overall aesthetic quality of the Development, particularly riverside views, however, it would not alter the significance of effects identified in Chapter 16: Townscape and Visual of the March 2022 ES.



As such, the proposed amendments do not result in any material changes to the assessment of the likely effects, mitigation measures and subsequent nature and significance of likely residual effects of the Development identified in Chapter 16: Townscape and Visual of the March 2022 ES, which therefore remain robust and valid.

#### Wind Microclimate

The minor decrease to massing of Building B01 and B10 is not expected to result in a significant change to the predicted wind conditions across the Development as previously reported in Chapter 17: Wind Microclimate of the March 2022 ES. This is because a slightly larger massing was assessed in the March 2022 ES, therefore, conditions with the proposed amendments are not likely to be significantly different, but if anything marginally calmer. As a result, the predicted levels of pedestrian comfort at the locations previously assessed are likely to remain unchanged. On this basis, the likely effects, mitigation measures and likely residual effects of the Development presented in Chapter 17: Wind Microclimate of the March 2022 ES are considered to remain robust and valid and applicable in relation to the proposed amendments.

#### Daylight, Sunlight, Overshadowing and Light Pollution

The minor reduction in building height of buildings B01 and B10 would result in either the same or marginal improvements to daylight, sunlight, overshadowing and light pollution. The changes are however unlikely to materially alter the nature or significance of the effects, as reported in Chapter 18: Daylight, Sunlight, Overshadowing and Light Pollution of the March 2022 ES.

BRE guidance 'BR209: Site layout planning for daylight and sunlight: a guide to good practice'<sup>3</sup> was published in June 2022. This guidance replaced the 2011 edition which the March 2022 ES was based on.

When considering significance to daylight within the surrounding properties, the Vertical Sky Component (VSC) and No Sky Line-Contour (NSC) analysis was used. These assessment methodologies remain as unchanged from the 2011 edition. The Average Daylight Factor (ADF) analysis was included in the March 2022 ES for supplementary purposes. This assessment methodology has since been removed from the 2022 BRE guidance. Whilst this assessment methodology has been removed, the primary assessments used to apply significance (VSC and NSC) remain unchanged. In addition, the assessments for sunlight, overshadowing and light pollution also remain unchanged. As such, the daylight, sunlight, overshadowing and light pollution effects remain as stated in the March 2022 ES.

In light of the above, it is considered that there would be no material change to the nature or significance of the daylight, sunlight, overshadowing, and light pollution assessment, as presented in Chapter 18: Daylight, Sunlight, Overshadowing and Light Pollution of the March 2022 ES. This assessment is therefore considered to remain valid and applicable in relation to the proposed amendments.

#### Greenhouse Gases and Climate Change

The proposed amendments result in an overall decrease of 14 residential units and minor reduction in office and flexible use areas. This would result in a very minor decrease to the calculated GHG

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<sup>3</sup> BRE, 2022: BR 209 2022 edition – Site layout planning for daylight and sunlight: a guide to good practice'.



emissions, which would be immaterial to the Development's lifetime GHG emissions presented in Chapter 19: Greenhouse Gases of the March 2022 ES. The IEMA guidance<sup>4</sup> makes it clear that any increase in GHG emissions should be considered to be significant. As such whilst there will be a very minor change to the calculated GHG, the conclusion of the GHG assessment reported in Chapter 19: Greenhouse Gases of the March 2022 ES remains robust, applicable and valid.

#### Cumulative Effects

Given the scale, nature and location of the proposed amendments, the likely in-combination effects are not considered to be materially altered, and the likely effects reported in the March 2022 ES remain valid.

No new cumulative schemes have been identified to warrant an assessment of intra-cumulative effects with other development schemes.

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<sup>4</sup> IEMA, 2022: 'Assessing Greenhouse Gas Emissions and Evaluating their Significance'.



## **Annex 2: Air Quality Assessment Update**

## Annex 2: Updates to Air Quality Results, Traffic Data and Model Verification

### Introduction

A sensitivity test has been undertaken with the new 2022 baseline traffic data, which has been collected in response to Transport for London (TfL) comments to assess the impact of the closure of Hammersmith Bridge on the data previously presented. Annex 2 of the ES Statement of Conformity presents the updated likely significant effects, traffic data and model verification associated with the new 2022 baseline traffic data. This sensitivity test has found that there would be no significant change in NO<sub>2</sub>, PM<sub>10</sub> or PM<sub>2.5</sub> concentrations. The likely effects, mitigation measures and likely residual effects associated with air quality at and surrounding the Development, as reported in Chapter 10: Air Quality of the March 2022 ES, remain unaltered and valid.

For consistency, the table and figure numbers correspond to those presented within **Chapter 10: Air Quality** and **Appendix 10.1** of the March 2022 ES.

### Updated Likely Significant Effects

#### The Works

##### *Construction Vehicle Exhaust Emissions*

Likely effects on local air quality associated with construction of the Development would result from changes to traffic flows on the local road network. To present a worst-case assessment of construction, vehicle emission rates and background concentrations for 2019 have been used. The results of the ADMS-Roads modelling of construction traffic at existing sensitive receptors are presented in **Table 10.15**.

Table 10.15: Results of the ADMS-Roads Construction Traffic Modelling at Sensitive Receptors

Receptor ID	NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )			PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )			PM <sub>10</sub> Number of Days >50µg/m <sup>3</sup>			PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )		
	Without Construction	With Construction	Change	Without Construction	With Construction	Change	Without Construction	With Construction	Change	Without Construction	With Construction	Change
1	19.1	19.1	0.0	17.0	17.0	0.0	0	0	0	11.3	11.3	0.0
2	21.6	21.9	0.3	17.3	17.4	0.1	0	0	0	11.5	11.6	0.0
3	20.0	20.1	0.1	17.1	17.2	0.1	0	0	0	11.4	11.4	0.0
4	17.8	17.9	0.1	16.4	16.4	0.0	0	0	0	11.0	11.0	0.0
5	17.7	17.7	0.0	16.3	16.3	0.0	0	0	0	11.0	11.0	0.0
6	19.2	19.3	0.1	17.0	17.0	0.0	0	0	0	11.3	11.3	0.0
7	19.5	19.5	0.0	17.1	17.1	0.0	0	0	0	11.4	11.4	0.0
8	19.9	20.0	0.1	17.2	17.3	0.1	0	0	0	11.5	11.5	0.0
9	19.6	19.6	0.0	16.9	16.9	0.0	0	0	0	11.3	11.3	0.0
10	20.9	20.9	0.0	17.7	17.7	0.0	1	1	0	11.7	11.7	0.0
11	21.0	21.1	0.1	17.8	17.8	0.1	1	1	0	11.8	11.8	0.0
12	19.3	19.4	0.1	17.0	17.1	0.1	0	0	0	11.4	11.4	0.0
13	19.3	19.3	0.0	16.7	16.7	0.0	0	0	0	11.2	11.2	0.0
14	19.4	19.5	0.1	16.9	16.9	0.0	0	0	0	11.3	11.3	0.0
15	17.8	17.8	0.0	16.4	16.4	0.0	0	0	0	11.0	11.0	0.0
16	27.0	27.3	0.3	18.1	18.1	0.0	1	1	0	12.0	12.1	0.1
17	25.4	25.5	0.1	17.9	17.9	0.0	1	1	0	11.9	11.9	0.0
18	28.6	28.9	0.2	18.4	18.4	0.0	1	1	0	12.2	12.2	0.0
19	29.7	30.1	0.4	18.5	18.6	0.1	1	1	0	12.3	12.3	0.0
20	30.4	30.9	0.5	18.8	18.8	0.0	2	2	0	12.4	12.4	0.0
21	21.4	21.7	0.3	17.2	17.2	0.0	0	0	0	11.5	11.5	0.0
22	21.3	21.6	0.3	17.5	17.5	0.0	1	1	0	11.7	11.7	0.0
23	20.9	21.2	0.3	17.1	17.1	0.0	0	0	0	11.4	11.4	0.0
24	22.1	22.3	0.2	17.7	17.8	0.1	1	1	0	11.8	11.8	0.0
25	21.7	21.8	0.1	17.3	17.3	0.1	0	0	0	11.5	11.5	0.0

Note: For accuracy, the changes arising from the Development have been calculated using the exact output from the ADMS-Road and ADMS model rather than the rounded numbers. This explains where there may be a slight difference in the calculated change in concentrations from the 'without' and 'with' Development scenarios.

As shown in **Table 10.15**, for the peak construction period (in 2028) with the Development construction vehicles on the local road network, concentrations are predicted to meet the respective AQS objectives for all pollutants assessed.

Using the impact descriptors outlined in **Table 10.10** of Chapter 10: Air Quality of the March 2022 ES, the Development is predicted to result in a 'negligible' impact at all receptors. As discussed in **Appendix 10.1** of the March 2022 ES, the 1-hour mean AQS objective for NO<sub>2</sub> is unlikely to be exceeded at a roadside location where the annual mean NO<sub>2</sub> concentration is less than 60µg/m<sup>3</sup>. It is considered that with the Development construction vehicles on the local road network there would be a 'negligible' impact on hourly NO<sub>2</sub> concentrations.

Using the impact descriptors outlined in **Table 10.10** of Chapter 10: Air Quality (of the March 2022 ES) with the Development construction vehicles on the local road network for PM<sub>10</sub> and PM<sub>2.5</sub> the predicted impact is 'negligible' at all existing receptors.

The predicted impacts above are worst-case, as the assessment has used the peak construction trips operating throughout an entire year (which would not occur in reality) and does not consider any improvements in NO<sub>x</sub> and NO<sub>2</sub>. Nonetheless, using professional judgement, based on the severity of the impact and the concentrations predicted at the sensitive receptors, it is considered that the effect of construction vehicles associated with the Development would be **insignificant** at all receptors and for all pollutants assessed.

The construction traffic modelling above was used to ascertain the impact of construction vehicles on existing receptors. The impact of construction vehicles on proposed receptors built out by 2028, such as the school, were not assessed. However, based on the impact of construction vehicles on existing receptors, the impact of construction vehicles on proposed receptors built out by 2028 would be **insignificant**.

## Completed Development

### *Changes in Local Air Quality from Traffic*

Likely impacts on local air quality when the Development is completed and operational in 2029 would result from changes to traffic flows on the local road network and emissions from the basement car parks associated with the Development. The results of the ADMS-Roads modelling of operational traffic (based on current guidance, that is with reduced emission rates and background concentration to the completion year of 2029) are presented in **Table 10.16**.

Table 10.16: Results of the Traffic Modelling at Select Sensitive Receptors

Receptor ID		NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Number of Days >50µg/m <sup>3</sup>				PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )			
		2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change
1	1 Varsity Flow	25.8	18.5	18.6	0.1	18.4	17.4	17.4	0.0	1	0	1	1	12.4	11.6	11.6	0.0
2	6 Watney Cottages	29.6	20.8	21.1	0.2	18.8	17.7	17.8	0.1	2	1	1	0	12.6	11.8	11.8	0.0
3	1 Watney Cottages	27.2	19.3	19.5	0.2	18.6	17.5	17.6	0.1	1	1	1	0	12.5	11.7	11.7	0.0
4	1-3 Parliament Mews	23.9	17.3	17.4	0.1	17.8	16.8	16.8	0.0	1	0	0	0	12.0	11.3	11.3	0.0
5	Ship Lane	23.6	17.1	17.3	0.2	17.8	16.7	16.8	0.1	1	0	0	0	12.0	11.2	11.3	0.1
6	Lower Richmond Road	26.2	18.6	18.9	0.2	18.4	17.4	17.5	0.1	1	0	1	1	12.4	11.6	11.7	0.1
7	Lower Richmond Road	26.6	18.8	19.1	0.1	18.5	17.5	17.6	0.1	1	1	1	0	12.4	11.7	11.7	0.0
8	Lower Richmond Road	27.1	19.2	19.4	0.1	18.7	17.6	17.7	0.1	1	1	1	0	12.5	11.7	11.8	0.1
9	13 Sheen Lane	26.8	18.9	19.1	0.2	18.3	17.3	17.3	0.0	1	0	0	0	12.3	11.5	11.6	0.1
10	40 Mortlake High Street	29.6	20.2	20.4	0.2	19.2	18.1	18.2	0.1	2	1	1	0	12.8	12.0	12.0	0.0
11	Boat Race Court	29.8	20.3	20.4	0.1	19.2	18.2	18.2	0.0	2	1	1	0	12.8	12.0	12.1	0.1
12	Little Paradise Nursery	26.3	18.7	18.9	0.2	18.5	17.4	17.5	0.1	1	0	1	1	12.4	11.6	11.7	0.1



Receptor ID		NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Number of Days >50µg/m <sup>3</sup>				PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )			
		2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change
13	Thomas House Primary School	25.9	18.7	18.8	0.1	18.1	17.0	17.1	0.1	1	0	0	0	12.2	11.4	11.4	0.0
14	Richmond Training and Development Centre	26.2	18.7	18.9	0.1	18.3	17.3	17.3	0.0	1	0	0	0	12.3	11.5	11.6	0.1
15	St Mary Magdalen's Catholic Primary School	23.9	17.2	17.3	0.0	17.8	16.8	16.8	0.0	1	0	0	0	12.0	11.3	11.3	0.0
16	179 Lower Richmond Road	35.6	26.8	26.9	0.1	19.6	18.0	18.1	0.1	2	1	1	0	13.2	12.0	12.0	0.0
17	189 Lower Richmond Road	33.6	25.2	25.3	0.3	19.4	17.8	17.8	0.0	2	1	1	0	13.0	11.8	11.9	0.1
18	2 South Circular	37.5	28.3	28.4	0.0	19.9	18.3	18.3	0.0	3	1	1	0	13.4	12.1	12.1	0.0
19	67 Shalstone Road	38.8	29.4	29.5	0.1	20.1	18.5	18.5	0.0	3	1	1	0	13.5	12.2	12.2	0.0
20	2 Lower Richmond Road	39.8	30.0	30.2	0.2	20.3	18.7	18.7	0.0	3	1	2	1	13.6	12.4	12.4	0.0
21	36 Lower Richmond Road	29.3	20.6	20.9	0.2	18.7	17.6	17.6	0.0	1	1	1	0	12.6	11.7	11.8	0.1
22	1 Chertsey Court	29.3	21.3	21.5	0.1	18.9	17.4	17.5	0.1	2	0	1	1	12.7	11.6	11.7	0.1
23	23 Chertsey Court	28.5	20.2	20.4	0.2	18.5	17.5	17.5	0.0	1	1	1	0	12.5	11.7	11.7	0.0
24	139 Chertsey Court	30.6	22.1	22.2	0.1	19.2	17.7	17.7	0.0	2	1	1	0	12.9	11.8	11.8	0.0

Receptor ID		NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )				PM <sub>10</sub> Number of Days >50µg/m <sup>3</sup>				PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )			
		2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change	2019 Baseline	2029 Without Development	2029 With Development	2029 Change
25	77 Chertsey Court	29.7	20.9	21.0	0.0	18.8	17.7	17.7	0.0	2	1	1	0	12.6	11.8	11.8	0.0
26	Proposed Building 10 – Ground Floor Level	-	-	20.5	-	-	-	18.1	-	-	-	1	-	-	-	12.0	-
27	Proposed Building 5 – Ground Floor Level	-	-	17.4	-	-	-	16.8	-	-	-	0	-	-	-	11.3	-
28	Proposed Building 9 – Ground Floor Level	-	-	17.2	-	-	-	16.7	-	-	-	0	-	-	-	11.2	-
29	Proposed School – Ground Floor Level	-	-	17.3	-	-	-	16.8	-	-	-	0	-	-	-	11.3	-

Note: For accuracy, the changes arising from the Development have been calculated using the exact output from the ADMS-Road and ADMS model rather than the rounded numbers within Table 10.15. This explains where there may a slight difference in the calculated change in concentrations from the 'without' and 'with' Development scenarios. Exceedences of the AQS objectives shown in **bold** text

### *Nitrogen Dioxide (NO<sub>2</sub>)*

The results in **Table 10.16** indicate that for 2019 the annual mean NO<sub>2</sub> objective is met at all 25 existing receptors. The highest concentration is predicted at Receptor 20 (39.8µg/m<sup>3</sup>). As discussed in **Appendix 10.1** of the March 2022 ES, the 1-hour mean AQS objective for NO<sub>2</sub> is unlikely to be exceeded at a roadside location where the annual mean NO<sub>2</sub> concentration is less than 60µg/m<sup>3</sup>. As shown in **Table 10.16**, the predicted annual mean NO<sub>2</sub> concentrations in 2019 are below 60µg/m<sup>3</sup> at all receptor locations. Accordingly, the 1-hour mean objective is likely to be met at these locations.

In 2029, both 'without' and 'with' the Development, concentrations are predicted to meet the NO<sub>2</sub> annual mean objective value at all receptor locations assessed. Therefore, the 1-hour mean objective is also predicted to be met at all existing receptor locations.

Using the impact descriptors outlined in **Table 10.10** of Chapter 10: Air Quality (of the March 2022 ES), the Development is predicted to result in an 'negligible' impact at all existing receptors assessed. It is also considered that the Development would have an 'negligible' impact on hourly NO<sub>2</sub> concentrations.

### *Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)*

As shown in **Table 10.16**, the annual mean concentrations of PM<sub>10</sub> are predicted to be well below the objective of 40µg/m<sup>3</sup> in 2019 and in 2029 both 'without' and 'with' the Development at all the existing receptor locations considered. The 2019 predicted annual mean PM<sub>10</sub> concentrations are consistent / in line with the existing LBRuT automatic monitor results. The maximum predicted annual mean PM<sub>10</sub> concentration is 20.3µg/m<sup>3</sup> at Receptor 20 in 2019. Using the impact descriptors outlined in **Table 10.10** of Chapter 10: Air Quality (of the March 2022 ES), the Development is predicted to result in an 'negligible' impact at all existing receptors assessed.

The results in **Table 10.16** indicate that in 2019 and in 2029 for both 'without' and 'with' the Development, all existing receptor locations are predicted to be below the 24-hour mean PM<sub>10</sub> objective value of 35 days exceeding 50µg/m<sup>3</sup>. The maximum predicted concentration in all scenarios tested is 3 days at Receptors 18, 19 and 20.

The results in **Table 10.16** indicate that in 2019 and in 2029 for both 'without' and 'with' the Development, all existing receptor locations are predicted to be below the annual mean PM<sub>2.5</sub> objective value of 25µg/m<sup>3</sup>.

Using the impact descriptors outlined in **Table 10.10** of Chapter 10: Air Quality (of the March 2022 ES), the Development is predicted to result in an 'negligible' impact at all existing receptors.

Using professional judgement, based on the severity of the impact discussed above and the concentrations predicted at all the sensitive receptors considered in the air quality assessment, it is considered that the effect of the Development on local NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations would be **insignificant**.

### *Conditions within the Development*

As shown by the results in **Table 10.16**, the predicted NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations for locations within the Development with relevant exposure are below the relevant objectives in 2029 for all floor levels. As such, it is considered that the effect of introducing future residential and school uses to the Site is **insignificant**.

#### *Overall Predicted Effects of the Development*

Using professional judgement, based on the severity of the impact discussed above and the concentrations predicted at all the sensitive receptors considered in the air quality assessment - it is considered that the effect of the Development on local NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations would be **insignificant**.

#### **Conclusion**

This sensitivity test has found that there would be no significant change in NO<sub>2</sub>, PM<sub>10</sub> or PM<sub>2.5</sub> concentrations. The likely effects, mitigation measures and likely residual effects associated with air quality at and surrounding the Development, as reported in Chapter 10: Air Quality of the March 2022 ES, remain unaltered and valid.

## Updated Air Quality Modelling

The traffic data and model verification has been updated and presented below. All other technical information and data upon which the operational phase of the air quality assessment is based has not been updated and remains as presented in **Appendix 10.1** of the March 2022 ES.

## Traffic Data

Updated traffic flow data comprising Annual Average Daily Traffic (AADT) flows, traffic composition (% HDVs – Heavy-Duty Vehicles) and speeds (in kph) were used in the model as provided by Stantec for the surrounding road network. **Table A1** presents the traffic data used within the air quality assessment.

Table A1: 24 hour AADT Data Used within the Assessment

Receptor Name	Speed (kph)	Direction	Base 2019		Without Construction 2028		With Construction 2028		Without Development 2029		With Development 2029	
			AADT	%HDV	AADT	%HDV	AADT	%HDV	AADT	%HDV	AADT	%HDV
A316 Clifford Avenue	65	NB	17116	2.5	18547	2.5	18591	2.7	18694	2.5	18846	2.5
	64	SB	15123	2.8	16387	2.8	16431	3.0	16517	2.8	16811	2.8
A316 Lower Richmond road	48	WB	13917	4.1	15081	4.1	15108	4.3	15200	4.1	15472	4.1
	48	EB	15685	3.7	16997	3.7	17024	3.8	17131	3.7	17388	3.7
South Circular (north of A316)	48	NB	7708	4.7	8352	4.7	8363	4.8	8418	4.7	8504	4.6
	48	SB	9114	4.0	9876	4.0	9887	4.1	9954	4.0	10083	3.9
South Circular (south of A316)	48	NB	10774	4.0	11674	4.0	11702	4.2	11766	4.0	11766	4.0
	48	SB	10025	4.1	10863	4.1	10890	4.4	10949	4.1	11035	4.1
A3003 Lower Richmond Road (Watney's Sports Ground)	44	WB	7388	4.0	8006	4.0	8115	5.3	8069	4.0	8666	3.9
	48	EB	9699	2.9	10509	2.9	10619	3.9	10592	2.9	11273	2.9
A3003 Lower Richmond Road (Mortlake Green)	39	WB	7357	3.6	7972	3.6	7972	3.6	8035	3.6	8679	3.6
	45	EB	2418	10.7	2620	10.7	2620	10.7	2641	10.7	3310	9.2
Williams Lane	41	NB	203	0.0	219	0.0	219	0.0	221	0.0	559	1.8
	42	SB	248	1.2	268	1.2	268	1.2	270	1.2	568	2.2



Receptor Name	Speed (kph)	Direction	Base 2019		Without Construction 2028		With Construction 2028		Without Development 2029		With Development 2029	
			AAADT	%HDV	AAADT	%HDV	AAADT	%HDV	AAADT	%HDV	AAADT	%HDV
Mortlake High Street	51	WB	7455	13.7	8078	13.7	8107	13.6	8142	13.7	8584	13.1
	33	EB	10014	13.7	10851	13.7	10879	13.7	10936	13.7	11400	13.3
The Terrace (west of Barnes Bridge Station)	46	WB	8,607	8.7	9,326	8.7	9,355	8.6	9,400	8.7	9,749	8.5
	47	EB	9,267	8.7	10,042	8.7	10,071	8.7	10,121	8.7	10,552	8.5
White Hart Lane (south of Mortlake High Street)	39	NB	2,250	8.3	2,438	8.3	2,438	8.3	2,457	8.3	2,549	8.1
	41	SB	2,757	7.5	2,988	7.5	2,988	7.5	3,012	7.5	3,045	7.5
Sheen Lane (north of Level Crossing)	48	NB	2321	1.8	2515	1.8	2515	1.8	2535	1.8	2737	1.9
	48	SB	2327	2.6	2522	2.6	2522	2.6	2542	2.6	2747	2.7
Sheen Lane (south of Level Crossing)	48	NB	2321	1.8	2515	1.8	2515	1.8	2535	1.8	2737	1.9
	48	SB	2327	2.6	2522	2.6	2522	2.6	2542	2.6	2747	2.7
Sheen Lane (south of South Circular)	33	NB	2,394	3.3	2,594	3.3	2,594	3.3	2,615	3.3	2,743	3.3
	34	SB	2,605	5.1	2,823	5.1	2,823	5.1	2,845	5.1	2,965	5.0
South Circular Road (west of Sheen Lane)	43	WB	9,531	8.7	10,328	8.7	10,356	9.0	10,410	8.7	10,410	8.7
	44	EB	9,205	8.1	9,974	8.1	10,002	8.3	10,053	8.1	10,053	8.1

## Model Verification

**Table A8** compares the modelled and equivalent measured roadside NO<sub>2</sub> concentrations at the diffusion tube sites.

Table A8: Annual Mean NO<sub>2</sub> Modelled and Monitored Concentrations

Site ID	Monitored Annual Mean NO <sub>2</sub> (µg/m <sup>3</sup> )	Modelled Total Annual Mean NO <sub>2</sub> (µg/m <sup>3</sup> )	% Difference
DT74	52.0	38.8	-25.5
DT51	30.0	25.4	-15.4
DT52	55.0	48.4	-12.0
DT18	41.0	31.9	-22.1
DT55	40.0	33.1	-17.3
DT70	33.0	26.8	-18.8
Diffusion Tube 1	40.0	39.4	-1.5
Diffusion Tube 2	34.3	34.6	0.8
Diffusion Tube 4	39.7	41.1	3.5
Diffusion Tube 6	45.7	37.1	-18.8
Diffusion Tube 7	39.2	34.7	-11.6
School 1	28.1	25.2	-10.2
School 2	28.0	25.0	-10.7

LAQM.TG(16) suggests that where there is no systematic over or under prediction at the diffusion tube results and where the majority of modelled results are within 10% of the monitored concentrations that the model verification is appropriate and no further adjustment factor is required. Given the results in **Table A8** model adjustment was undertaken.

Box 7.15 in LAQM.TG(16) indicates a method based on comparison of the road NO<sub>x</sub> contributions and calculating an adjustment factor. This requires the roadside NO<sub>x</sub> contribution to be calculated. In addition, monitored NO<sub>x</sub> concentrations are required, which were calculated from the annual mean NO<sub>2</sub> concentration at the diffusion tube site using the NO<sub>x</sub> to NO<sub>2</sub> spreadsheet calculator as described above. The steps involved in the adjustment process are presented in **Table A9**.

Table A9: Model Verification Result for Adjustment NO<sub>x</sub> Emissions (µg/m<sup>3</sup>)

Site ID	Monitored NO <sub>2</sub>	Monitored Road NO <sub>x</sub>	Modelled Road NO <sub>x</sub>	Ratio of Monitored Road Contribution NO <sub>x</sub> /Modelled Road Contribution NO <sub>x</sub>
DT21	52.0	70.6	35.3	2.0
DT51	30.0	15.5	5.6	2.8
DT52	55.0	79.4	60.4	1.3
DT18	41.0	39.6	18.1	2.2
DT55	40.0	39.6	23.1	1.7
DT70	33.0	22.2	8.6	2.6
Tube 1	40.0	38.4	36.9	1.0
Tube 2	34.3	24.8	25.4	1.0
Tube 4	39.7	37.6	41.1	0.9
Tube 6	45.7	53.1	31.3	1.7
Tube 7	39.2	36.4	25.6	1.4
School 1	28.1	11.4	5.3	2.2
School 2	28.0	11.1	4.8	2.3

**Figure A3** shows the mathematical relationship between modelled and monitored roadside NO<sub>x</sub> (i.e. total NO<sub>x</sub> minus background NO<sub>x</sub>) in a scatter graph (data taken from **Table A9**), with a trendline passing through zero and its derived equation.

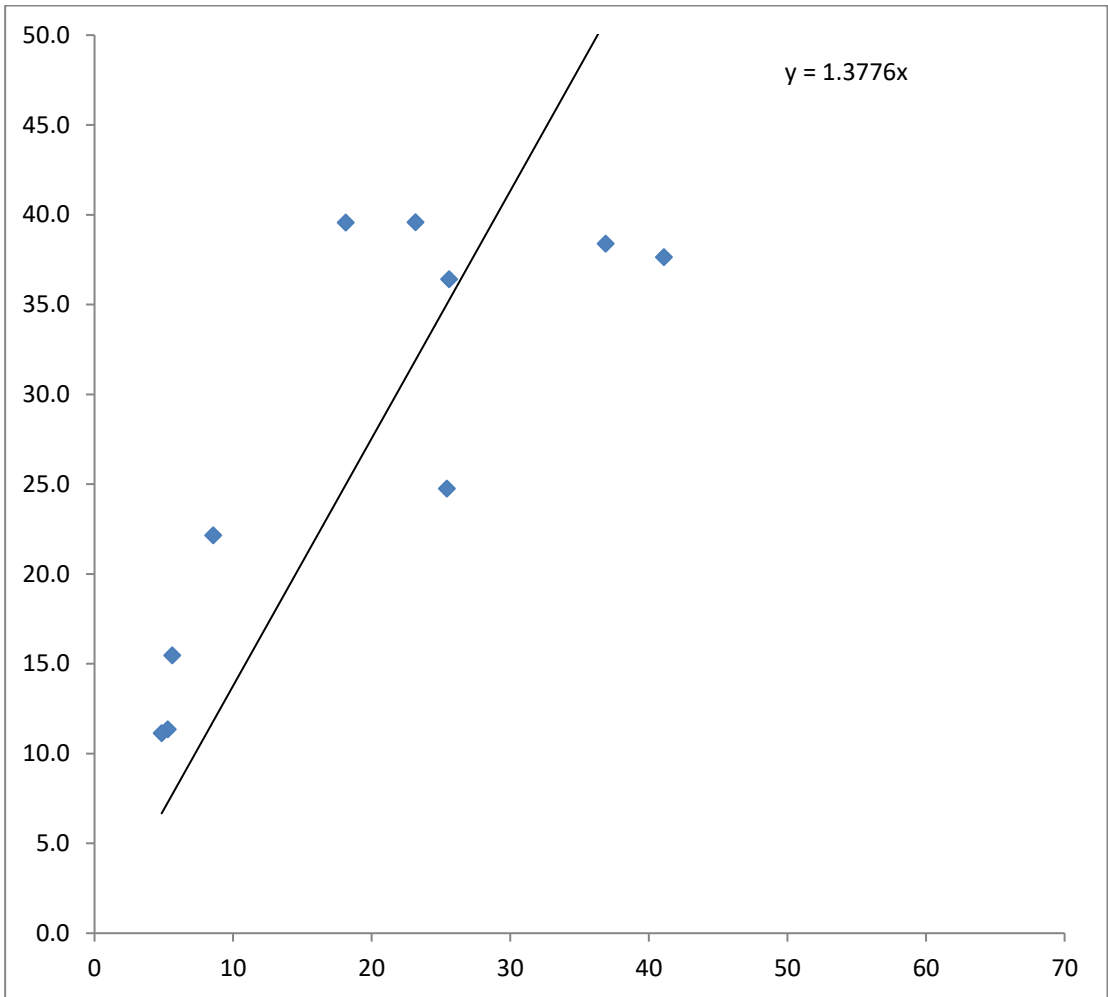


Figure A3: Unadjusted Modelled versus Monitored Annual Mean Roadside NO<sub>x</sub> at the Monitoring Sites (µg/m<sup>3</sup>)

Consequently, in **Table A10** the adjustment factor (1.3776) obtained from **Figure A3** is applied to the modelled NO<sub>x</sub> Roadside concentrations to obtain improved agreement between monitored and modelled annual mean NO<sub>x</sub>. This has been converted to annual mean NO<sub>2</sub> using the NO<sub>x</sub>:NO<sub>2</sub> spreadsheet calculator.

Table A10: Adjusted Annual Average NO<sub>2</sub> Concentrations Compared to Monitored Annual Mean NO<sub>2</sub> Concentrations (µg/m<sup>3</sup>)

Site ID	Adjusted Modelled Road NO <sub>x</sub>	Adjusted Modelled Total NO <sub>x</sub>	Modelled Total NO <sub>2</sub>	Monitored Total NO <sub>2</sub>	% Difference
DT21	48.7	82.5	44.0	52.0	-15.3
DT51	7.7	41.3	26.4	30.0	-12.1
DT52	83.2	117.0	56.3	55.0	2.3
DT18	25.0	59.9	34.9	41.0	-14.8
DT55	31.9	64.8	36.9	40.0	-7.9
DT70	11.8	45.4	28.3	33.0	-14.2
Tube 1	50.8	84.6	44.9	40.0	12.1
Tube 2	35.0	68.8	38.6	34.3	12.6
Tube 4	56.6	90.4	47.0	39.7	18.4
Tube 6	43.2	77.0	41.9	45.7	-8.3
Tube 7	35.2	69.0	38.7	39.2	-1.2
School 1	7.3	40.8	26.2	28.1	-6.9
School 2	6.7	40.2	25.9	28.0	-7.5

## Statistical Analysis

To determine if the model is performing well further statistical analysis of the performance of the modelled results has been undertaken using the methodology detailed in LAQM.TG(16) Box 7.17: Methods and Formulae for Description of Model Uncertainty. This statistical analysis checks the performance of the model used and the accuracy of the results (observed vs predicted).

The methodology for the calculations is presented in LAQM.TG(16) for the following:

- **Correlation Coefficient:** This is used to measure the linear relationship between the predicted and observed data. A value of zero means no relationship and a value of 1 means an absolute relationship. This statistic can be particularly useful when comparing a large number of model and observed data points.
- **Fractional Bias:** this is used to identify if the model shows a systematic tendency to over or under predict. Values vary between +2 and -2 and has an ideal value of zero. Negative values suggest a model over-prediction and positive values suggest a model under-prediction.
- **Root Mean Square Error:** This is used to define the average error or uncertainty of the model. The units of the Root Mean Square Error are the same as the quantities compared.

The results of the statistical calculation are presented in **Table A11**.

Table A11: Statistical Calculations of Error for the Modelled Results

Statistical Calculation	Perfect Value	Acceptable Variable Tolerance	Unadjusted Model Score	Unadjusted Model Score
Correlation Coefficient	1	N/A	0.869	0.875
Fractional Bias	0	+2 to -2	0.45	0.42
Root Mean Square Error	0	±10	17.2	4.5

Based on the results presented in **Table A11** it is considered that the model is performing well following adjustment. When adjusted there is no systematic over or under prediction of results and the root mean square error is within the acceptable tolerance levels, further adjustment is therefore not necessary.

### Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)

PM<sub>10</sub> and PM<sub>2.5</sub> monitoring data is not available for the Site area. Therefore, the roadside modelled NOx factor of 1.3776 factor has been applied to the roadside PM<sub>10</sub> and PM<sub>2.5</sub> modelling results.



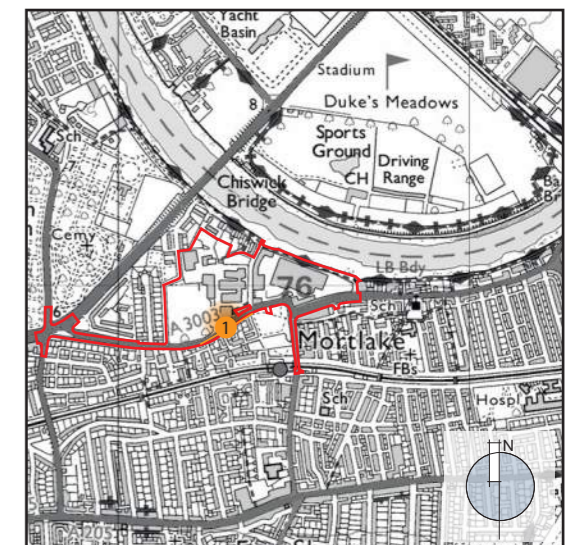
### **Annex 3: Updated AVRs**



Viewpoint 1b: Existing view looking Northeast across Lower Richmond Road towards the West Gatehouse and P.O.B office building within the Site.



Viewpoint 1b: Proposed view of the Development looking northeast across Lower Richmond Road.



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.7: Viewpoint 1b Existing and Proposed View Looking North East Across Lower Richmond Road
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.7A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>

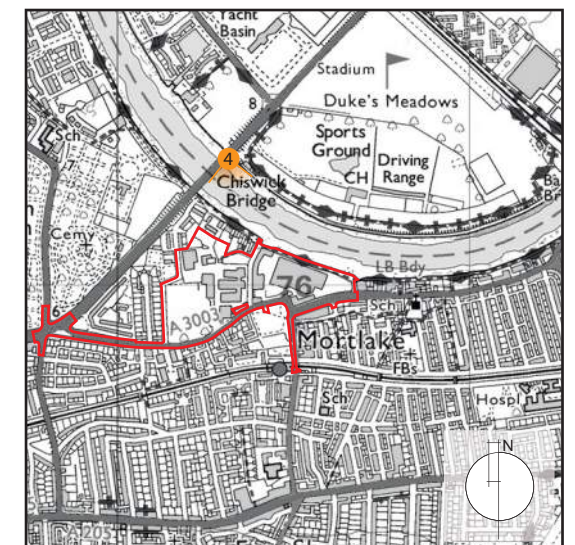




Viewpoint 4: Existing view from the northern end of Chiswick Bridge, looking south across the River Thames towards the Site.



Viewpoint 4: Proposed view from the northern end of Chiswick Bridge, looking south across the River Thames towards the Site.



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.10: Viewpoint 4 Existing and Proposed View from the Northern End of Chiswick Bridge
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.10A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>

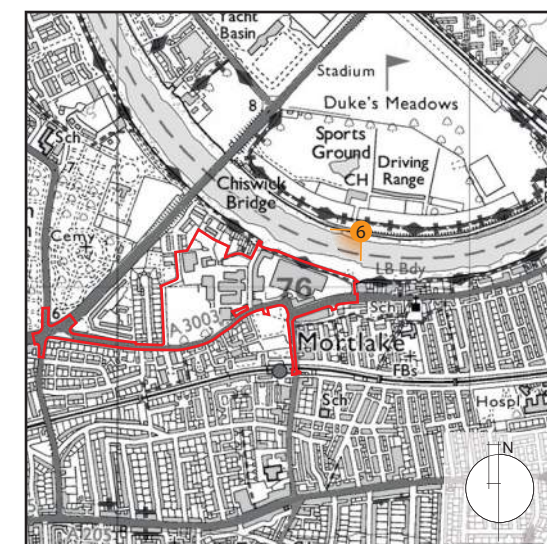




Viewpoint 6: Existing view from the Thames Path (north) adjacent to the car parking area on Dan Mason Drive, looking southwest across the River Thames towards the Site.



Viewpoint 6: Proposed view from the Thames Path (north) adjacent to the car parking area on Dan Mason Drive, looking southwest across the River Thames towards the Site.



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.12: Viewpoint 6 Existing and Proposed View from the Thames Path (north) looking South West across the River Thames
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.12A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>

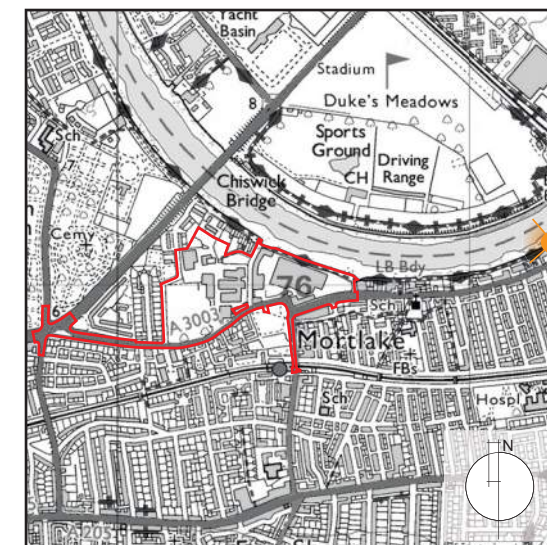




Viewpoint 7: Existing view from Thames Path (south) adjacent to the seating area outside the White Hart Public House looking west.



Viewpoint 7: Proposed view from Thames Path (south) adjacent to the seating area outside the White Hart Public House looking west.



Project Details	WIE18671-100: Stag Brewery, Mortlake
Figure Title	Figure 16.13: Viewpoint 7 Existing and Proposed View from Thames Path (South) Looking West
Figure Ref	WIE18671-100_GR_ESSoC_16.13A
Date	2022
File Location	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>





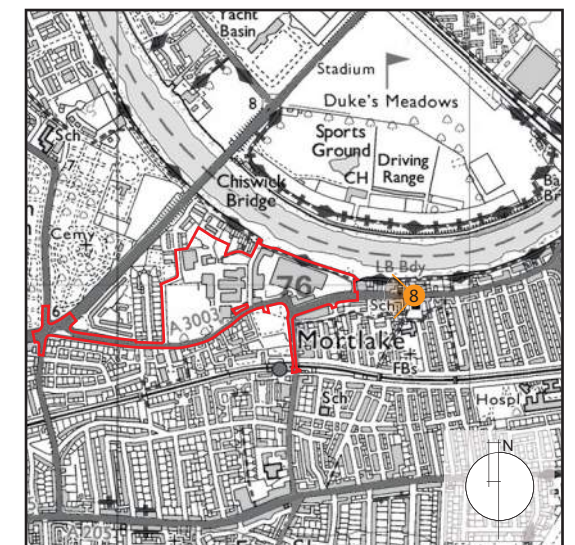


Viewpoint 8: Existing view from Mortlake High Street adjacent to St Mary the Virgin Church looking west towards the Site.



Viewpoint 8: Proposed view from Mortlake High Street adjacent to St Mary the Virgin Church looking west towards the Site.

-  Outline component of the Development, represented as AVR1 wirelines
-  Detailed component of the Development, represented as AVR1 wirelines



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.14: Viewpoint 8 Existing and Proposed View from Mortlake High Street Looking West
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.14A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder




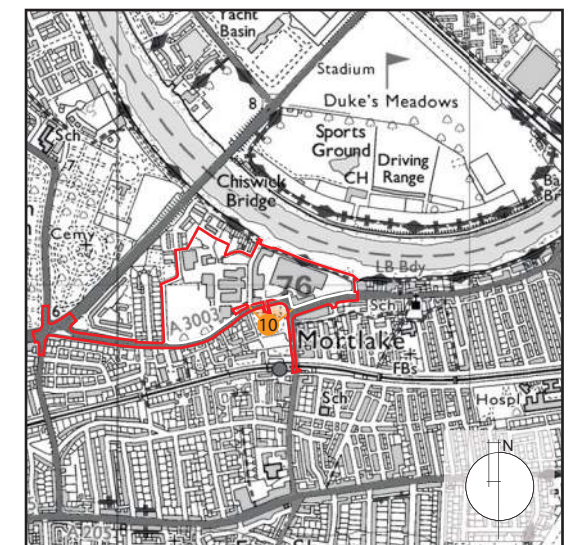


Viewpoint 10: Existing view looking north across Mortlake Green towards the Site.



Viewpoint 10: Proposed view looking north across Mortlake Green towards the Site.

 Detailed component of the Development, represented as AVR1 wirelines



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.16: Viewpoint 10 Existing and Proposed View Looking North Across Mortlake Green
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.16A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>





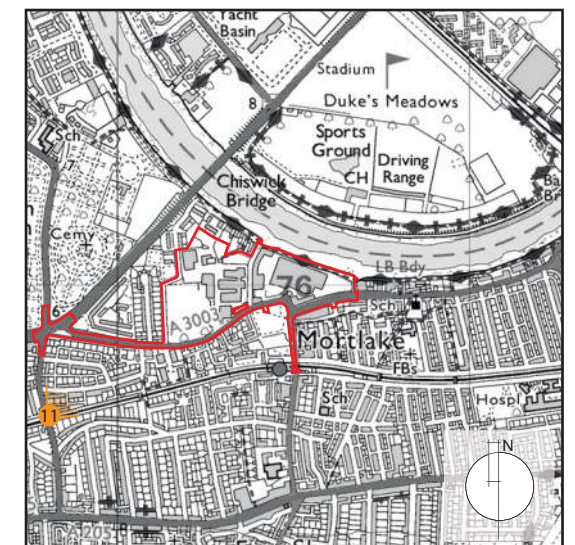


Viewpoint 11: Existing view from the South Circular Road bridge over the railway line, looking north east towards the Site.



Viewpoint 11: Proposed view from the South Circular Road bridge over the railway line, looking north east towards the Site.

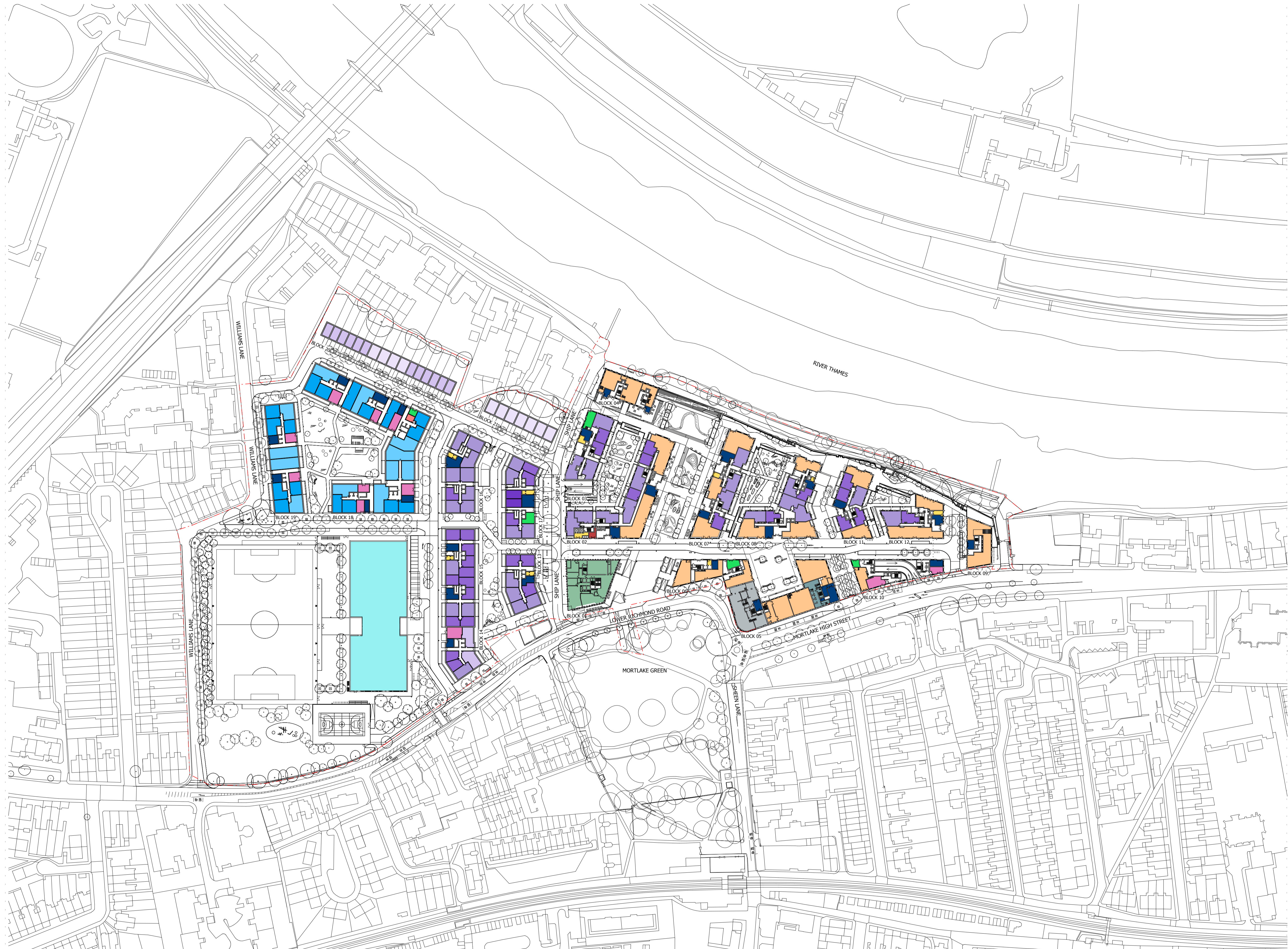
-  Outline component of the Development, represented as AVR1 wirelines
-  Detailed component of the Development, represented as AVR1 wirelines



<b>Project Details</b>	WIE18671-100: Stag Brewery, Mortlake
<b>Figure Title</b>	Figure 16.17: Viewpoint 11 Existing and Proposed View from the Road Bridge on the South Circular Road
<b>Figure Ref</b>	WIE18671-100_GR_ESSoC_16.17A
<b>Date</b>	2022
<b>File Location</b>	N:\Projects\WIE18671\100\8_Reports\Graphics\14_ESSoC\Issued Figures\PDF Folder
	<a href="http://www.watermangroup.com">www.watermangroup.com</a>

## **Annex 4: Updated Illustrative Masterplan Ground Floor Level**





NOTES:

DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE. ALL OMISSIONS AND DISCREPANCIES TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.

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NOTE: UNIT MIX AND LAYOUT FOR DEVELOPMENT AREA 2 IS INDICATIVE AT THIS STAGE

- Studio
- 1B2P
- 2B3P
- 2B4P
- 3B5P
- 3B6P
- 4B8P
- 2B3P SR
- 2B4P SR
- 3B5P SR
- 3B6P SR
- BIKE STORE
- CAR PARK ENTRANCE
- CINEMA
- FLEXIBLE USE
- GAS METER ROOM
- HOTEL
- LV SWITCHROOM
- OFFICE
- REFUSE STORE
- SCHOOL
- SUBSTATION

LBRUT 2 APPLICATION AMENDMENTS	21/07/22	BJ	F
LBRUT 2 APPLICATION	25/02/22	BJ	E
FINAL DRAFT HYBRID SUBMISSION	07/01/22	RKB	D
GLA SUBMISSION	27/04/20	BJ	C
DRAFT GLA SUBMISSION	24/01/20	KH	B
FINAL DRAFT PLANNING APPLICATION	21/10/19	KH	A
LEGAL REVIEW	13/09/19	KH	-

Revision description	Date	Check	Rev
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## SQUIRE & PARTNERS

The Department Store  
 248 Ferndale Road London SW9 8FR  
 T: 020 7278 5555 F: 020 7239 0495

info@squireandpartners.com  
 www.squireandpartners.com

Project  
**Stag Brewery**  
 Richmond

### PROPOSED MASTERPLAN GROUND FLOOR LEVEL

Drawn	Date	Scale
TC	18/01/18	1:1250 @ A1 1:2500 @ A3
Job Number	Drawing number	Revision
18125	C645_MP_P_00_001	F

