URS

Fisher Street Over Site Development

EIA Scoping Report

July 2012

Prepared for:
Crossrail Limited.

UNITED KINGDOM & IRELAND

REVISION RECORD					
Rev	**Date**	**Details**	**Prepared by**	**Reviewed by**	**Approved by**
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2	3rd August 2012	Final for Submission	Tsz Kan Woo Graduate Environmental Consultant	Colin Bush Principal Environmental Specialist	Colin Bush Principal Environmental Specialist

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1 INTRODUCTION

1.1 Background

Crossrail Limited (hereinafter referred to as the 'Applicant') intends to seek full planning permission for the construction of a residential development at 1 & 2 Fisher Street and 2 to 6 (even) Catton St, in the jurisdiction of the London Borough of Camden (LBC). The application site has an area of approximately 0.05 hectares (ha) and is located at National Grid Reference (NGR) 530533, 181605. The site is bound to the north by Fisher Street, to the east by Procter St, to the south by Catton St, and the west by Southampton Row. A plan showing the location of the site is provided in Figure 1, and the planning application red line boundary of the site is shown in Figure 2.

Figure 1 Site Location and Context

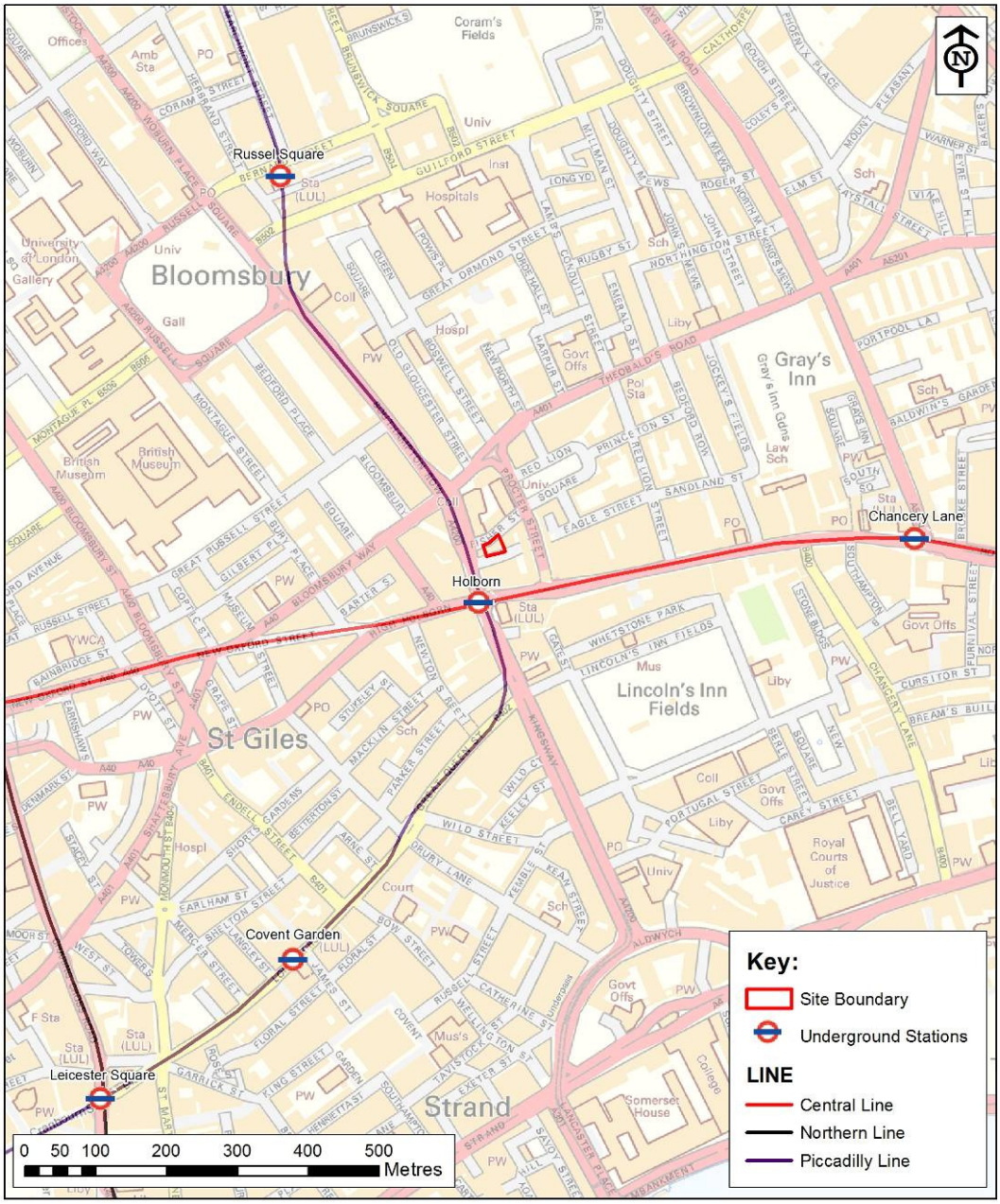
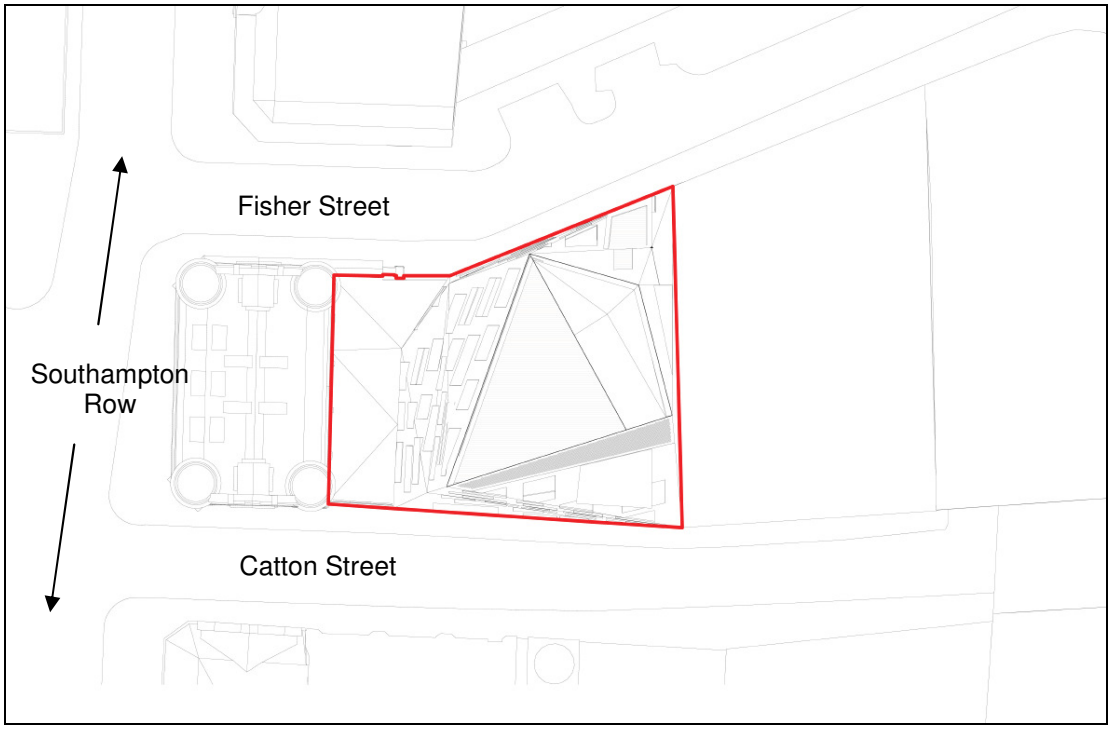


Figure 2 Indicative Red Line Boundary of the Proposed Development



Prior to the Crossrail works, the site of the Proposed Development comprised of 1 & 2 Fisher Street and 2 to 6 (even) Catton St. The site was formerly occupied by a 4 storey building and a 5 to 6 storey building.

The Proposed Development involves the construction of a building known as an Over Site Development (OSD), above the proposed Crossrail Fisher Street shaft and headhouse. The Proposed Development will comprise 22 residential units and will be approximately 8 storeys tall. It will include:

- Two apartments allocated for wheelchair users;
- Two apartments with private terrace garden;
- One roof top penthouse with private terrace; and
- A potential storage unit at ground floor level with a new garden terrace on the level above, above the rear of 8 – 10 Southampton Row.

(NB all layouts and areas for the residential units are indicative and subject to ongoing adjustment and improvement).

1.2 The Need for an Environmental Impact Assessment (EIA)

Applications for developments that are covered by the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011, (hereafter referred to as the EIA Regulations) are termed 'EIA applications'. In most circumstances, the actual requirement for an EIA is either mandatory or conditional depending on the classification of the development project. This in turn, is based on the likelihood of significant impacts arising.

The Crossrail Act 2008, is an Act of Parliament that *"that makes provision for a railway transport system running from Maidenhead, in the County of Berkshire, and Heathrow Airport, in the London Borough of Hillingdon, through central London to Shenfield, in the County of Essex, and Abbey Wood, in the London Borough of Greenwich, and for connected purposes."* Section 14 of the Act provides that, where a building is demolished or substantially demolished for the purposes of the Crossrail works, any later planning application for the replacement

development (for example, OSDs above a Crossrail shaft) must be accompanied by an environmental assessment, irrespective of whether or not they would be defined as 'EIA development' under the EIA Regulations. This is on the basis that the replacement development forms part of the overall Crossrail project, and in this sense, it seeks to ensure that all the direct and indirect environmental effects of the development authorised by the Act are properly assessed at the appropriate stage.

As a result, an EIA will be undertaken and an ES prepared to support the planning application for the Proposed Development in accordance with the requirements within the Crossrail Act 2008. URS Infrastructure and Environment UK (URS) has been commissioned to conduct an EIA on behalf of the Applicant, in line with the EIA Regulations and relevant EIA guidance.

1.3 Site Description and Context

The application site is approximately 0.05ha and is located at NGR 530533, 181605.

The site is well served (i.e. Public Transport Accessibility Level (PTAL) rating of 6b) by London Underground Limited (LUL) public transport services as the site is situated within approximately 100 metres (m) of Holborn Station, which provides Central Line and Piccadilly Line services. Frequent bus services run along Procter Street, High Holborn and Southampton Row. In addition, Barclays Cycle Hire points are available within walking distance of the site.

The site is located adjacent to the Kingsway Conservation Area, with additional Conservation Areas nearby (e.g. Covent Garden, Strand, Chancery Lane, Bloomsbury and Seven Dial (Covent Garden) Conservation Areas). There are no listed buildings on the site, however several listed buildings in the surrounding area include the Grade II listed 8 – 10 Southampton Row (directly adjacent to the site), Grade II* listed Baptist Church House and Grade II listed Numbers 114 and 115 High Holborn. The vicinity of the site primarily comprises of office and commercial units, along with some residential units.

The site is located within the London Suburbs Archaeological Priority Area. However, there are no Scheduled Ancient Monuments at the site, and the site is not located within a World Heritage Site.

The site is located within an Environment Agency Flood Zone 1, as it is not at risk from flooding from the River Thames or from open Rivers.

At the time of writing, the application site is undergoing significant changes due to the Crossrail works for the Fisher Street shaft.

Site Prior to Crossrail Works (Pre-Crossrail baseline – see Section 4.2)

The baseline conditions prior to commencement of the Crossrail works for the Fisher Street shaft and description of the exact scope of those works is described in the Crossrail Environmental Statement (ES) (February 2005) and Supplementary ES3 (November 2006) published subsequently (see http://www.crossrail.co.uk/railway/getting-approval/crossrail-bill-supporting-documents/). As shown in Figure 3, prior to the commencement of the Crossrail works, the site was occupied by 1 & 2 Fisher Street, and 2 to 6 (even) Catton Street.

Figure 3: Aerial View of the Site Prior to Crossrail Works (not to scale)

Site following completion of Crossrail works (Post-Crossrail baseline – see Section 4.2)

Work is anticipated to begin on the Proposed Development following the completion of the Crossrail works for the Fisher Street shaft, which is currently expected to be in 2015. For the purposes of the Fisher Street OSD ES, the future (post-Crossrail) baseline conditions for the site assume the following:

- All the buildings within the red line boundary of the Proposed Development will have been demolished;
- The below ground construction works (for the shaft and connecting tunnels) will have been completed and an above ground Crossrail operational building (headhouse) will have been constructed; and
- The Crossrail headhouse will form the foundation for the OSD construction.

1.4 The Purpose of Scoping in the EIA Process

Scoping is a key stage of the EIA process. It refers to the activity of identifying those environmental aspects that may be significantly affected by the Proposed Development. Scoping also allows for the early identification of potential receptors that may be affected by the Proposed Development. In identifying the environmental aspects and potential receptors, the potential significance of impacts associated with each environmental aspect becomes more clearly defined, resulting in the identification of a number of priority issues to be addressed in the EIA.

Regulation 13 of the EIA Regulations provides that an applicant may ask the Local Planning Authority to state in writing its opinion as to the scope of the ES (i.e. a Scoping Opinion). The purpose of this document is to provide the LBC (as Local Planning Authority for this site) with the opportunity to comment, along with the consultation bodies, on the information to be provided within the ES.

A copy of this Scoping Report will be appended to the ES, along with the Scoping Opinion received from the LBC.

Once the Scope of the EIA has been agreed, the next step of the process will be to gather further baseline environmental and socio-economic information against which potential impacts can be assessed.

The methodology for the assessment of impacts will vary depending on the topic in question but, in all cases, the assessment will utilise a pre-defined set of significance criteria in order to quantify the degree of beneficial or adverse impact.

Where significant adverse impacts are predicted, the EIA process provides the opportunity to stipulate mitigation measures to address these and reduce them to an acceptable level, often through consultation with stakeholders.

The EIA process and outcomes, including a description of the mitigation and compensatory measures proposed and the impacts that will remain at the end of the process (termed 'residual impacts'), will be documented in the ES.

1.5 Structure of the Scoping Report

The remainder of the Scoping Report is structured as follows:

- **Section 2** describes the Proposed Development;
- **Section 3** describes the existing environment (potential sensitive receptors);
- **Section 4** presents environmental topics proposed to be addressed by the EIA;
- **Section 5** summarises the key issues;
- **Section 6** describes the non-significant environmental issues;
- **Section 7** details the sustainability and energy documents to be submitted alongside the ES;
- **Section 8** details the proposed structure of the ES; and
- **Section 9** provides a summary and conclusions of this EIA Scoping Report.

2 OVERVIEW OF THE PROPOSED DEVELOPMENT

2.1 The Proposed Development

The Proposed Development is a residential-use scheme, comprising of 22 residential units, at 8 storeys in height. A draft design and layout plan was produced by Jacobs and HOK, on behalf of Crossrail Limited, for a pre-application presentation to the LBC in March 2012. The site is located in the Holborn area, which is identified by the London Plan as suitable for large scale redevelopment or significant increases in jobs and homes, and is based around transport interchanges where increased capacity is planned. It is proposed that the Holborn area will provide a minimum of 200 homes and 2000 new jobs between 2006 and 2026. The Proposed Development will contribute towards this target.

The Proposed Development builds upon a new Crossrail shaft and headhouse, creating a new building for the area, to meet appropriate uses of the site (i.e. residential). The Proposed Development is being designed by HOK architects and will comprise one single building, with one entrance from Fisher Street. It will comprise 22 residential units, including:

- Two apartments allocated for wheelchair users;
- Two apartments with private terrace gardens;
- One roof top penthouse with a private terrace; and
- A potential storage unit at ground floor level with a new garden terrace on the level above, above the rear of 8 – 10 Southampton Row.

An early conceptual view of the OSD on site is shown in Figure 4.

Figure 4: Proposed Elevation of the OSD on site

3 THE EXISTING ENVIRONMENT

3.1 Potential Environmental Sensitivities / Sensitive Receptors

When undertaking an EIA it is important to understand which receptors will be considered as part of the assessment. The sensitive receptors of the Proposed Development include:

- Key short, medium and long-distance views;
- Nearby retail and office property;
- Nearby private / residential property;
- Pedestrians, cyclists and road users;
- Listed buildings in the surrounding area (including the Grade II listed 8 – 10 Southampton Row and Grade II* listed Baptist Church House);
- Conservation Areas adjacent to and nearby the site (e.g. Kingsway, Covent Garden, Strand, Chancery Lane, Bloomsbury and Seven Dial (Covent Garden) Conservation Areas); and
- Distinctive street facades.

4 KEY ENVIRONMENTAL 'TOPICS' TO BE ADDRESSED WITHIN THE EIA

4.1 Introduction

The EIA and associated technical studies will be carried out in accordance with statutory policy guidance and legislation, including the requirements for the contents of an ES. For the EIA to be an effective decision-making tool, the ES needs to focus on the potentially significant environmental issues. These issues have been identified through data review and early site investigations. The following sub-sections describe the works proposed to fulfil the requirements of the EIA process.

4.2 Methodology and Cumulative Impact Assessment

The topics considered as part of this scoping exercise comprise:

- Construction;
- Socio-economics;
- Traffic and Transport;
- Air Quality;
- Noise and Vibration;
- Ground Conditions;
- Waste and Recycling;
- Water Resources, Drainage and Flood Risk;
- Archaeology and Built Heritage;
- Microclimate (Wind);
- Daylight, Sunlight, Overshadowing, Light Spillage and Solar Glare;
- Townscape and Visual Impacts;
- Ecology;
- Aviation; and
- Electronic Interference (TV & Radio Reception).

As required by Schedule 4 of the EIA Regulations, the ES will provide "*a description of the likely significant effects of the development on the environment*" and address the direct effects of the development in addition to the indirect, cumulative, short, medium and long term, permanent, temporary, beneficial and adverse effects arising from the development. The main mitigation measures envisaged in order to avoid, reduce or remedy significant adverse effects will be described. The concluding chapters will provide a summary of the cumulative and residual impacts of the proposed development.

Crossrail Assessment Criteria

For the purposes of the Crossrail ES a definition of a significant impact has been defined as *"an impact that (either in isolation or combination with others) should, in the opinion of the EIA team, having regard to relevant criteria, be taken into account in the decision-making process."* On the basis of this definition, the significance of impacts on the environment arising from Crossrail was determined using a set of assessment criteria for each environmental topic. The physical or spatial boundaries, the time-based or temporal boundaries, the technical environmental methodologies required, and the thresholds by which magnitudes of impacts

are described (significance criteria) are set out for each environmental topic in the Crossrail ES (Volumes 1 & 5).

For the purpose of consistency, and in accordance with the principles of Section 14 of the Crossrail Act (as described in Section 1.3), URS has used Crossrail's assessment methodology as far as possible, and where appropriate will adopt the significance criteria set out in Volumes 5 and 8a of the Crossrail ES.

Given that the nature of the Proposed Development is different to the Crossrail project, the assessment criteria may need to be tailored and focussed to the requirements of the Proposed Development to ensure that the impacts are addressed appropriately.

Baseline

In order to assess the potential impacts of the Proposed Development, it is necessary to determine the environmental conditions that currently exist on the site. These are known as 'baseline conditions'.

EIA guidelines recommend that assessments be undertaken against a baseline that takes account of all *"committed development"*, recognising both changing conditions at the site and conditions *"projected forward"*[1]. Given that the Crossrail works for the Fisher Street shaft are a committed development currently under construction, it is necessary for the Fisher Street OSD ES to consider these works upon completion as part of the baseline. However, since the OSD forms part of the Crossrail project (through definition as 'replacement development' in Section 14 of the Crossrail Act 2008), the baseline conditions at the site prior to the commencement of Crossrail works (i.e. in 2009) will also need to be considered. As such, the assessment of potential impacts for each environmental topic (unless otherwise stated) will use the following baselines:

1. The site prior to the commencement of the Crossrail works (pre-Crossrail), to assess the operational impacts of the Proposed Development; and

2. The site following the completion of the Crossrail works and prior to the commencement of the OSD work (post-Crossrail), to assess the construction impacts of the Proposed Development.

The methodology for each environmental topic will include a definition of the baseline(s) against which the environmental impacts will be assessed.

Cumulative Impact Assessment

Cumulative impact interactions can occur as either interactions between different types of impacts associated with just one project, or interactions between the impacts of a number of projects in an area. Both types of cumulative impact interaction will be considered within the ES as follows:

1. The combined effect of individual impacts arising as a result of the Proposed Development, for example impacts in relation to noise, airborne dust or traffic impacting on a single receptor; and

2. The combined impacts of the Proposed Development with other committed development schemes which may, on an individual basis be insignificant but, cumulatively, have a significant effect.

In terms of spatial scope for the cumulative assessment, typically an EIA will consider other committed development projects located within 1 kilometre (km) from the Proposed Development site. The 1km distance is applied to ensure all projects with the potential to interact in a cumulative manner within the vicinity of the Proposed Development site area are taken into account. The projects to be considered within the cumulative assessment would typically comprise those, proposed by way of the submission of a planning application and

[1] Department for Communities and Local Government (2006): *Environmental Impact Assessment: A Guide to Good Practice and Procedures (a Consultation Paper).*

consented at the time of writing this Scoping Report. In order to be considered as being significant, the schemes indentified either comprise over 50 residential units or provide over 10,000 square metres (m^2) of floorspace.

A list of the projects considered within this scoping exercise is provided below (Table 1).

Table 1: Description of projects identified during scoping, to be considered for inclusion in the Cumulative Impact Assessment

Application Number	Site Address	Development Description	Decision
1. 2009/5109/P	73 Guilford Street	Erection of a 4 storey over basement building to provide 7 residential units (4 x 1bed; 2 x 2 beds and 1 x 3 bed) following the demolition of 73 Guilford Street.	Granted Subject to a Section 106 Legal Agreement
2. 2009/4638/P	British Museum, Great Russell Street	Erection of 5-storey building (plus 3 basement levels) with roof level plant to provide a special exhibition gallery, logistics bay (accessed via new vehicular lift off Montague Place), collection storage facilities, conservation laboratories, associated offices and management facilities for the British Museum (Class D1), associated alterations to the facades of the North Range and King Edward Building, and hard and soft landscaping works (following demolition of Nos. 1 and 2 Montague Place, Book Bindery, EDF Sub-station, BMS Store, Stonemasons/Locksmiths workshops and portakabins) (Includes Environmental Impact Assessment).	Granted Subject to a Section 106 Legal Agreement
3. 2009/2629/P	2 - 8 Ridgmount Street and 6 Store Street	Reconstruction of Bloomsbury Service Station following demolition of existing building, construction of a three storey building at 2 Ridgmount Street, erection of a three storey building (behind a retained facade) at 4-8 Ridgmount Street, and alterations to 2 Ridgmount Street to create an Class A1 (shop)/Class A3 (restaurant) and Class B1 (office) floorspace.	Granted Subject to a Section 106 Legal Agreement
4. 2011/4011/P	Waverley House Hotel	Erection of a 7 storey side extension and 5 storey rear extension to provide enclosed fire escape stair and additional sitting rooms to guestrooms of existing hotel (Class C1).	Granted
5. 2010/6917/P	40 Great Russell Street	Change of use from showroom/office (Class B1) to 2 x 1-bed residential flats (Class C3) at first and second floor level and the erection of a four storey plus basement rear extension including rear roof terrace at first floor level.	Granted Subject to a Section 106 Legal Agreement

Application Number	Site Address	Development Description	Decision
6. 2010/5725/P	Land Bounded by 50-57 High Holborn	Revisions to planning permission 2009/0675/P, dated 07/07/2009 for mixed use redevelopment of the site involving the part demolition, part retention and part erection of new eight storey (plus two level basement and roof plant floor) building to accommodate A1, flexible A3/A4, B1, residential and student units. Revisions relate to variations in building envelope, office and retail space, including an overall reduction of office (Class B1) accommodation by 552sqm and overall increase of retail (Class A1) by 426sqm (as a result of reduction of floor to ceiling heights at ground and first floor levels, relocation of plant room to basement to create an eighth floor of office (Class B1) accommodation and various other internal reconfigurations, and to create ground floor retail units on Hand Court (west) elevation; increase in parapet height at seventh and eighth floor levels on Brownlow Street (east) elevation by 1.1m, increase in height of mansard roof associated with High Holborn House on south elevation by 1m; alteration to location of service yard entrance (to the south) and kerb (to the west to widen the highway) on Brownlow Street, retention of Brownlow Street highway to High Holborn (as opposed to 2009/0675/P which pedestrianised part of Brownlow Street) and associated alterations.	Granted Subject to a Section 106 Legal Agreement
7. 2009/3968/P	1A Doughty Mews,	Erection of a three-storey and basement single family dwelling house (Class C3), including an internal courtyard, external terraces and integral garage providing one off-street parking space with entrance off Roger Street.	Granted Subject to a Section 106 Legal Agreement
8. 09/08178/EIAOP	Number One Oxford Street	Scoping request under Regulation 10 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended 2006, 2007 and 2008), for the proposed development of the Over Site Development (OSD) at the Number One Oxford Street Site.	Not Available

Table 1 provides a list of the projects identified during scoping. A review of these projects suggests that significant cumulative impacts are unlikely in many cases, owing to the relatively small size and scale of the Proposed Development, the nature of the schemes identified, and the likelihood of interactions with the Proposed Development given the environmental topics to be considered in the ES.

Therefore, only the following projects will be included in the cumulative impact assessment:

- Waverly House Hotel – 2011/4011/P;
- 40 Great Russell Street – 2010/6917/P; and

- Land Bounded by 50 – 57 High Holborn – 2010/5725/P.

The Crossrail works for the Fisher Street Shaft will not be considered as part of the cumulative impact assessment, unless there is an overlap in terms of the construction programme (these are currently anticipated to be complete prior to commencement of the Fisher Street OSD works).

4.3 Policy Context

The ES will be prepared in accordance with legislative requirements and current guidance for EIA, covered by 'statutory requirements' In particular, the ES will be prepared with due consideration to:

- Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011;
- Department of Environment, Transport and the Regions (DETR) Circular 02/99 Environmental Impact Assessment;
- Department for Communities and Local Government (DCLG), June 2006 – Amended Circular on Environmental Impact Assessment, A Consultation Paper June 2006;
- Preparation of Environmental Statements for Planning Projects that require Environmental Assessment: Good Practice Guide, Department of the Environment (DoE) 1995;
- Institute of Environmental Management and Assessment (IEMA) Guidelines for Environmental Impact Assessment, 2004; and
- Office of the Deputy Prime Minister (ODPM) Environmental Impact Assessment – A Guide to Procedures, 2000.

The EIA will have regard to the following planning policy guidance:

National Planning Policy

The ES will have regard to the National Planning Policy Framework (NPPF) (2012), which replaces the previous collection of national Planning Policy Statements (PPS) and Planning Policy Guidance (PPG) documents. The policies contained within the NPPF articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

Regional Planning Policy:

- The London Plan: Spatial Development Strategy for Greater London (July 2011);
- London View Management Framework Supplementary Planning Guidance (SPG) (March 2012);
- Sustainable Design and Construction SPG (May 2006);
- Land for Transport Function SPG (March 2007);
- Accessible London: Achieving an Inclusive Environment (April 2004); and
- Regional Flood Risk Appraisal for the London Plan (October 2009).

Local Planning Policy:

- The LBC Core Strategy (November 2010);
- North London Joint Waste Plan (currently submitted and undergoing examination);
- Camden Planning Guidance: Design (CPG 1) (2011);

- Camden Planning Guidance: Housing (CPG 2) (2011);
- Camden Planning Guidance: Sustainability (CPG 3) (2011);
- Camden Planning Guidance: Basements and Lightwells (CPG 4) (2011);
- Camden Planning Guidance: Town Centres, Retail and Employment (CPG 5) (2011);
- Camden Planning Guidance: Amenity (CPG 6) (2011);
- Camden Planning Guidance: Transport (CPG 7) (2011); and
- Camden Planning Guidance: Planning Obligations (CPG 8) (2011).

Relevant policy guidance and legislation relating to each technical aspect will also be discussed specifically within each technical chapter of the ES.

4.4 Alternatives Assessment

The EIA Regulations require the consideration of alternative development options with their respective environmental impacts before a final decision is taken on the design. In accordance with EIA Regulations and statutory guidance, the following types of alternative would normally be described in the ES:

- 'Do nothing scenario' – the consequences of no development taking place;
- 'Alternative sites' – examination of alternative locations for the development; and
- 'Alternative designs' – description of the evolution of the proposed design including a summary of the main alternative designs considered, the modifications which have taken place to date (e.g. with reference to mixes of use, floor heights and bulking, and materials etc), the environmental considerations which have led to those modifications, and a justification for the final design.

However, given that the Crossrail Act places an obligation on the Secretary of State to bring forward the OSD proposal for this site, the location of the OSD is entirely dependent on the location of the Crossrail operational structures for the Fisher Street shaft. The Crossrail ES provided details of alternative locations for station infrastructure which were considered during the earlier planning phase. As a result, only 'alternative designs' will be considered in the Fisher Street OSD ES.

4.5 Construction

The buildings on the site, prior to commencement of the Crossrail works, will have been demolished prior to the commencement of the proposed OSD works. There will be no demolition involved in the Proposed Development as the development proposes the construction of the OSD above the Fisher Street shaft and headhouse. In addition, all the below ground works for Crossrail will have been completed prior to the commencement of the Proposed Development.

Construction works for the site will comprise the construction of the OSD structure above the headhouse, with associated fit out works.

The ES will provide details of the proposed construction programme including a description of specific construction activities, proposed methods, and their anticipated duration. An outline of the information expected to be included within the Demolition and Construction Method Statement (DCMS) and Environmental Management Plan (EMP) will be provided in the ES. Together, these documents will detail the specific mitigation measures (which will be included within the ES) to be followed to reduce impacts related to:

- Construction traffic;
- Changes to access and the public rights of way;

- Noise and vibration;
- Services diversion;
- Dust generation / plant, vehicles, emissions;
- Soil / waste removal.

The DCMS will take into account the London Councils' guidance on 'The Control of Dust and Emissions from Construction and Demolition'.

4.6 Air Quality

Based on a review of current air quality information, the site lies within an Air Quality Management Area, designated due to exceedences of nitrogen dioxide (NO_2) and particulate matter (PM_{10}) (which are primarily associated with road traffic emissions) as specified in the National Air Quality Strategy (NAQS). As such, potential air quality impacts are a key issue.

It is proposed that an Air Quality Impact Assessment is undertaken to assess the Proposed Development's impact on local air quality, potentially brought about through the generation of road traffic on the local road network during the construction of the Proposed Development. The study would be desk-based and investigate a number of pollutants emitted from vehicles (such as NO_2 and PM_{10}), that are potentially hazardous to human health, at a number of receptor points along the local road network.

Baseline, or existing, background air quality will be determined using a nearby representative automatic monitoring station, supplemented by Local Authority diffusion tube sampling and Defra background air quality maps, where necessary. It is not proposed to conduct diffusion tube monitoring as part of the EIA (either as part of the baseline data collection or in order to validate the model findings), given the abundance of local monitoring data available: the London Air Quality Network automatic stations 'Bloomsbury' and 'Shaftsbury Avenue AURN' are within 500m of the site.

The assessment will apply either the DMRB screening model or detailed ADMS-Roads dispersion model (depending on background concentrations and percentage predicted traffic increase), which have been specifically designed to assess the impact of road traffic emissions in urban areas in the United Kingdom (UK) (in accordance with LAQM TG(09)). Although traffic and transport is not considered to be a significant issue due to the size of the site, and as such a Transport Assessment (TA) is not being undertaken for this project, the air quality model will require local traffic data attained through a Transport Statement (TS). This will include traffic numbers, fleet composition, and average vehicle speeds, to calculate emission fluxes for the above listed pollutants from each road source. The updated Emission Factors Toolkit (version 5.1) will be incorporated into the modelling, which is based on COPERT 4 v8.1 emission factors for NOx.

In addition, potential impacts and nuisance from construction dust and site plant exhaust emissions generated during the construction phase will be considered in a semi-quantitative context (i.e. a basic screening assessment using estimated data), and where appropriate mitigating measures will be recommended to minimise, or remove, the potential impacts.

Dependent upon whether data is sparse, the potential impacts from any heating plant associated with the completed development (e.g. CHP's or boilers for heating and hot water provision) will be assessed qualitatively, or quantitatively using the ADMS-4.1 atmospheric dispersion model (if sufficient data is available to estimate the pollutant flux and likely stack parameters).

Following determination of the likely impacts, a standard suite of mitigation measures will be recommended for the control of dust and site plant emissions during construction works, with specific attention paid to the London Councils' guidance on 'The Control of Dust and Emissions from Construction and Demolition'. Additional site specific mitigation measures will be proposed as necessary, in order to minimise or remove adverse impacts to local air quality.

The assessment of potential impacts and their significance will be based on the criteria outlined in the Environmental Protection UK (formerly National Society for Clean Air) publication 'Development Control: Planning for Air Quality 2010 Update'. However, where appropriate, Crossrail's assessment criteria will be used.

4.7 Noise and Vibration

A noise survey will be undertaken in line with BS7445, to establish both background noise levels at potentially sensitive receptors, and ambient levels at the façades of the Proposed Development. These measurements will be adjusted / corrected to be representative of the baseline year (2015, following the completion of the Crossrail works), with the adjustments accounting for relative traffic movements and differences in building mass. Although a TA will not be carried out for the EIA, information from the standalone TS will be drawn upon for the purposes of this, and any other available noise survey data. Appropriate figures will be included in the ES to illustrate the noise measurement locations.

The ambient noise levels at the façades of the Proposed Development will be reviewed in conjunction with recommended British Standard noise limits for the various internal spaces (BS8233). Mitigation measures such as façade sound insulation and ventilation attenuation requirements will be recommended and discussed in the ES.

A construction phase impact assessment will be undertaken based on typical construction activity and plant use for a development of this type and traffic movement information. Noise levels at receptors will be calculated using BS5228 data and procedures. Vibration risks will be assessed based on the types of plant used and their proximity to receptors, using guidance in BS7385 and BS5228.

From the results of the construction noise and vibration impact assessment, potential mitigation measures will be listed and relevant construction procedures will be taken into account. The identified likely mitigation measures, including work procedures, screening, working hours and monitoring activities will be used to determine the reduction in noise and vibration, and determine the residual impact.

Based on background noise levels at sensitive receptors, suitable operational phase noise limits for building services plant will also be recommended according to BS4142. Mitigation measures will be detailed as required.

Based on indicative traffic changes (detailed in the TS) generated by the Proposed Development, the Calculation of Road Traffic Noise (CRTN) method will be used to determine the potential impacts and mitigation measures will be recommended where necessary.

Crossrail's assessment criteria will be used where appropriate.

4.8 Waste and Recycling

A Waste and Recycling chapter shall be produced as part of the ES. This chapter will be an informative chapter which will:

- Identify waste management objectives and targets the Proposed Development is required to comply with through a review of waste legislation and national, regional and local planning policies. Guidance from the LBC will be sought in order to ensure a sustainable strategy is produced in line with local targets and aspirations for future management of waste and recyclate;
- Describe and define the main waste streams relevant to the Proposed Development;
- Provide estimates of the quantities of key waste streams likely to be produced during the construction phase of the development;
- Describe the waste management and disposal options for the identified key construction waste streams with reference to the Site Waste Management Plan (SWMP) Regulations 2008. A SWMP will be produced by a contractor, subsequent to the ES;

- Provide estimates of the quantities of key waste streams likely to be produced during the operation of the completed development. This will be carried out through a review of available information relating to the Proposed Development, including plans and elevations indicating proposed building materials and proposals for waste storage / handling during the operation of the completed development; and

- Outline the waste management strategy proposed for the operation of the completed development. The strategy will provide details of the proposed minimisation, segregation, recycling measures and collection arrangements that will be considered in line with British Standards, Duty of Care compliance and LBC's policies.

4.9 Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare

Daylight / Sunlight

The methodology for the assessment of daylight and sunlight matters is set out in the Building Research Establishment (BRE) Handbook "Site Layout Planning for Daylight and Sunlight 2011". This Handbook states in its introduction that it is a guide to provide advice on site layout planning, to achieve good sunlighting and daylighting within buildings and in the open space between them. It is intended to be used in conjunction with the interior daylight recommendations in the British Standard BS8206 Part II and the Applications Manual Window Design of the Chartered Institute of Building Services Engineers (CIBSE).

The potential impact of the Proposed Development on daylight and sunlight, in relation to adjacent sensitive buildings (e.g. residential), will be assessed against the existing baseline and in relation to other surrounding consented projects. The following will be assessed:

- Vertical Sky Component (VSC) for daylight;

- No Sky Line (NSL) for daylight;

- Average Daylight Factor (ADF) for daylight; and

- Total and Winter Annual Probable Sunlight Hours (APSH) for sunlight.

In addition to the above daylight and sunlight tests, an internal daylight assessment will be undertaken. The 2011 BRE Guidelines methods of assessment will be followed.

Overshadowing

Site visits and a review of the adjacent properties of the site indicate that there are no gardens or open spaces that will be affected by overshadowing as a result of the Proposed Development. In addition, the Proposed Development is not seeking to provide gardens or public open spaces. As such, in compliance with the 2011 BRE Guidelines, an overshadowing assessment will not be required or undertaken.

Light Pollution

Light Pollution can be defined as any light emitting from artificial sources into spaces where this light would be unwanted. Examples include spillage of electric light from office or commercial buildings onto streets or into residential accommodation such as bedrooms, where this would cause inconvenience to their occupants. Additional light spillage into nearby areas of nature conservation, which may cause disturbance to foraging or roosting bats and birds, would also be considered as light pollution. Quantitative criteria for acceptable levels of light pollution are detailed within the Institution of Light Engineers (ILE) document entitled 'Guidance Notes for the Reduction of Light Pollution'. Due to the intended use of the Proposed Development, it is unlikely that the Proposed Development will cause significant light pollution upon surrounding properties as future occupants of the residential units are likely to close their curtains at night. This will reduce / remove any potential for light pollution from the Proposed Development. In relation to the potential impacts from adjoining properties upon future occupants of the Proposed Development, there will be limited light pollution impacts due to the following:

- To the north of the site the former University of the Arts building is currently still of educational use, but has potential for residential / office use; as such, there will be limited light pollution as the building will not be in use at night (if it is of educational / office use) and potential residents will close their curtains at night (if it is of residential use);

- To the east, the LEB substation has no windows which face the Proposed Development site;

- To the south, there is consent for a hotel; as such, hotel guests are likely to close their curtains at night; and

- To the west, there is the intention to re-instate residential use; as such, future occupants will close their curtains at night.

Solar Glare

The BRE Guidelines make the following statement regarding the potential for reflected solar glare upon a development: "Glare or solar dazzle can occur when sunlight is reflected from a glazed façade. This can affect road users outside and the occupants of adjoined buildings". Solar glare is particularly important at pedestrian and vehicular junctions where the glare can cause temporary blinding of either vehicle operators or pedestrians at such junctions. The Proposed Development is situated in a dense urban environment with limited potential to receive low level sunlight, which can be the main cause of solar glare / dazzle. In addition, the site of the Proposed Development is not on a main thoroughfare and tall buildings surround the site, which will prevent potential reflection of sunlight to pedestrians and road users. As such, the Proposed Development is unlikely to cause any significant impacts in relation to solar glare / dazzle.

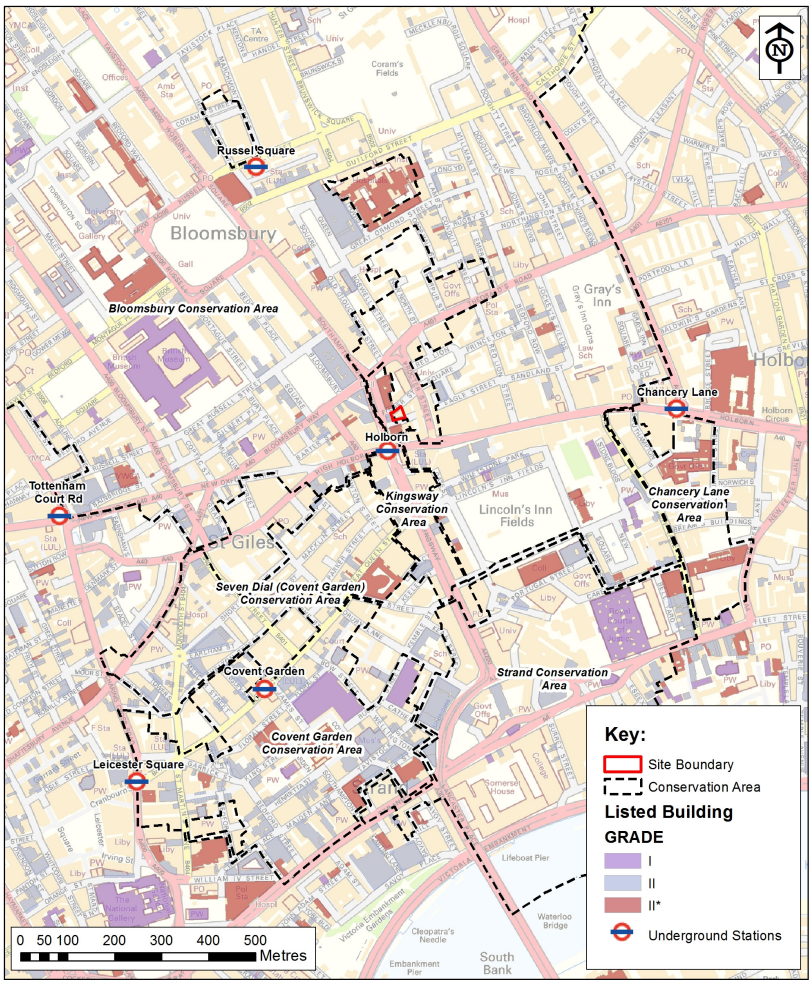
Daylight and sunlight assessments will be undertaken; however, overshadowing, light pollution and solar glare will be scoped out the ES chapter.

A descriptive comparison of impacts between the conditions 'pre-Crossrail' and following construction of the Proposed Development will also be made.

4.10 ES Volume II – Townscape and Visual Impact Assessment

The site of the Proposed Development is located adjacent to the Kingsway Conservation Area, with other Conservation Areas nearby (see Figure 5). There are no listed buildings on the site, however several listed buildings in the surrounding area include the Grade II listed 8 – 10 Southampton Row, Grade II* listed Baptist Church House and Grade II listed Numbers 114 and 115 High Holborn. The vicinity of the site primarily comprises of office and commercial units, along with some residential units.

Figure 5 – Relationship of the Proposed Development site with Conservation Areas and Listed Buildings



Volume II of the ES will include an assessment of the impacts on Townscape caused by the construction of the Proposed Development. It will assess the Proposed Development in relation to its local and wider setting by considering a number of pre-selected views, architectural and historic accounts in the area, policy designations – such as conservation areas and listed buildings – and consented projects in the vicinity that will alter the townscape in the future. A general overview of the visual context, both prior to the commencement and during the construction of the Crossrail works, and the extent of views will form part of the baseline assessment. A descriptive comparison of impacts between the conditions 'pre-Crossrail', 'post-Crossrail' and following construction of the Proposed Development will also be made, using the Townscape characterisation specified in the Crossrail ES. Both construction and operational impacts will be assessed as part of the EIA.

Accurate visual representations in the form of Visually Verified Montages (VVMs) of the Proposed Development will be inserted into selected views to demonstrate its potential impact on the townscape. In addition, the Proposed Development will be illustrated from verified views by means of wire line images.

Specifically, the methodology will cover:

- Rationale for the selection of views and ways in which the Proposed Development is represented within them;
- Explanation of the guidance and Crossrail assessment criteria (used where appropriate) used to assess the views; and

- Means of photographing and verifying views and validation of photomontage methods.

The views assessment will be informed by an appraisal of the site that considers its townscape context and character, the current and historical form of the site, evolution of the townscape, local and medium-distance views and the potential impacts of the new building on the skyline. Specifically, it will address:

- The history of the site with particular emphasis on the street form, streetscape and relationships with existing buildings;
- Evolution of the townscape;
- Review of nearby conservation areas and listed buildings and their settings;
- Local, regional and national planning policy and design guidance in relation to historic environments and tall buildings;
- A review of statutory and other significant views and constraints; and
- Short and medium-distance views including street level; and implications of the above for the design concept including design mitigation.

A series of locations will be considered for the assessment of views which will be carried out by consultants to be appointed by Crossrail. The selection of views will be based upon regional and local guidance (e.g. the London View Management Framework (LVMF) and LBC Core Strategy) and the potential visibility of the site from key viewpoints in the surrounding area.

The viewpoints to be considered for the assessment of views will be discussed and agreed with the LBC, and will be considered within the ES.

5 SUMMARY OF KEY POTENTIAL ISSUES

The table below provides a summary of potentially significant environmental and socio-economic issues.

Table 2: Summary of potentially significant environmental and socio-economic issues

Environmental Topic	Potential Issue
Air Quality	– Construction dust; and – Impact of mechanical plant and potential traffic levels during construction and once development is complete and operational.
Noise and Vibration	– Noise and vibration from construction/demolition activities; and – Potential noise disturbance from operational activities and servicing.
Waste and Recycling	– Waste arisings during construction; – Waste and servicing strategy during operation of Proposed Development
Daylight, Sunlight, Overshadowing, Light Spillage & Solar Glare	– Potential reduction in daylight and sunlight levels to neighbouring residential properties; – Potential overshadowing of public amenity areas; – Light spillage to neighbouring properties; and – Solar glare impact to key pedestrian and vehicular routes around the site.
Townscape and Visual	– Appearance / visual impact of construction works on surrounding area and from adjacent sensitive receptors; – Changes to townscape and site setting of Listed Buildings and Conservation Areas; – Impact on the London City skyline; – Long term changes to local and long views; – Potential improvements to the public realm / public open space.

6 NON-SIGNIFICANT ENVIRONMENTAL ISSUES

6.1 Socio-Economics

The potential impacts of the Proposed Development, in relation to Socio-Economics, include the following:

- The role of the Proposed Development in the generation of direct, indirect and induced employment opportunities at the local and regional level during the construction phase;
- The provision of residential units;
- Associated increases in local spending;
- Demand for educational services;
- Demand on primary healthcare services;
- Effects on crime levels; and
- Public amenity, access and safety, and open space and children's play space.

Although the Proposed Development may potentially result in the above mentioned impacts, it is proposed that socio-economics is scoped out of the EIA. Justification for this is provided below.

The construction of the Proposed Development will produce some employment opportunities in the construction phase. It is considered that the number of jobs created will be insignificant in terms of the overall numbers of construction workers in Greater London (less than 1%).

In the operational phase of the Proposed Development, the Proposed Development will be making a valuable contribution towards meeting the borough's London Plan monitoring target of 665 new homes per annum. However the Proposed Development (22 units) is not considered to be of large enough scale as to have a significant impact on the provision of housing in the borough.

Based on the draft accommodation schedule prepared by the Applicant and assuming the scheme includes a 20% affordable housing element[2], it has been estimated that 37 people would reside at the Proposed Development, of whom 4 would be children (aged 0 – 17)[3]. See Tables 3 and 4 for further details.

Table 3: Population of the Proposed Development

Dwelling Size	Market		Intermediate*		Social Rent		Total	
	Units	Population	Units	Population	Units	Population	Units	Population
1 bed	4	5	-	-	1	1	5	6
2 beds	13	22	1	2	2	4	16	28
3 beds	1	2	-	-	-	-	1	3
Total	**18**	**29**	**1**	**2**	**3**	**6**	**22**	**37**

Source: Accommodation Schedule; URS Calculations 2012

** Number of intermediate housing units calculated based on assumption that such units would comprise 40% of the affordable housing units, in line with Camden Planning Guidance 2: Housing and the London Plan 2011.*

[2] Based on the affordable housing 'sliding scale' set out in London Borough Camden's (LBC) '*Camden Planning Guidance 2: Housing*' (2011).

[3] Using occupancy rates and child yields from *DMAG Briefing 2005* (which used data from a housing study in the London Borough Wandsworth ('*The Wandsworth New Housing Survey*')), for private and intermediate housing, and *'Oxfordshire New Housing Survey'* (2005), also documented in *DMAG Briefing 2005*, for social rented housing.

Table 4: Estimated Child Occupancy at the Proposed Development

Children Aged (Years)				
0-4	**5-10**	**11-15**	**16-17**	**Total**
3	**1**	**-**	**-**	**4**

Source: URS Calculations 2012.

Based on the child occupancy set out above, assumptions have been applied to estimate the number of children that could require education places[4]. It is concluded that 1 child of nursery / early years age and 1 child of primary school age from the Proposed Development could require education places in the borough (Table 5).

Table 5: Estimated Education Demand from the Proposed Development

Nursery / Early Years	Primary	Secondary
1	**1**	**-**

Source: URS Calculations 2012.

Set within the context of Camden's estimated resident population of 235,400[5], it is considered that there will be no significant impacts arising from the estimated 37 residents of the Proposed Development in relation to: associated increases in local spending; increased demand for educational services; increased demand for primary healthcare services; effects on crime levels; and impacts on public amenity, open space and child play space.

On the basis of the above considerations it is deemed that there will be no significant impacts arising from the Proposed Development with regard to socio-economics, it is therefore proposed that no Socio-Economic chapter be prepared for inclusion within the ES.

6.2 Traffic and Transport

The site is well served (i.e. Public Transport Accessibility Level (PTAL) rating of 6b) by London Underground Limited (LUL) public transport services as the site is situated within approximately 100 metres (m) of Holborn Station, which provides Central Line and Piccadilly Line services. Frequent bus services run along Procter Street, High Holborn and Southampton Row. In addition, Barclays Cycle Hire points are available within walking distance of the site.

Due to the limited size of the Proposed Development (approximately 0.05ha, with 22 residential units), it is proposed that a Transport Assessment (TA) is scoped out of the EIA. However, as the LBC's Core Strategy document "Camden Development Policies 2010 – 2015" (adopted in November 2010) sets out requirements for TAs that are required to support planning applications, it is proposed that a standalone Transport Statement (TS) is prepared to address these requirements.

Appendix A to the abovementioned LBC document sets out thresholds for different levels of development, and a full TA is required for developments of 80 units or more. For proposed residential developments in the range of 10 – 79 units the LBC requires the submission documentation (i.e. the TS) to include information on the following:

- An overview of how potential highway impacts from the construction of the Proposed Development and associated traffic will be remedied or mitigated, and how local amenity will be preserved during the construction period;

[4] To calculate the number of education places required, we apply assumptions to the child yield calculation drawn from the local context. In the case of this development we used the following assumptions:

- 50% of children aged 0-4 will attend nursery/early years education (i.e. all children aged 3-4)
- A 7% reduction is applied to the primary aged child yields to account for likely 'leakage' to the private and independent schools sector (based on the national average take-up of private education)

[5] Office for National Statistics (ONS) Mid-year Population Estimates 2011

- An indication of the scale, mode, type and frequency of all trips associated with the Proposed Development on a daily basis;

- A description of how this transport demand can be accommodated by walking, cycling, public transport, and any other sustainable alternative modes of travel, as set out in policy DP17; and

- An overview of the servicing requirements of the Proposed Development after occupation and of the servicing provision made to accommodate this.

A traffic and transport chapter will not be included in the ES, but a standalone Traffic Statement will be prepared to address the above outlined planning policy requirements.

6.3 Ground Conditions

It is proposed that a ground conditions assessment is scoped out as there is no demolition or excavation required for the Proposed Development, and the potential impacts of any piling for the headhouse, of which the Proposed Development will be constructed above, were considered within the Crossrail 2005 EIA.

A ground conditions chapter will not be included in the ES. However, any unexpected groundworks which may occur during construction will be managed by the implementation of mitigation measures. Such measures will be detailed in the Construction chapter of the ES and the EMP.

6.4 Water Resources, Drainage and Flood Risk

The potential impacts of the Proposed Development, in relation to water resource, drainage and flood risk, include the following:

- Demand on water resources and infrastructure;

- Changes to groundwater; and

- Flood risk.

Although the Proposed Development may potentially result in the above mentioned impacts, it is proposed that water resource, drainage and flood risk is scoped out of the EIA. The Proposed Development is located in an Environment Agency Flood Zone 1 and the development covers an area less than one hectare; as such, a full Flood Risk Assessment (FRA) is not required. As the Proposed Development will not involve any below ground works, there will be no pathways between the site and underlying groundwater. Therefore, the Proposed Development is unlikely to result in changes to groundwater. Furthermore, it is considered that the scale of the Proposed Development (22 residential units) will result in a limited impact upon water resources and infrastructure during the operational phase.

The Proposed Development will follow the Sustainable Design and Construction SPG (2006), to *"achieve 50% attenuation of the undeveloped site's surface water run off at peak times"*, which will reduce the risk of flooding off-site.

Any potential spills (e.g. oil or chemical) during the construction phase, which may affect surface water and groundwater, will be managed by the implementation of mitigation measures. Such measures will be detailed in the Construction chapter of the ES and EMP.

On the basis of the above, a water resources, drainage and flood risk chapter will not be included in the ES. The cumulative impacts of water usage within the vicinity of the Proposed Development during operation, however, will be included within the Cumulative Impact Assessment chapter of the ES.

6.5 Archaeology and Built Heritage

Crossrail considered the potential impacts of the excavation activities associated with Fisher Street shaft on archaeology within the Crossrail ES, 2005.

The Proposed Development site is within an Archaeological Priority Area (London Suburbs); however, it is proposed that an archaeology assessment is scoped out of the EIA as no excavation works will be required for the OSD at the site, and thus there will be no impacts to archaeology. Any unexpected matters concerning site activities during construction, which relate to archaeology, will be managed by the implementation of mitigation measures. Such measures will be detailed in the Construction chapter of the ES and the EMP.

An archaeology chapter will not be included in the ES.

In consideration of the Grade II listed 8 – 10 Southampton Row located directly adjacent to the Proposed Development, it is acknowledged that part of the 8 – 10 Southampton Row basement (which is also listed) could be affected by construction of the Proposed Development (i.e. the potential storage unit and new terrace garden above the rear of 8 – 10 Southampton Row). Given the nature and extent of works proposed, it is proposed that a Listed Building Consent is applied for. If direct impacts result then it is considered that the Listed Building Consent itself will be sufficient to assess these impacts for planning purposes. As such, there will be no need to assess physical impacts on built heritage.

A built heritage chapter will not be included in the ES, although impacts on the setting of listed buildings will be addressed in the Townscape & Visual assessment.

6.6 Microclimate (Wind)

Given that the site is relatively enclosed and the height of the Proposed Development is limited when compared to the existing buildings within the vicinity, it is likely that the microclimate impact on pedestrian activity at ground level will be low. Therefore, it is considered that a Wind Assessment will not be necessary, and it is proposed that microclimate (wind) is scoped out of the EIA.

A microclimate (wind) chapter will not be included in the ES.

6.7 Ecology

The site is in a dense urban area in central London, and there is currently demolition and clearance works currently ongoing at the site as part of the Crossrail development. Given the existing site conditions and paucity of vegetation at the site and in the surrounding area, the potential impact of the Proposed Development on ecological resources is considered to be minimal. As such, it is proposed that an ecology assessment is scoped out of the EIA and an ecology chapter will not be included in the ES. Any unexpected matters concerning site activities during construction, which relate to ecology, will be managed by the implementation of mitigation measures. Such measures will be detailed in the Construction chapter of the ES and EMP.

6.8 Aviation

The Proposed Development will be clear, both laterally and vertically, from the outer limits of the London City Airport (LCY) and London Heathrow Airport (LHR) Safeguarded Zone. The Proposed Development will only be 8 storeys in height, very similar to the height of nearby buildings. As such, it is considered that the Proposed Development will have no impacts upon aviation, and it is proposed that aviation is scoped out of the EIA. An aviation chapter will not be included in the ES.

6.9 Electronic Interference (TV & Radio Reception)

The introduction of new structures of significant height and bulk into an environment can cause disruption to the reception of electromagnetic waves for TV and radio reception. However, the Proposed Development will only be 8 storeys in height.

Analogue signals have recently ceased to be transmitted and have been be replaced by digital signals. It is considered that the Proposed Development's potential to interfere with television, radio (both analogue and digital) and mobile phone reception will be of negligible impact. Therefore, this topic will not be assessed and will be scoped out of the EIA. An electronic interference chapter will not be included in the ES.

7 SUSTAINABILITY AND ENERGY

In order to meet the requirements of the LBC in terms of sustainability and the Code for Sustainable Homes (CSH), it is proposed to provide the following sustainability reports to support the planning application for this project:

- Sustainability Statement including a CSH Pre-Assessment Report; and
- Energy Strategy.

The performance of the Proposed Development against the relevant policy requirements will be outlined in the above reports and, therefore, it is proposed that a separate sustainability chapter is not included in the ES.

7.1 Sustainability Statement

The London Plan (GLA, 2011) contains policies that promote sustainability principles, particularly with regard to the reuse of land and buildings, energy conservation, materials and water usage, waste minimisation, and conserving and enhancing the natural environment. The Mayor's SPG on 'Sustainable Design and Construction' (GLA, 2006) provides guidance to developers on sustainable design and construction. This SPG provide an essential context for all developments and offers a mechanism for addressing climate change impacts through new developments. It contains the Mayor's essential and preferred standards and also identifies several methodologies that can be used to measure and demonstrate sustainability.

In addition to the London policies, the LBC's Core Strategy and Development Policies cover a number of 'sustainability' issues, while the Supplementary Planning Document 'Camden Planning Guidance (CPG) 3: Sustainability', provides further guidance on how to achieve sustainable developments and covers the following:

- The energy hierarchy;
    - Energy efficiency (new and existing buildings);
    - Decentralised energy networks and combined heat and power;
    - Renewable energy;
- Water efficiency;
- Sustainable use of materials;
- Sustainable assessment tools;
- Brown roofs, green roofs and green walls;
- Flooding;
- Adapting to climate change;
- Biodiversity; and
- Local food growing.

Following the London Plan 2011 and the LBC planning policy guidance, it is proposed that the Sustainability Statement will be prepared based upon the topics identified in the Sustainable Design and Construction SPG and Camden Sustainability Guidance CPG3.

The Sustainability Statement will demonstrate how the Proposed Development will take into account sustainable design issues, balancing social, economic and environmental factors. As this approach requires environmental performance to be tested against economic viability, the measures that will be incorporated into the Proposed Development will be practical and achievable.

7.2 Preliminary Code for Sustainable Homes (CSH) Assessment

As required by the GLA and LBC, it is proposed that a Preliminary CSH Assessment for the Proposed Development will be undertaken.

The CSH methodology covers a set of criteria such as: management, energy use, health and well-being, pollution, land use and ecology, materials, waste and water. Credits are awarded in each area according to performance, and these are added together to produce a single overall score. The building is then rated from Level 1 to Level 6.

The Proposed Development will be targeting a Level 4.

7.3 Energy Strategy

As required by the London Plan 2011 and the LBC planning policies, it is proposed that an Energy Strategy is prepared for the site in accordance with the methodology set out in the GLA Energy Team Guidance on Planning Energy Assessment, and reflecting the requirements of the London Plan 2011, LBC planning guidance, and the London Energy Partnerships Renewables Toolkit.

In compliance with the planning requirement, the Energy Strategy will comprise the following:

- Energy consumption and CO_2 emission baseline: This will require preliminary estimates of energy consumption for the development based on frozen architect's drawings and schedule of accommodation;
- The Government's Standard Assessment Procedure (SAP) for Energy Rating of Dwellings software will be used to model sample residential units.
- Passive design: A cost effective and buildable approach to optimising the fabric design through reduced U-valves and air leakage rates, specification of solar shading and an effective use of solar gains will be established;
- Low energy services: Establishing a commercially viable approach to minimising demand from lighting, white goods, and electrical installations, with optimised controls wherever feasible;
- Community heating and power: An analysis of the potential base demand for CHP and feasibility of connection to local district heating schemes; and
- Renewable technologies: Review of options against design constraints and demand, taking account of environmental impact and deliverability.

The Sustainability Statement, CSH Pre-Assessment Report and Energy Strategy will be prepared as stand-alone documents to be submitted in support of the planning application.

8 PROPOSED STRUCTURE OF THE ENVIRONMENTAL STATEMENT

The ES will comprise the following set of documents.

ES Non-Technical Summary (NTS): This document will provide a summary of the key issues and findings of the EIA. The NTS will be presented in non-technical language to assist the reader in understanding the site context, the proposed development, the design alternatives, the environmental issues arising and proposed mitigation measures.

ES Volume I: This will contain the full text of the EIA with the proposed chapter headings as follows:

- Introduction;
- EIA Methodology;
- Alternatives and Design Evolution;
- The Proposed Development;
- Construction;
- Air Quality;
- Noise and Vibration;
- Waste and Recycling;
- Daylight, Sunlight, & Overshadowing;
- Cumulative Impact Assessment; and
- Residual Impact Assessment and Conclusions.

***ES Volume II: Townscape and Visual Impact Assessment*:** The ES will include a stand-alone Townscape and Visual Assessment accompanied by a full set of views and verified images.

***ES Volume III: Technical Appendices*:** This will provide supplementary details of the environmental studies conducted during the EIA including relevant data tables, figures and photographs.

9 SUMMARY AND CONCLUSIONS

This EIA Scoping Report is prepared in support of a Scoping Opinion from the LBC pursuant to Regulation 13 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011. This report suggests a comprehensive scope of work based on previous experience of the assembled team of specialists, existing knowledge of the site and predicted impacts of the Proposed Development. The LBC are invited to consider the contents of this Report and comment accordingly within the five-week period prescribed in the EIA Regulations.