



Planning Application for the Aylesbury Estate Regeneration

Masterplan & First Development Site Application

Environmental Statement Addendum

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Environmental Statement – 2015 Addendum

February 2015

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Aylesbury Estate

Environmental Statement - Addendum

February 2015

Client

Notting Hill Housing Trust

Consultant

WSP UK Limited
WSP House,
70 Chancery Lane,
WC2A 1AF

Tel: +44 (0) 20 7314 5000

Fax: +44 (0)20 7314 5999

www.wspgroup.co.uk

Registered Address

WSP UK Limited
01383511
WSP House, 70 Chancery Lane, London, WC2A 1AF

WSP Contacts

Karen McAllister - Project Director
karen.mcallister@wspgroup.com
020 7314 5177

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1 Introduction

1.1 Background

1.1.0 In October 2014, Notting Hill Housing Trust (the 'Applicant') sought to obtain planning permission through two separate Planning Applications (First Development Site (FDS) Application in detail and the Masterplan Application in outline) for a residential-led, mixed use development (the 'Comprehensive Development') located at the Aylesbury Estate (the 'Site') in the London Borough of Southwark (LBS). The Site extends to approximately 27 hectares (ha) and lies immediately to the north of Burgess Park and Albany Road, to the east of Portland Street and to the west of Alvey Street.

1.1.1 The two Planning Applications formed an overall Masterplan for the comprehensive redevelopment of the Aylesbury Estate and proposed the following:

- FDS Application: Detailed application for the demolition of existing buildings and redevelopment to create a residential-led development comprising 815 private and affordable units (Use Class C3); flexible community use, early years facility (Use Class D1) or gym (Use Class D2); public and private open space; formation of new accesses and alterations to existing accesses; and energy centre; gas pressure reduction station; associated car and cycle parking; and associated works; and
- Masterplan Application: Outline Application, including access for demolition of existing buildings and redevelopment to provide up to 2,745 private and affordable units (Use Class C3); 600 to 2,500 sqm of employment use (Use Class B1); 200 to 500 sqm of retail space (Use Class A1); 3,100 to 4,750 sqm of community use, medical centre and early years facility (Use Class D1); 600 to 3,000 sqm flexible retail use (Use Class A1/A3/A4) or workspace use (Use Class B1); new landscaping; public and private open space; energy centre; gas pressure reduction station; up to 1,070 car parking spaces; cycle parking; landscaping and associated works.

1.1.2 The Applications referred to as the Comprehensive Development proposed the following, at maximum:

- Up to 3,560 Residential Dwellings;
- 2,500 sqm of Business space / Employment use;
- 3,000 sqm of Retail or Workspace;
- 500 sqm of Retail;
- 263 sqm of Community / Leisure Use; and
- 4,750 sqm Health / Community / Early Years.

1.1.3 The Applications were accompanied by a suite of Reports including an overarching Environmental Statement (ES) prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 to assess the likely significant environmental effects of the Comprehensive Development. The ES was based on an assessment of the Parameter Plans and Application Plans in the context of the Development Specification which defined and described the overall development content and allowed an assessment to be made of the likely significant environmental effects of the overall Comprehensive Development the subject of the October 2014 Applications.

1.1.4 The October 2014 ES comprised the following:

- **ES Volume 1:** formed the main body of the ES and was divided into a number of background and technical chapters supported with figures and tabular information detailing the results of environmental investigations, potential effects arising and the proposed mitigation measures. The ES also identified opportunities for social and economic benefit and environmental enhancement;

- **ES Volume 2:** Technical Appendices;
- **ES Volume 3:** Townscape, Visual and Built Heritage; and
- **Non-technical Summary.**

1.1.5 The 2014 ES reported the assessment of the likely significant effects of the following two development scenario options:

- Site Wide Development Option: the combination of both the Masterplan Application Site and the FDS Application Site (Comprehensive Development); and
- FDS Development Option: the development of the FDS Application Site in isolation.

1.1.6 Other reports submitted in support of the Planning Applications comprised the Design and Access Statement, a Transport Assessment (TA) and Travel Plan, Flood Risk Assessment (FRA), Planning Statement, Energy Strategy, Sustainability Statement and Statement of Community Involvement. Pertinent information from those studies was included in the 2014 ES and the Technical Reports (as appropriate) relating to these studies were either included as appendices to the 2014 ES, or submitted separately in support of the Planning Applications.

1.2 Proposed Scheme Changes

1.2.0 Following the submission of the Planning Applications discussions have continued with Officers of LBS in the context of a review of consultee responses and design development. It was agreed that it would be appropriate to formally submit a package of revisions to both the FDS and the Masterplan Applications and to provide clarification and additional information relevant to the determination.

1.2.1 The key amendments to the proposed scheme are set out in Section 2 of this Addendum which includes confirmation of those Plans and documents upon which the EIA was based. The key changes are the following:

- An increase of 15 residential units within the FDS Application. This increases the number of proposed units from 815 to 830
- Reconfiguration of the internal layout of the buildings resulting in minor alterations to the residential mix and unit sizes within the proposed development.
- Minor increase in the redline boundary of the Masterplan Application;
- Increase in the maximum height parameter for plots 18a and 18b (which will be the first to be delivered in the outline application site) by between 2.85m and 4m .These plots will provide the majority of the community facilities which will be delivered across the Masterplan area including the Health Centre. There will be no change to the proposed maximum floorspace which will be provided within these development parcels
- Incorporation of Subplot 9c within Plot 18; and
- Minor increase in the number of habitable rooms within the Masterplan Application.

1.3 Purpose of the 2015 Addendum

1.3.0 The purpose of this ES Addendum is to provide a mechanism for the review of the 2014 ES to consider if the assessments undertaken to date remain valid in the context of the proposed scheme changes or if there is the potential for material change in the significance of the effects previously identified in the resultant environmental and socio-economic effects. If that is the case this is made explicit in this ES Addendum and if required the technical assessments have been updated and are presented.

1.3.1 In addition, this ES Addendum responds to points of clarification requested by LBS as part of their review of the 2014 Planning Applications. These relate to the Daylight, Sunlight and Overshadowing assessment carried out as part of the 2014 ES, and are clearly identified and detailed

in Section 4 below. In addition, the winter views for the Townscape, Visual and Built Heritage assessment requested by LBS, are submitted within this Addendum, as it was not possible to include at the time of submission of the 2014 ES and Applications.

1.3.2 This ES Addendum (the '2015 Addendum') should therefore be read in conjunction with, and as an Addendum to the 2014 ES as submitted in support of the Planning Applications. As in most cases, the environmental information as provided and reported in the 2014 ES with the Application remains valid and up to date in terms of the Planning Applications. Therefore, the 2014 ES and this 2015 Addendum together comprise the assessment of environmental effects of the revised Aylesbury Estate Development Proposals.

1.4 The Project Team

1.4.0 The project team remains as was the case at the time of the submission of the Applications. **Table 1.1** confirms the Team for ease of reference who are responsible for the scope, content and analysis of the documentation and technical assessments as submitted with the Applications, including the scheme changes as reported in the Addendum.

Table 1.1: Project Team

Team Members	Role
Notting Hill Housing Trust  NottinghillHousing	Applicant
Deloitte 	Planning Consultant
  	Architects
WSP 	EIA Project Management, Ecology & Nature Conservation, Socio-Economics, Telecommunications, Transport and Access, Noise & Vibration, Air Quality, Archaeology, Ground Conditions, Hydrogeology & Contamination, Water Resources, Water Quality, Flood Risk & Drainage.
HTA 	Sustainability, Landscape Architects, Townscape, Visual and Built Heritage Assessment, Wind, Daylight, Sunlight and Overshadowing.

1.5 ES Availability

- 1.5.0 The 2015 ES Addendum is available from the LBS planning website. CD and Paper copies can be obtained at a cost, via WSP.

2 Proposed Scheme Changes

2.0.0 The proposed scheme changes in relation to each Application are confirmed below to understand the implications of the scheme changes on the technical assessments in the 2014 ES. The Development Specification and Parameter Plans submitted with the 2014 Applications have been updated to reflect the scheme changes and have been relied upon for the basis of this 2015 Addendum.

FDS Application

2.0.1 The number of residential units has increased from 815 to 830 with the split confirmed in **Table 2.1**.

Table 2.1: Proposed changes to the number of residential units within the FDS Application

Subplot	October 2014 ES (Number of units)	2015 ES Addendum (Number of units)	Quantum of Change
1	114	115	+1
2	33	34	+1
3	40	40	0
4	215	221	+6
5	231	237	+6
6	182	183	+1
Total	815	830	+15

2.0.2 The mix of units within the FDS Application has also changed, as follows in **Table 2.2**.

Table 2.2: Proposed changes to the unit mix (Exclusive of the 50 Extra Care Units which are not proposed to change)

Submitted Dwelling Mix – November 2014		Revised Dwelling Mix – February 2015	
1B Flats	314	1B Flats	324
2B Flats	258	2B Flats	261
3B Flats	43	3B Flats	48
2B Maisonette / Duplex	36	2B Maisonette / Duplex	35
3B Maisonette / Duplex	61	3B Maisonette / Duplex	60
4B Maisonette / Duplex	6	4B Maisonette / Duplex	5
4B Houses	27	4B Houses	27
5B Houses	20	5B Houses	20
Total	765	Total	780

2.0.3 As a result of the changes to the number of units, there have also been a number of changes to the internal layouts within each of the Subplots (1 - 6).

2.0.4 There have been no changes to the following:

- Heights, massing and footprints of the Subplots and Blocks;
- The percentage of Target Rent, Shared Ownership and Private Units across the FDS Application;
- Provision of non-residential floorspace: community, early years floor space (Use Class D1);
- Provision of open space; and
- Location of the energy centre and gas pressure reduction station.

Masterplan Application

2.0.5 As a result of feedback from LBS, scheme changes have been made to the Masterplan Application, as below.

Habitable Rooms

2.0.6 The total floorspace and number of residential units within the Masterplan Application remain the same (Up to 2,745 units); however, the number of habitable rooms has changed. See **Table 2.3** below.

Table 2.3: Proposed changes to the number of habitable rooms within the Masterplan Application

Tenure	October 2014 ES	2015 ES Addendum	Quantum of Change
Target Rent	3,936	3,955	+19
Shared Ownership	1,237	1,292	+55
Private	5,340	5,412	+72
Total	10,513	10,659	+146

Increase in Building Height - Plot 18

2.0.7 The parameter of the north building has increased laterally to allow for the taller element to be located further to the east of the plot and to allow greater flexibility in terms of the position of the taller block.

2.0.8 The lower portion of the northern block has been revised. It was previously broken into two sections defined by two height parameters, 6 - 8 storeys to the south and 4 - 6 to the north. This parameter has been simplified to reflect a 6 - 8 storey height across the lower element of the northern block.

2.0.9 The south building parameter has been increased to allow greater flexibility in floor to floor heights. It has increased by 4m but remains at four storeys.

Other Minor Changes in Relation to the Masterplan Application

- As a result of detailed discussions with Planning and Design Officers at LBS the Parameter Plans and Development Specification submitted with the original application have been amended. The amendments are proposed to allow for a greater degree of flexibility in design response at the reserved matters stage whilst maintaining the overall objectives of the outline scheme;
- Masterplan Application redline boundary extended to include a small part of Portland Street;
- The re-arrangement of Plot 18 (this includes the loss of 9c Subplot and also the movement of the 9b Block southwards);
- Changes to Gaitskell Park;
- The eradication of the pedestrian link between Subplots 17a and 17b;

- Plot 17a/b has moved north slightly due to the street widths north and south of the plot having swapped to improve the community spine connection;
- Subplots 5b and c have moved north slightly due to an increase in the street width to the south;
- Subplots 15a and b have also moved position slightly due to the street widths around Gaitskell Park swapping their street widths over; and
- Along Albany Road and Thurlow Street, on road cycle lanes have been removed and will be subject to further consultation with LBS and TFL.

2.0.10 There have been no changes to the following:

- Residential unit numbers and total floorspace;
- The percentage of Target Rent, Shared Ownership and Private Units;
- Provision of non-residential uses (Use Class B1, A1, A3, A4, D1);
- Maximum provision of open space; and
- Location of the energy centre.

3 Approach to the 2015 ES Addendum

3.0 Introduction

3.0.0 Below is an outline of the approach to preparing the 2015 ES Addendum and presents the process behind the review of the 2015 scheme changes to the Planning Applications and the effect on the environmental and socio-economics assessment as submitted and comprising the 2014 ES. This 2015 Addendum has been prepared in accordance with statutory requirements and current industry accepted guidance for EIA, together with applicable national and international legislation for the EIA process.

3.1 Objectives

3.1.0 The key objectives of this Addendum are to undertake a verification exercise as follows:

- To undertake qualitative technical analysis to outline the implications that the proposed scheme changes will have on the submitted 2014 ES;
- To ensure that the overall significance of effects as previously reported remain valid;
- To confirm whether there are any changes to the previous conclusions reported; and
- To provide a clear and concise Addendum, which in combination with the submitted 2014 ES, can inform the consultation and decision making process.

3.2 Approach to Baseline Conditions

3.2.0 The baseline conditions presented within the submitted 2014 ES were informed by surveys and desk studies. The baseline as reported in the 2014 ES is considered to still remain valid as the existing use of the Site remains the same as that assessed and reported. No further survey or studies are required to support the proposed scheme changes. It has not been necessary to represent an overview of baseline conditions or the baseline across the technical components of the 2014 ES as this Addendum should be read in conjunction with the submitted 2014 ES.

3.3 Approach to Policy and Guidance

3.3.0 The planning policy context of the Aylesbury Estate Proposals was assessed against relevant national, regional and local planning policy in the Planning Statements that accompanied the Planning Applications. The details were set out in Chapter 4 'Planning Policy Context' of the 2014 ES with an overview of policy specific to certain technical areas included within the relevant technical chapters, where applicable.

3.3.1 There has been no change to the policy since the submission of the 2014 ES. WSP have therefore assumed that there will be no requirement to modify existing assessments in relation to planning policy.

3.3.2 At the request of LBS, the Saved Polices of The Southwark Plan 2007 have been included in this ES Addendum and provide an update to Chapter 4 'Planning Policy Context' of the 2014 ES. The Saved Polices can be found in **Appendix A**, but do not affect the assessments provided as part of the 2014 ES.

3.4 Approach to red line boundary change

3.4.0 The minor increase to the redline boundary of the Masterplan Application does not affect the likely significant effects of the development as reported within the 2014 ES and is not considered further within this ES Addendum.

3.5 Methodology and Structure

3.5.0 The purpose of this Addendum is to outline the implications that the proposed scheme changes will have on the submitted 2014 ES and to ensure that the overall significance of effects as previously reported within the 2014 ES remain valid. Each of the effects previously considered are outlined for each of the technical topics considered within the submitted ES as outlined in **Table 3.2** below.

3.5.1 In addition, each of the technical Chapters consider whether there are likely to be any changes to the previous conclusions, supported by an evidence base.

3.5.2 The assessment criteria, magnitude of change, sensitivity of receptors and assessment of effect significance remains as set out within Chapter 2 'Approach to the Assessment' of the submitted 2014 ES.

3.6 Cumulative Effects

3.6.0 As part of the submitted 2014 ES, all technical assessments considered cumulative effects arising from the proposed development together with other foreseeable development projects in the area. These developments included:

- Site 7 Aylesbury Estate (LPA Ref. 12/AP/2332);
- Eileen House (LPA Ref. 09/AP/0343);
- Elmington (LPA Ref. 11/AP/4309);
- Heygate (LPA Ref. 12/AP/1092);
- Leisure Centre (LPA Ref. 12/AP/2570);
- Former London Park Hotel (LPA Ref. 07/AP/0760);
- Newington Causeway (LPA Ref. 09/AP/1940);
- One the Elephant (LPA Ref. 12/AP/2239);
- Elephant One (LPA Ref. 08/AP/2403);
- Trafalgar Place (LPA Ref. 12/AP/1455);
- Walworth Road 1 (LPA Ref. 14/AP/0833); and
- Walworth Road 2 (LPA Ref. 14/AP/0830).

3.6.1 The assessment of cumulative effects was presented within Chapter 17 'Cumulative Assessment' of the 2014 ES. No additional committed developments have been considered, however, the assessment was largely based upon the information available for the above committed developments and the conclusions of the submitted 2014 ES, neither of which are anticipated to significantly change (based on the proposed scheme changes outlined in Section 2). and therefore the submitted 2014 assessment is considered to remain valid.

3.7 Location of Information in ES

3.7.0 The EIA Regulations set out both what an Environmental Statement must at least contain (EIA Regs, Reg 2 "environmental statement" (b), and Schedule 4 Part 2); and also a more exacting list which may be addressed if reasonably required to assess the environmental effects of the development and which the

applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile (EIA Regs, Reg 2 "environmental statement" (a), and Schedule 4 Part 1).

3.7.1 **Table 3.1** lists each of the elements required by the EIA Regs on this approach, and where in the environmental information each of those matters is located within the 2014 ES documentation including the 2015 ES Addendum.

Table 3.1: Location of Required Information within this ES

	Required Information	Location within the 2014 ES	Location within the 2015 ES Addendum
1	Description of the developments, including in particular:		
(a)	Description of the physical characteristics of the developments and the land-use requirements during the construction and operational phases.	Chapter 3: The Comprehensive Development	Section 2 updates
(b)	Description of the main characteristics of the production processes, for instance, nature and quantity of materials used.	Chapter 3: The Comprehensive Development	Previous versions remain valid
(c)	An estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the developments.	Technical Chapters 6 – 16	Section 4 updates and clarifies
2	An outline of the main alternatives studies by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.	Chapter 3: The Comprehensive Development	Previous versions remain valid
3	A description of the aspects of the environment likely to be significantly affected by the development, including in particular, population, fauna, flora, soil, water, air, climate factors, material assets including the architectural and archaeological heritage, landscape and inter-relationship between the above factors.	Technical Chapters 6 - 16	Section 3
4	A description of the likely significant effects of the developments on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the developments, resulting from: (a) the existence of the development; (b) the use of natural resources; (c) the emissions of pollutants, the creation of nuisances and the elimination of waste; and (d) the description by the applicant of the forecasting methods used to assess the effects on the environment.	Technical Chapters 6 - 16	Section 4
5	A description of the measures envisaged	Technical Chapters 6 - 16	Section 4

	Required Information	Location within the 2014 ES	Location within the 2015 ES Addendum
	to prevent, reduce and where possible offset any significant adverse effects on the environment.		
6	A non-technical summary of the information provided.	Non-Technical Summary (included as a separate document)	Previous versions remain valid
7	Townscape, Visual and Built Heritage Assessment	Included as a separate document – Volume 3	Section 4
8	An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.	Chapter 2: Approach to the Assessment , and technical chapters as relevant.	Section 4

3.8 Consideration of changes to 2014 ES

3.8.0 **Table 3.2** identifies the technical chapters that will be considered further within this ES Addendum providing a brief justification as to why certain technical assessments will not be considered further.

Table 3.2: Technical assessments potentially affected by scheme changes

Technical Chapter	Chapter Title	Scheme changes likely to affect assessment	Comments
5	Demolition and Construction	No	The proposed construction activities and programme are unchanged. They would still be managed and controlled through a Construction Environmental Management Plan (CEMP) to be developed, in consultation with LBS. The October 2014 ES remains valid and no further assessment is considered necessary.
6	Ecology and Nature Conservation	No	The proposed changes for both Applications will not affect the ecological assessment. The landscape strategy remains unchanged for both the FDS and Masterplan Applications. The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Ecological Assessment. The October 2014 ES remains valid and no further assessment is considered necessary.
7	Socio-Economics	No	The increase in the number of residential units in the FDS Application (15 units, 1.8% increase) will not result in a significant change in the child yield or demand for health and community facilities. There is also no change in the number of residential units and floorspace of the Masterplan Application, and non-residential uses and floorspace remain the same for both the FDS and Masterplan Applications. The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Socio-economics Assessment. Therefore, the original assessment reported in the October 2014 ES for the Site Wide Development Option and the FDS Development Option remains valid and no further assessment is considered necessary.
8	Telecommunications	No	There is no increase in Block massing and height within the FDS Application, and therefore the original assessment reported in the October 2014 ES for the FDS Development Option remains valid and no further assessment is considered necessary. The changes made to the building heights of Plot 18 in the Masterplan Application do not represent a significant change in terms of telecommunications. The proposed changes do not alter the assessment of effects or the resultant requirement for mitigation. The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Telecommunications Assessment. Therefore, the original assessment reported in the October 2014 ES for the Site Wide Development Option and the FDS Development Option remains valid and no further assessment is considered necessary.
9	Wind	Potentially	There is no increase in Block massing and height within the FDS Application, and therefore the original assessment reported in the October 2014 ES for the FDS Development Option remains valid and no further assessment is considered necessary. The changes made to the building heights of Plot 18 in the Masterplan Application and the potential effects are considered below and in detail in Appendix B .
10	Daylight, Sunlight & Overshadowing	Potentially	The changes to the internal layouts of the FDS Application as a result of the increase in residential units and the changes to

Technical Chapter	Chapter Title	Scheme changes likely to affect assessment	Comments
			<p>the Masterplan Application (Plot 18) may alter the Daylight, Sunlight and Overshadowing.</p> <p>The changes and the potential effects are considered in Section 4 below and Appendices C, D and E.</p>
11	Transportation and Access	No	<p>The increase in the number of residential units in the FDS Application will not result in any significant change in the trip generation estimate reported in the October 2014 ES. There is also no change in the number of residential units and floorspace of the Masterplan Application, and non-residential uses and floorspace remain the same for both the FDS and Masterplan Applications.</p> <p>The proposed changes do not significantly alter the provision of car and cycle parking within the Comprehensive Development, the assessment of effects or the resultant requirement for mitigation.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Transport Assessment. Therefore, the original assessment reported in the October 2014 ES for the Site Wide Development Option and the FDS Development Option remain valid and no further assessment is considered necessary.</p>
12	Noise and Vibration	No	<p>The proposed changes do not result in a significant change in the trip generation estimate reported in the October 2014 ES.</p> <p>The proposed changes do not alter the assessment of effects or the resultant requirement for mitigation.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Noise and Vibration Assessment. There will be no change in the traffic data used for the assessment of noise, and the energy centres in both the FDS and Masterplan Application remain the same. Therefore the original assessment reported in the 2014 ES remains valid and no further assessment is considered necessary.</p>
13	Air Quality	No	<p>The proposed changes do not result in a significant change in the trip generation estimate reported in the October 2014 ES.</p> <p>The proposed changes do not alter assessment of effects or the resultant requirement for mitigation.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Air Quality Assessment. There will be no change in the traffic data used for the assessment of air quality and the energy centres in both the FDS and Masterplan Application remain the same. Therefore the original assessment reported in the 2014 ES remains valid and no further assessment is considered necessary.</p>
14	Archaeology	No	<p>The proposed changes will not significantly affect the building footprints or construction activities and as such the proposed mitigation measures as controlled by planning conditions remain valid, and no further assessment needs to be carried out or mitigation measures recommended.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Archaeology Assessment. Therefore, the original assessment of buried archaeological potential reported in the 2014 ES remains valid and no further assessment is considered</p>

Technical Chapter	Chapter Title	Scheme changes likely to affect assessment	Comments
			necessary.
15	Ground Conditions, Hydrogeology and Contamination	No	<p>The proposed changes will not significantly affect the building footprints or construction activities and as such the proposed mitigation measures as controlled by planning conditions remain valid, and no further assessment needs to be carried out or mitigation measures recommended. Furthermore the landscape strategy remains unchanged for both the FDS and Masterplan Applications.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Ground Conditions Assessment. Therefore, the original assessment of buried archaeological potential reported in the 2014 ES remains valid and no further assessment is considered necessary.</p>
16	Water Resources, Water Quality, Flood Risk and Drainage	No	<p>The proposed changes will not significantly affect the building footprints or construction activities and as such the proposed mitigation measures as controlled by planning conditions remain valid, and no further assessment needs to be carried out or mitigation measures recommended. Furthermore the landscape strategy remains unchanged for both the FDS and Masterplan Applications.</p> <p>The scheme changes are not considered significant enough to alter the significance of residual effects identified in the 2014 Water Resources Assessment. Therefore, the original assessment of buried archaeological potential reported in the 2014 ES remains valid and no further assessment is considered necessary.</p>
Volume 3 of the ES	Townscape, Visual Assessment and Built Heritage Assessment	Potentially	<p>It is considered possible that proposed changes could potentially alter the assessment of effects during the operational phase. The potential effects are considered further in Section 4 below.</p> <p>The changes made to the building heights of Plot 18 in the Masterplan Application and the potential effects are considered below and Appendix F.</p>

4 Assessment of Effects

4.0 Wind (2014 ES Chapter 09)

4.0.0 Introduction

4.0.1 This Section reports the consideration of the likely significant environmental effects of the proposed scheme changes on the local environmental wind in the context of the 2014 ES.

4.0.2 This Section and the supporting information in **Appendix B** should be read in conjunction with Chapter 9 'Wind' and Appendix 9.1 of the 2014 ES.

4.0.3 **Appendix B** provides a detailed assessment of any changes in the significance of effects that were reported in the 2014 ES (Summary provided below).

4.0.4 Assessment Methodology and Significance Criteria

4.0.5 The assessment methodology is consistent with that adopted and set out in the 2014 ES (Chapter 9) and the methodology as set out in **Appendix B**.

4.0.6 Consideration has been given to the following scheme changes:

- **Masterplan Application:** Increase in the building height and re-configuration of Plot 18 which results in the loss of subplot 9c and re-position southwards of block 9b.

4.0.7 Due to the different position of the buildings in the re-assessed configuration, a different location and number of receptors within the Masterplan was created. The 2014 ES assessed only one point within the area (location 144) and three points surrounding the area (locations 21, 22 and 23). These locations are the most significant in that portion of the Masterplan. This revised assessment tests a total of 31 points, 5 points on the roofs and 10 in the middle of the streets. The smaller size of the area allows the identification of more sensible points. With respect to the comparison of the 2014 ES and this revised assessment, locations 21, 22 and 23 have been re-assessed and five additional receptors were tested.

4.0.8 To predict the local wind environment and subsequent pedestrian comfort within and immediately surrounding the Site, the wind assessment used the Integrated Environmental Solution (IES) Virtual Environment (VE) Computational Fluid Dynamics (CFD) model to simulate local wind conditions.

4.0.9 The CFD analyses predict wind velocities and air flow patterns through the Site, wind data from the nearest suitable meteorological station and the recommended comfort standards (Lawson Criteria). The Lawson Criteria is a widely used method in the UK to quantify wind conditions on built development in UK. A full three dimensional model of the Site and surrounding areas has been constructed for the assessment. For the receptors located in the public realm areas, private gardens, balconies and roof areas, the condition of sitting (level 6 of the Lawson Criteria) has been considered as acceptable. For the points located close to the main entrance areas, the entrance door level has been considered as acceptable (level 5).

4.0.10 The following factors were considered for the revised assessment based on the Parameters Plans and Application plans:

- The effect of the geometry, height and massing of the buildings existing surroundings on local wind speeds and direction;
- The wind speed as a function of the local environment, such as topography, ground roughness and nearby obstructions (buildings etc.);
- The effects of the built up urban site on the wind flow patterns; and
- The pedestrian activity to be expected (sitting, standing, strolling and fast walking).

4.0.11 The assessment of effects on existing spaces has been conducted based on a comparison of the CFD modelling results of the baseline scenario and the proposed development. For the assessment within the new development, the assessment of effects has been conducted based on a comparison the CFD modelling results of the proposed development with the expected usage of the space of each location.

4.0.12 The significance level attributed to each effect has been assessed based on the magnitude of change due to the development proposals, and the sensitivity of the affected receptor / receiving environment to change, as well as a number of other factors consistent with the approach in Chapter 2 of the 2014 ES. Magnitude of change and the sensitivity of the affected receptor / receiving environment were both assessed on a scale of high, medium, low and negligible (as shown in Table 2.2 in Chapter 2 'Approach to the Assessment'.

Assessment of Effects

4.0.13 The first set of results assesses the situation around the elevations of the new buildings, on the roof level and in the courtyard to assess whether the wind conditions will be suitable for standing and entrance use and sitting. In the 2014 ES only receptor 144 was assessed showing that that location was suitable for sitting with a **positive impact of minor effect**.

4.0.14 The new results show that the courtyard is suitable for sitting and all locations around the buildings are suitable for standing and entrance or sitting. Out of the 36 points tested, 19 have a **minor positive effect**. The effect is negligible in the case of 12 points and negative in the case of the five top level points checked. All the negative results refer to balconies and roof areas where the worst conditions have been considered.

4.0.15 In the case of the top level points the **negative effect is major** at the top level roof and **moderate** at the lower level roofs. This means that the roofs would not be suitable for sitting in the absence of any mitigation.

4.0.16 The second set of results assessed the wind conditions in the middle of the streets of the new development, where the target level is suitability for walking. The 2014 ES did not include the assessment in these locations, due to the scale and the nature of the study. A comparison between the two versions is therefore not possible. However the simulations show that all ten points tested are suitable for standing and entrance or sitting, exceeding the target level. The effect is positive in all ten points; minor in the case of five and moderate in the case of five. Locations 1-5 assess the effect on the existing streets.

4.0.17 The third set of results assessed the effects of the development at Plot 18 on the existing streets. Points 1-5 are newly assessed and the situation has been proven to be suitable for standing and entrance or sitting, exceeding the target level which was walking. The positive effect is **minor** in the case of Points 1-3 and **minor** in the case of Points 4-5.

4.0.18 Points 21 - 23 have been reassessed and are compared to the 2014 ES. The 2014 ES indicated that all three points were suitable for sitting with a **negligible** effect, whereas the revised assessment indicates that the effect is **negligible** in the case of Points 22 and 23 and minor negative in the case of Point 21, which is suitable for standing and entrance use but not for sitting.

4.0.1 Mitigation

4.0.2 On the basis of the above, no mitigation measures are needed in the courtyard, all locations around the buildings, in the middle of the streets of the new development and in the existing streets. On balconies and roof areas a design strategy that will offer protected areas will be adopted consistent with the Parameter controls of the development.

4.0.3 Residual Effects

4.0.4 On the basis of the above, the residual effects will be **negligible or minor positive** for the first set of results without including the top level points. On the roof areas, if the mitigation measures are properly followed, the residual effects will be **negligible or negative of minor** effect.

4.0.5 For the second set of results, the residual effects will be **moderate positive** in five out of ten points, and **positive of minor** effect for the remaining locations. The residual effects of three out of eight points of the third set of results will be **moderate positive**, two will have a **positive impact of minor** effect and the remaining three will have a negligible residual effect.

4.0.6 It should be noted that although Point 21 achieves a slightly **negative** effect compared to the 2014 ES, this value exceeds the expected suitability level, which is for walking. Therefore the residual effect can be considered negligible.

4.0.0 Limitations and Assumptions

4.0.1 There are no additional limitations and assumptions other than those outlined within Section 3 above.

4.2 Daylight, Sunlight and Overshadowing (2014 ES Chapter 10)

4.2.0 Introduction

4.2.1 This Section reports the consideration of the likely significant environmental effects of the proposed scheme changes on the daylight, sunlight availability and overshadowing in the context of the 2014 ES. The main change concerns the effect of the development on the daylight availability to the five windows in Dawes Streets as described below.

4.2.2 This Section and the supporting information in **Appendix C, D and E** should be read in conjunction with Chapter 10 'Daylight, Sunlight and Overshadowing' and Appendix 10.1 of the 2014 ES.

4.2.3 Supporting technical information is presented in **Appendix C, D and E** to this Addendum, as follows:

- **Appendix C:** FDS Application '**FDS Addendum**' – Internal daylight and sunlight assessment, providing the assessment and results of all residential units;
- **Appendix D:** Masterplan Application '**Plot 18 - Outline Development Addendum**' – takes into account the changes to Plot 18; and
- **Appendix E:** Masterplan Application '**Outline Development Addendum**' - requested by LBS, to assess the impact of six individual plots on each other within the Masterplan.

4.2.4 Assessment Methodology and Significance Criteria

4.2.5 The assessment methodology is consistent with that adopted and set out in the 2014 ES (Section 10.3 of Chapter 10) and the methodology as set out in Appendix C,D and E. Consideration has been given to the following scheme changes:

- **FDS Application:** Change in elevations (window sizes and balconies, but not heights) and internal layouts.
- **Masterplan Application:** Increase in the building height and re-configuration of Plot 18 which results in the loss of subplot 9c and re-position southwards of block 9b.

4.2.6 For the proposed changes to the FDS Application, the ADF calculations have been carried out to check whether the spaces achieve the minimum values recommended by the BRE guide (2% for kitchens, 1.5 for living rooms and 1% for bedrooms). A total number of 3,302 rooms across the scheme were assessed against BRE criteria. Where the same room includes the kitchen with a living room or a dining space, due to the different targets that are set by the BRE guide, it has been analysed twice.

4.2.7 The Sky-view analysis has also been undertaken. If more than 20% of the working plane lies beyond the no-sky line, poor daylight levels are expected within the space.

4.2.8 Within the FDS Application all units have been tested for the ADF (Average Daylight Factor) and the Sky-view analyses. The 2014 ES tested only 182 representative units. Table 10.7 of the 2014 ES summarises these results. It shows that 70% of the assessed spaces pass the ADF values recommended by the BRE guide, and 79% of the rooms pass the Sky-view test. The revised assessment indicates that taking into consideration all the units and the scheme changes to the FDS, 80% of the spaces will pass the ADF analysis and 75% the Sky-view test.

4.2.9 The Daylight, Sunlight and Overshadowing (DSO) effect on the surrounding building and spaces has been re-tested following the changes to Plot 18.

4.2.10 For the daylight impact assessment, the Vertical Sky Component (VSC) has been calculated. The BRE guide sets at 27% the value that should be achieved at the centre of each window in order to guarantee a good amount of light inside the space. If the loss of light is no more of 20%, then the value can still be considered acceptable.

4.2.11 For the sunlight impact assessment, the Probable Sunlight Hours (PSH) test has been carried out in order to assess whether the winter PSH is at least 5% and the annual PSH is at least 25%.

4.2.12 The overshadowing effects have been assessed to identify that at least 50% of the amenity spaces receive a minimum of two hours of direct sun-on-the-ground on 21st March as recommended by the guidelines. The calculations have been carried out also on 21 June.

4.2.13 For the daylight study the following surroundings properties have also been re-analysed:

- 22 Dawes Street - Building 1,
- 23 Dawes Street - Building 2 and
- 37 Thurlow Street (incl. Southern Street side) - Building 2.

4.2.14 For the sunlight study, only windows facing within 90 degrees of due south have been tested, therefore only the southern facade of the building in Thurlow Street has been taken into consideration.

4.2.15 The overshadowing analysis tested the external spaces corresponding to numbers 52, 53, 54, 55, 56, 57 and 62.

4.2.16 The significance level attributed to each effect has been assessed based on the magnitude of change due to the development proposals, and the sensitivity of the affected receptor / receiving environment to change, as well as a number of other factors consistent with the approach in **Chapter 2** of the 2014 ES. Magnitude of change and the sensitivity of the affected receptor / receiving environment were both assessed on a scale of high, medium, low and negligible (as shown in **Table 2.2** in **Chapter 2 'Approach to the Assessment'**).

4.2.17 Assessment of Effects

4.2.18 The daylight study of the 2014 ES showed that all the five windows assessed in building 1 in Dawes Street had a **negligible effect**. The revised calculations indicate that these windows will receive a **negative moderate** effect owing to the increased height of Plot 18. For the other buildings, the revised assessment is in line with the 2014 ES; therefore the effects are the same as reported in the 2014 ES.

4.2.19 The assessment of the effects on sunlight has been carried out for windows in building 2 of Thurlow Street (n. 37). The simulations show similar results to those reported in Table 10.4 of the 2014 ES.

4.2.20 The overshadowing analysis indicates that spaces 54, 55 and 56 will have a **negligible effect**. For these spaces the 2014 ES showed a positive impact of minor effect. The remaining spaces show similar results to the 2014 ES.

4.2.21 Mitigation

4.2.22 The daylight impact assessment of building 1 in Dawes Street will receive less daylight with the new height. The Parameter Plans however allow flexibility in the final detailed design of Plot 18 which will be modulated at the reserved matters stage compliant with the Parameter Plans, Development Specification and Design Guide to minimise adverse effects on Building 1, Dawes Street.

4.2.23 For the other buildings no mitigation effects are needed.

4.2.24 For the sunlight impact assessment, the results are similar to the previous assessment and no mitigation measures are required.

4.2.25 The overshadowing analysis indicates that out of seven re-tested spaces four will have different results comparing to the previous assessment. Given that the new simulations indicate that they will have a negligible impact, no mitigation measures are required. The same applies for the remaining spaces.

4.2.26 Residual Effects

4.2.27 There are sufficient controls in place through the Parameter Plans, Development Specification and Design Guide to ensure the residual effects in building 1 in Dawes Street would be **negative of minor** effect.

4.2.28 For the remaining results, no mitigation measures are required as outlined in the 2014 ES and the residual effects will be the same as the ones described above.

4.2.29 Limitations and Assumptions

4.2.30 There are no additional limitations and assumptions other than those outlined within Section 3 above.

4.3 Townscape, Visual and Built Heritage (2014 ES Volume 3)

4.3.0 Introduction

4.3.1 This Section reports the consideration of the likely significant environmental effects of the proposed scheme changes on the Townscape, Visual and Built Heritage Assessment in the context of the 2014 ES.

4.3.2 This Section and the supporting information provided within **Appendix F** should be read in conjunction with Volume 3: Townscape, Visual and Built Heritage of the 2014 ES.

4.3.3 **Appendix F** provides a detailed assessment of the views that will be affected by the scheme changes, and any change in the significance of effects that were reported in the 2014 ES (Summary provided below). **Appendix F** also provides the assessment of the winter views (which were not included in the 2014 ES).

4.3.4 Assessment Methodology and Significance Criteria

4.3.5 The assessment methodology is consistent with that adopted and set out in the 2014 ES.

4.3.6 Consideration has been given to the following scheme changes:

- **Masterplan Application:** Increase in the building height and re-configuration of Plot 18 which results in the loss of subplot 9c and re-position southwards of block 9b.
- **FDS Application.** There are no changes to the Block heights and massing for the FDS Application. However, in the 2014 ES the TVIA model and images were drawn incorrectly (lower than actual plans submitted). This has been rectified in this 2015 ES Addendum.

4.3.7 In total eight summer views were revised to take account of the scheme changes listed above. These views included the following:

- **View 01:** Flint Street just north of East Street looking southeast along Thurlow Street;
- **View 09:** East of the north wing of Grade II Listed Almshouses, looking west;
- **View 11:** Junction of paths to the southwest of the lime kiln in Burgess Park, looking north towards Portland Street;
- **View 12:** Junction of paths in Burgess Park looking northeast towards the First Development Site;
- **View 13:** Western edge of Addington Square looking northeast towards the First Development Site;
- **View 15:** Portland Street at northern end of Michael Faraday School looking south;
- **View 17:** Corner of Aylesbury Road and Brettell Street looking east; and
- **View 18:** Junction of paths within Nursery Row Park, looking south east.

4.3.8 The significance level attributed to each effect has been assessed based on the magnitude of change due to the development proposals, and the sensitivity of the affected receptor / receiving environment to change, as well as a number of other factors consistent with the approach in Chapter 2 of the 2014 ES.

Magnitude of change and the sensitivity of the affected receptor / receiving environment were both assessed on a scale of high, medium, low and negligible (as shown in Table 2.2 in Chapter 2 'Approach to the Assessment'.

4.3.0 Assessment of Effects

4.3.1 The only view affected by the scheme changes is View 17: Corner of Aylesbury Road and Brettell Street looking east. All other views and effects remain unchanged from that reported in the 2014 ES. The assessment and justification for this can be found in **Appendix F**.

4.3.2 The assessment of the revised summer view of the minimum parameter of View 17 shows that the changes to the building height and footprint on Plot 18 has resulted in the magnitude of change increasing from moderate to major, and the visual impact increasing from moderate – major to major. However the significance of effect remains unchanged at minor beneficial. The impact and effect of the scheme changes at the maximum parameters remains unchanged from the 2014 ES.

4.3.3 The loss of leaves in the **winter views** increases the visual effect in two Views as follows:

- View 05: the visual effect changes from **minor to moderate to moderate to major** for the FDS Development Option. However, the significance of effects remained **minor beneficial** as identified in the summer views; and
- View 18: the visual effect changes from **negligible to minor to moderate** for the maximum parameter views. However, the significance of effects remains **negligible** as identified in the summer views.

4.3.0 As concluded in the 2014 ES, analysis of the revised summer views and winter view identifies that the visual effect of the Site Wide Development Option and FDS Development Option as a whole will be a beneficial improvement to the existing views even though the development will sometimes have a major visual impact.

4.3.1 Mitigation

4.3.2 On the basis of the above, the mitigation measures outlined in the 2014 ES will remain those identified which are the controls in place through the Parameter Plans, Development Specification and the Design Guide.

4.3.3 Residual Effects

4.3.4 On the basis of the above, the residual effects identified in the 2014 ES remain valid.

4.3.5 Limitations and Assumptions

4.3.6 There are no additional limitations and assumptions other than those outlined within Section 3 above.

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

WSP UK Limited

WSP House

London

WC2A 1AF

UK

Tel: +44 20 7314 5783

Fax: +44 20 7314 5111

www.wspgroup.co.uk

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