AILSA WHARF
ENVIRONMENTAL STATEMENT
VOLUME 3 - NON-TECHNICAL SUMMARY
SEPTEMBER 2016
Introduction & Methodology

1.1 This document is a summary in non-technical language of an Environmental Statement (‘ES’) prepared on behalf of Ailsa Wharf Developments Ltd. (‘AWD’) (‘the applicant’). It accompanies an application for a residential-led development comprising 782 units and 1,941sqm of commercial floorspace (Use Classes A1/A3/B1/D1/D2) at Ailsa Wharf, London.

1.2 The proposed development falls within part 10(b) (Infrastructure Projects) of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (the ‘2011 Regulations’) (as amended). Part 10(b) relates to “urban development projects” where the development includes more than 150 dwellings. For such developments, EIA is required in situations where the development could give rise to significant environmental effects. The scope of the ES has been agreed with London Borough of Tower Hamlets (‘LBTH’).

1.3 The document includes the following information: -

- Section 1.0 – background to the assessment process and the scheme;
- Sections 2.0 to 3.0 – description of the site and the current proposals;
- Sections 4.0 to 15.0 – a topic by topic review of the findings of the EIA;
- Section 16.0 – a review of whether other direct or indirect effects may arise when the scheme is considered with other schemes in the area;
- Section 17.0 – details of how to obtain a full copy of the ES;
- Section 18.0 – scheme plans.

The EIA Process

1.4 The ES sets out the findings of an Environmental Impact Assessment (‘EIA’) of the development.

1.5 The EIA process aims to ensure that any significant effects arising from a development are systematically identified, assessed and presented to help a local planning authority, statutory consultees and other key stakeholders in their understanding of impacts arising from development. If measures are required to minimise or reduce effects then these are clearly identified.

1.6 For this development, EIA has been carried out to consider the likely significant effects that may arise during its construction and operation and due to its potential relationship to future developments in the area. It has been completed with regard to best practice and relevant legislation and has addressed the following matters agreed with LBTH as being required to assess the impacts of the development:-
1.7 Likely effects are identified based on current knowledge of the site and surroundings, desktop assessment, survey and fieldwork and information available to the EIA team. All those matters that could be reasonably required to assess the effects of the proposals are set out in the ES; this includes effects arising from the scheme itself as well as those temporary effects arising during the construction of the proposed development.

1.8 The EIA team has worked with the design team to ensure that the scheme for which planning permission is sought incorporates those revisions or modifications that are necessary or appropriate to avoid or reduce significant adverse effects on the environment.

1.9 Consultation has also informed the EIA process in relation to the methods by which the EIA has been carried out, as a means to seek environmental data, to review the effectiveness of any identified mitigation measures and as a means to keep interested bodies informed on the process of EIA undertaken.

Background to the Scheme

1.10 The site is currently in mixed ownership and occupied by various industrial activities, including storage, scrap yards and waste disposal. The owners of the site have come together as Ailsa Wharf Developments Ltd to bring forward the redevelopment of the site.

1.11 The site is located within the Lower Lea Valley Opportunity Area; a significant zone identified in the London Plan (2004, 2006) as a main focus and location of the London 2012 Olympic & Paralympic Games and for significant regeneration.

1.12 In June 2014, the Government and the Mayor of London announced the intention to create a number of ‘housing zones’ in London to significantly expand the number of homes being built. The zones identified include Poplar Riverside Housing Zone within which the site is located. The Zone has been identified for the delivery of 6,404 homes to 2025.

1.13 The LBTH Core Strategy 2010 establishes a vision for Poplar Riverside to transform the area ‘...into a revitalised and integrated community reconnecting with the A12... River Lea Poplar Riverside will change from a largely industrial area to a predominately residential area’.

1.14 The Ailsa Street area is also identified within the LBTH Managing Development Document (2013) as a site for ‘a comprehensive mixed use scheme to provide a strategic housing development, a primary school and other compatible uses, including employment floorspace’.
It is against this context that the development is being brought forward for development.

**Site & Surroundings**

**Surroundings**

2.1 The site is located in ‘Poplar Riverside’ in Bromley-by-Bow/Poplar in the administrative area of LBTH. The site is bounded to east by the River Lea; to the north by an area safeguarded by LBTH as a waste site; and to the west and south by a range of commercial uses with the route of the A12 Blackwell Tunnel Approach to the west (from which access to the site is also taken). LBTH Bromley Hall School site is located immediately to the south, beyond which is the Poplar Harca Nairn Street Estate.

2.2 The southern boundary of the site is formed by Lochnagar Street.

Figure C2.1 Aerial Photograph identifying broad extent of the development site

Source: Google Earth

2.3 The site is 700 metres south of Bromley by Bow London Underground Station (on the Hammersmith and City and District Lines) and 500 metres to the north-west of Langdon Park (the nearest station on the Docklands Light Railway). Bus stops are located immediately adjacent to the site on the A12, served by the number 108 between Stratford and Lewisham.

2.4 The site is close to four listed buildings: Bromley Hall, 43 Gillender Street (Grade II*), located to the north west; the Poplar Public Library, 45 Gillender Street (Grade II) and Brunswick Road Fire Station at 25-37 Gillender Street.
(Grade II) to the west; and Bromley Hall School (Grade II) to the south. The area is identified as an ‘Area of Archaeological Importance’ by LBTH.

**The Site**

2.5 The site is flat, largely featureless and in a range of ownerships and covers 2.39ha of land. The site is occupied by a number of industrial activities including storage, scrap yards and waste disposal. There are several low lying buildings/industrial units of a single storey. The main vehicular access into the site is from the A12 Blackwall Tunnel Northern Approach.

2.6 A High Voltage Cable crosses the River Lea to the site in a ‘container bridge’ before running underground across the site towards Lochnagar Road and the junction with the A12.

2.7 The site is located within Flood Zone 3 but in an area benefitting from flood defences which run along the length of the River Lea.

**Description of Development**

3.0 The development is described as follows:-

'Demolition of existing structures/buildings and the redevelopment of the site for a mixed use scheme providing 782 residential units (C3) and 1,941 sqm GIA commercial floorspace (A1/A3/B1/D1/D2) within a series of thirteen building blocks varying between 3 and 16 storeys; the creation of a new access road and the realignment of Ailsa Street; the provision of cycle and car parking spaces; and associated site-wide landscaping and public realm works.'

3.2 The site is laid out on an area of 2.39ha and proposes the construction of seven buildings varying between 3 to 16 storeys (see Section 18.0 for a site layout) with the following block by block breakdown:

<table>
<thead>
<tr>
<th>Block</th>
<th>Height in Storeys</th>
<th>Height in mAOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block A</td>
<td>16 storey</td>
<td>56.80</td>
</tr>
<tr>
<td>Block B</td>
<td>13 storey</td>
<td>48.975</td>
</tr>
<tr>
<td>Block C</td>
<td>12 storey</td>
<td>44.80</td>
</tr>
<tr>
<td>Block D</td>
<td>8 storey (west) &amp; 6 storey (east)</td>
<td>31.75 and 25.80</td>
</tr>
<tr>
<td>Block E</td>
<td>7 storey</td>
<td>27.37</td>
</tr>
<tr>
<td>Block F</td>
<td>7 storey</td>
<td>27.37</td>
</tr>
<tr>
<td>Block G</td>
<td>8 storey</td>
<td>30.90</td>
</tr>
<tr>
<td>Block H (EFG houses)</td>
<td>3 storey</td>
<td>15.00</td>
</tr>
<tr>
<td>Block I</td>
<td>7 storeys</td>
<td>27.10</td>
</tr>
<tr>
<td>Block J</td>
<td>7 storeys</td>
<td>27.10</td>
</tr>
<tr>
<td>Block K</td>
<td>8 storeys</td>
<td>30.45</td>
</tr>
<tr>
<td>Block L (IJK houses)</td>
<td>3 storeys</td>
<td>15.40</td>
</tr>
<tr>
<td>Block M</td>
<td>8 storey (north), 7 storey (middle), 10 storey (south)</td>
<td>32.35, 29.28, 38.40</td>
</tr>
</tbody>
</table>
The following table provides a summary of the unit sizes by tenure.

Table C3.2  Unit Size by Tenure

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>Affordable Rent</th>
<th>Intermediate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>74</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td>1 bed</td>
<td>205</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td>2 bed</td>
<td>102</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>3 bed</td>
<td>77</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4 bed</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4bed house</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>548</td>
<td>143</td>
<td>91</td>
</tr>
</tbody>
</table>

A total number of 209 car parking will be provided for the development, including 109 standard car parking spaces and 76 accessible parking spaces within the basement car parking area. It is envisaged that 1,284 cycle parking spaces will be provided for the scheme, including 10 cycle spaces for the commercial units.

**Construction Methodology**

For the purposes of this EIA, construction of the development is anticipated to take approximately 4.5 years. The EIA has been prepared on the basis that construction works will commence in 2017. The period of phased construction would take place after an initial mobilisation period to provide site management offices and contractor facilities.

The contractor will be required to produce and agree a ‘Construction Environmental Management Plan’ (‘CEMP’) to describe how construction will be managed to avoid, minimise and mitigate any construction effects on the environment and existing surrounding communities. The information assessed in the EIA will form part of the tender documentation to be issued to potential contractors and they will be required to comply with the outline methodology described, as well as any relevant planning conditions.

**Alternatives Considered**

It is good practice to consider alternatives for the proposed development. This helps in clarifying the main advantages for taking forward the current scheme, taking account of the environmental effects.

Consideration of a scenario where the development does not proceed and the site remains in its current use has also been considered. In this ‘no development scenario’, it is expected that the existing uses would continue. The site is occupied by a number of industrial activities including storage, scrap yards and waste disposal and there are several low lying buildings/industrial units of a single storey. As such, there is little investment into the facilities at present and it may be that buildings may become derelict and less attractive for any other uses. The significant housing, social and economic benefits from the Ailsa Wharf residential development would not come forward at the site.
3.9 Alternative sites for the proposed development have not been considered due to it being a primary objective to deliver a residential-led development at the Ailsa Wharf site.

3.10 A variety of different scales and configurations for the uses forming part of the proposed development were considered for the site under a number of key design priorities including: to provide the best solution to townscape and visual impact issues; maximise new public space; and enhance access to the site. The proposed site layout has evolved from an iterative process of design review, consultation and environmental assessment.

4.0 Townscape and Visual Effects

4.1 An assessment has been carried out of the effect of the development on existing townscape character and on views towards the site. The assessment methodology draws upon key guidance from the Landscape Institute and the Institute of Environmental Management and Assessment. This chapter comprises two separate but interrelated assessments: an assessment of the likely significant effects on the character and quality of the townscape together with an assessment of the effect of development on views (including protected views), viewers and their visual amenity.

4.2 The extent of the study area has been established through a combination of desk-based study and fieldwork to define the Zone of Theoretical Visibility (ZTV) (i.e. where views of the proposed development would be obtained).

4.3 The fieldwork has provided a good understanding of potential effects of the proposed development within the existing townscape. A selection of key representative views has been established (13 in total). This takes into account the townscape characteristics of the surrounding area – there are numerous tall buildings up to and in excess of 20 storeys in the wider area of this part of east London.
4.4 The construction phase of the scheme is considered to give rise to minor effects on townscape character, and minor to moderate adverse visual effects. This is for a temporary period, as the development is being constructed. Construction sites are considered to be an expected and characteristic scene within an evolving urban townscape.

4.5 The effect of the operational development on townscape character is either neutral or beneficial. This is as the existing site is a low grade industrial area that would benefit from development. The proposed high quality scheme repairs this area of townscape and creates a strong street structure, with perimeter block development and high quality new buildings and landscaping. The scale, heights and massing of the scheme complement the existing and emerging buildings within the area where tall buildings are characteristic.

4.6 The assessment identifies that the redevelopment of low grade industrial units with a high quality, cohesively designed development of up to 16 storeys means that the impacts are either neutral (the introduction of new taller buildings within an urban area already characterised by tall buildings) or beneficial (the improved townscape visible in views closer to the site). Using the views at Figure 4.1 above, there is little impact from Views 1, 5, 6, 7, 9, 12 and 13 and beneficial impacts at from views 2, 3, 4, 8, 10 and 11. The night time and seasonal effects are not considered to differ from the effects concluded on the daytime views.
5.0 Ground Conditions and Contamination

5.1 An assessment of the potential effects of the proposed development on ground conditions has been undertaken. Historically the site was developed with terraced housing, oil depots with bulk storage, garage and wharves. The current uses include glass cutting/distribution, waste processing, car breakers and a scrap yard. Additionally, the wider historical landuse included large scale industry and gas works which is likely to have impacted the surrounding water quality.

5.2 During construction, the potential environmental effect of suspended solids discharged into watercourses and ground waters will be mitigated by adequate site controls developed by way of a CEMP. All contractors working on the site will be required to adopt the procedures and proposed means of mitigation outlined in the document.

5.3 In addition, it will be compulsory on the selected contractor to assess working practice related risks and impacts before implementation and control such by employing industry good practice techniques. Furthermore, the contractor will be required to develop emergency spillage, flood, fire and contamination control procedures such that any inadvertent incidents are immediately controlled to minimise the potential impact.

5.4 Provided specific investigation works and remediation and/or mitigation measures are adopted, the potential effect on sensitive receptors is, in general, assessed to be not significant. It is concluded that the potential effects associated with ground contamination and hazardous ground gases do not pose an unacceptable constraint to the proposed development.

6.0 Water Environment

6.1 This chapter identifies and assesses the potential impacts of the proposed development in respect of water, flood risk and foul and surface water drainage. The chapter has been prepared in consultation with the Environment Agency, LBTH, Thames Water Utilities Ltd, Marine Management Organisation and the Canal and River Trust.

6.2 The River Lea flows south and converges with the River Thames approximately 1.6km to the southeast of the site. The River Lea is known to be predominantly tidal at this location. Limehouse Cut is located approximately 200m north of the site. The site is located within Flood Zone 3, defined in the National Planning Policy Framework (‘NPPF’), as an area with a ‘Medium’ probability of flooding. The site is considered to benefit from flood defences located along the River Lea and the River Thames which provide protection up to the 1 in 1000 (0.1%) Annual Probability fluvial and tidal events.

6.3 To protect the water environment during construction, all construction activities will be undertaken in accordance with the Environment Agency Pollution
Prevention Guidance Notes and site specific CEMP ensuring no likely significant effects on watercourses.

6.4 It is anticipated that through the integration of proposed landscaped areas and sustainable urban drainage system features that the runoff rate and volume can be managed sustainably and effectively whilst offering additional amenity and water quality benefits. The surface water management scheme will result in a reduction in runoff from the site thereby offering a potential benefit to areas downstream which may have previously received runoff from the site, either through overland flow or through the public sewer system.

6.5 The assessment concludes that providing the mitigation measures are adopted during construction and after completion that the development should have no significant adverse impact on the water environment.

7.0 Transport

7.1 An assessment of the potential transportation issues associated with the proposed development has been carried out.

7.2 The A12 forms the western boundary of the site. The site can be accessed from the A12 via a signalised crossroads junction with Lochnager Street and Zetland Street. South of the site, the A12 links to the Blackwall tunnel, East India Dock Road and Aspen Way (A1261). North of the site the A12 links to the A11, which provides access into Central London.

7.3 There is a good level of buses serving the site and London Underground network and DLR services are available within a reasonable walking distance. There are also a wide range of key facilities within a short walking distance of the site including primary/secondary schools, doctors and open space. Whilst it is acknowledged that the A12 is a busy traffic corridor, the site’s proximity to an at-grade signalised pedestrian crossing and an underpass offers pedestrians a safe and convenient crossing point over the A12.

7.4 During construction, a Construction Traffic Management Plan will help manage all types of freight vehicles to and from the site during construction; with the aim of improving the safety and reliability of deliveries to a site, reducing congestion and minimising the environmental impact. Following its implementation, it is considered that there will be a minor negative impact on users of the surrounding highways due to construction traffic.

7.5 On all assessed roads, the scheme is only considered to have a significant increase in traffic on Ailsa Street and Lochnager Street which is to be expected considering the location of the development, and both are not classified as sensitive links. All other roads are considered to have an insignificant impact in terms of traffic.

7.6 A Travel Plan and Framework Travel Plan will be prepared in accordance with relevant authority guidance, which will set out a strategy to reduce single
occupancy vehicle trips, and encourage the use of sustainable modes of transport. It is anticipated that there will be an overall beneficial impact on pedestrian amenity and pedestrian delay with no impact on all other receptors.

8.0 Noise and Vibration

8.1 A noise assessment has been carried out following establishment of the existing noise environment has been determined by a long-term noise survey over a week long period. Sound levels were higher in the western area of the site, close to the A12, with traffic being the dominant noise source at the site.

8.2 The noise sensitive receptors closest to the site are mainly residential dwellings located to the south, south-west and west of the proposed development, and local businesses. The dwellings, located off the A12 and Zetland Street were included in the study area. Bromley Hall School is proposed to the south of the building and will be a sensitive receptor.

8.3 The demolition of the existing buildings and the construction of the development are likely to include activities such as site levelling/clearance, ground excavation, concreting, piling, superstructure construction and road construction. The internal building construction phases and the servicing and fitting out of new buildings is not normally a significant source of noise or vibration for nearby receptors.

8.4 Construction phase noise impacts are not anticipated to be significant when appropriate mitigation measures set out within the Construction Environmental Management Plan (CEMP) have been implemented.

8.5 During operation, in some external amenity areas close to the A12 and surrounding road network, sound levels will be below the proposed level at which these impacts are assessed to be significant, but some may be above the threshold for some impact. The level of impact at all receptors is likely to be no greater than 1 dB and is therefore considered a minor adverse impact.

8.6 Mitigation measures, such as limiting the sound levels with which plant noise is emitted, have been proposed which can eliminate any residual impacts in relation to industrial/commercial sounds. Assuming proposed mitigation is in place, it is unlikely that a significant residual impact will occur.

9.0 Air Quality

9.1 An assessment has been carried out of the potential air quality impacts associated with the development. The potential impact of dust generated during site enabling, earthworks and construction works at the proposed development has been undertaken in accordance with the Mayor of London’s guidance for the control of dust and emissions during construction and
demolition, which is closely aligned with the Institute of Air Quality Management (IAQM) construction dust guidance.

9.2 The assessment has shown that releases of dust and particulate matter are likely to occur during site construction activities. The potential risk of dust soiling and health impacts at neighbouring receptors has been assessed as high, however through identified good site practice and the implementation of suitable mitigation measures, the impact of dust and particulate matter releases are not considered to be significant.

9.3 Potential impacts on air quality during the operational phase include traffic and emissions from the proposed on-site energy centre. A detailed assessment will be undertaken following the assessment of the anticipated trip generation and the specification of the proposed plant and boiler units.

10.0 Socio-Economics

10.1 An assessment has been carried out of the potential effects on socio-economic receptors. The assessment reviews current economic and labour market conditions and the provisions of schools, healthcare facilities, and other community facilities and infrastructure.

10.2 The assessment principally focuses on the impact of the development on the local population, supply of housing, provision of education and health facilities, and provision of community facilities and amenities including open space, sport and recreation facilities. The local employment and labour market impacts of the proposed development scheme are also considered.

10.3 The resident population in LBTH in 2014 amounted to 284,000 and has risen by 34% over the decade 2004 to 2014. Over the same period population growth in London was 15%. The number of people of working age (16-64 years) in LBTH grew by 42% between 2004 and 2014 and in 2014 people of working age accounted for 74% of the population. This is higher than the London-wide average (68%).

10.4 In its latest Monitoring Report, the Council indicates that 3,153 homes were delivered including 2,460 conventional units and 382 non-conventional units in 2013/14. This is almost 20% lower than the London Plan target. There were 691 affordable homes delivered in this year.

10.5 In 2014, LBTH had some 256,700 employee jobs. Between 2009 and 2014, over 52,300 jobs (26%) were gained in LBTH. This was comparable to the general trend of employment growth in London (14%) and exceeded national job growth over the period significantly (5%).

10.6 Overall, economic indicators point to a local economy performing well in comparison to the rest of London. The recent recession had an impact on unemployment and growth in LBTH. However, this impact has been significantly less than elsewhere in London. Unemployment is low, new jobs
are being created at a similar rate to the London-wide average growth rate and a strong base of private sector jobs exists.

10.7 The proposed development is expected to generate positive effects in regards to the housing market by delivering 782 residential units including 234 affordable homes. It will increase the housing supply in LBTH and deliver 12% of the Poplar Riverside Housing Zone housing numbers target.

10.8 The proposals are also expected to generate positive effects by increasing the quantum of employment supported and through provision of flexible business space required in LBTH to accommodate small and medium enterprises.

10.9 The development will have a beneficial effect on the local economy by creating new construction jobs during the development phase and new operational jobs once the scheme has been fully built-out. Increases in resident expenditure and supply chain expenditure will also support additional employment.

10.10 The Ailsa Wharf development will displace the existing occupiers from the site on a permanent basis, however the uses are temporary in nature and the space is predominantly meeting short term business needs.

10.11 On balance, overall, from a socio-economic perspective, the development is assessed as having a moderate beneficial effect.

11.0 Daylight and Sunlight

11.1 An assessment has been carried out of the effect of the development on daylight, sunlight and shadow levels experienced at residential dwellings and gardens/amenity space surrounding the site. It also reviews the levels of natural light that will be experienced within all of the proposed residential units and open spaces within the development. The assessment has been carried out in accordance with guidelines prepared by the Building Research Establishment (‘BRE’).

Figure 11.1 Models used for Daylight and Sunlight Assessment
11.2 The assessment considers the scheme’s effects on the levels of daylight levels received by 132 windows serving neighbouring residential properties on Gillender Street, Leven Road, Teviot Street and Wellspring Close. The assessment has also considered the levels of natural light received by the proposed units within the development (2,944 proposed windows and 1,845 rooms assessed in terms of daylight and 1,471 windows assessed in terms of sunlighting). Finally, the chapter considers the effects of the development on the levels of overshadowing experienced within four areas of open/amenity space within the development.

11.3 The results of the assessment demonstrate that the development will have a negligible effect on the daylight conditions experienced by most neighbouring properties, and a minor or moderate adverse impact on certain isolated windows serving neighbouring properties. The windows experiencing a moderate adverse effect are all located beneath balconies which limit the windows’ access to natural light. It will have a negligible effect in terms of neighbouring sunlight conditions experienced by all but one south facing neighbouring window which will experience a minor adverse effect. The development will have no effect in terms of overshadowing of neighbouring receptors.

11.4 In addition, the proposed residential units will experience good levels of interior daylight and acceptable sunlight conditions. The proposed public/communal amenity spaces in the development will be well lit.

11.5 Taking account offsetting factors proposed as part of the development, it is considered that the proposed development will not result in any unacceptable daylight, sunlight and overshadowing effects in relation to both neighbouring residential properties and their gardens, and the proposed units and their amenity spaces. It is, therefore, concluded that the proposed development will not give rise to any materially unacceptable environmental impacts in terms of daylight, sunlight and overshadowing in the context of the standard guidelines and relevant planning policy.
Micro-climate and Wind

12.0 This chapter of the ES reports the findings of an assessment of the likely significant wind microclimate effects of the proposed development. The analysis used Computational Fluid Dynamic (CFD) modelling to predict what effect the new building will have on wind conditions and relates the findings to industry standards on pedestrian comfort. CFD modelling uses computer software to evaluate fluid motion within a set environment.

12.1 Potential impacts on the local wind microclimate following the completion of the proposed development would include changes in wind conditions around the perimeter of the proposed development due to the new building form and height, potentially affecting the suitability of that surrounding area’s usage. In addition, the amenity and pedestrian uses within the proposed scheme may be affected due to its buildings shape and design.

12.2 Therefore, a total of 86 sensitive receptor points have been identified within and adjacent to the development site to gauge the overall wind speeds in each direction.

12.3 Given all structural work will be completed before the first units are occupied, no impacts on pedestrians and residents are anticipated during the construction phase. Some impacts may occur on construction workers.

12.4 During operation, 45 out of 86 receptors tested correspond to improved wind conditions when compared to the intended use of the spaces, under the proposed condition, while 17 receptors experienced a negligible impact. 24 receptors are identified to experience adverse impacts, though none are anticipated to be significant.

12.5 Overall, the wind conditions resulting from proposed development in place were found to be within acceptable limits for a proposed scheme in an industrial urban context.

Archaeology

13.0 An assessment has been carried out of the potential for effects on archaeological features.

13.1 Prior to 1995 the site was marshland adjacent to the River Lea. According to records these marshland and estuarine areas have a high potential for the preservation of organic remains associated with a wetland environment and evidence for surviving archaeological landscapes. For these reasons the site is included within an Archaeological Priority Area (APA).

13.2 Elsewhere along the River Lea Prehistoric finds and substantial structures, including timber trackways, have been found in similar conditions. A significant amount of Roman activity has also been identified within these extensive
marshland landscapes; this includes a ditch with Roman pottery on Gillender Street, to the immediate east of the site.

13.4 A total of six archaeological assets have been identified and assessed. Only one known non-designated asset would be directly impacted upon by the proposed development during the construction phase. The asset however is likely to have been destroyed by the construction of former gas tanks at the site in the 20th century.

13.5 Three archaeological assets are located outside the proposed development area and will not be impacted by the construction works. Two additional archaeological assets have been identified on the site during this assessment although the presence, condition, extent and value of the remains is currently unknown. These include the potential for Prehistoric and Roman remains on the Site, and potential for Post-Medieval agricultural and land reclamation remains.

13.6 Taking into account the significance of the non-designated assets (both known and currently unknown) likely to be impacted upon by the proposed development it is suggested that a programme of archaeological work is undertaken in advance of, during and after pre-construction and construction activities. This programme of work could include an archaeological evaluation to assess the presence/absence and character of any archaeological assets on the site in order to inform the need for, and scope of any further investigation and recording of such assets. It would also provide an opportunity for the deployment of protective measures to ensure the long-term conservation of any highly significant archaeological assets that are required to remain in-situ.

13.7 Following mitigation, effects are assessed to be of negligible significance.

**Heritage**

14.0 Above ground heritage assets (in this case listed buildings, locally listed buildings and conservation areas) with a visual relationship to the site have been considered as part of the assessment. Assets comprise:-

1. Limehouse Cut Conservation Area;
2. Balfron Tower Conservation Area (including Balfron Tower (Grade II* Listed); Carradale House (Grade II Listed); Glenkerry House (Grade II Listed);
3. Langdon Park Conservation Area (including Church of St. Michael’s and All Angels, St. Leonard’s Road (Grade II Listed);
4. Bromley Hall, 43 Gillender Street (Grade II* Listed)
5. Dowgate Wharf, 22 Gillender Street (Grade II Listed)
6. Brunswick Road Fire Station, 25-37 Gillender Street (Grade II Listed)
7. Old Poplar Library, 45 Gillender Street (Grade II Listed)
The construction activity will have the potential for the most significant effects to occur to those listed buildings closest to the site; namely Bromley Hall, Brunswick Road Fire Station and Old Poplar Library. Taking into account the construction traffic to the site and visual and physical construction activities on the site, the nature of change to the settings of the three assets arising from the construction period will be low with a resultant minor adverse effect. This adverse effect would be for a temporary period only.

Given the existing use and visual impact of the site, the heritage assessment shows that the scheme would result in either neutral or beneficial effects to the setting of the heritage assets. The conclusions identify:

1. The settings of all heritage assets included within the assessment are either preserved or enhanced.
2. There are no effects to the significance of any heritage assets as a result of the proposed development.
3. No significant adverse environmental effects have been identified. The only significant environmental effect that has been identified is a substantial beneficial effect on the setting of Bromley School Hall (Grade II Listed).

Overall, it can be concluded that the development proposals will comply with statutory requirements and national and local planning policies to preserve or enhance the settings and significance of heritage assets.

Ecology

This chapter describes the likely effects of the proposed development in terms of ecology, biodiversity and protected species. There is no soft landscaping and no trees on site. However, there are mature street trees along the A12 trunk road. There is a stand of Japanese knotweed (*Fallopia japonica*) on the southern side of the site adjacent to Lochnagar Street. The proposed site is not designated for its wildlife value and is not covered wholly or partially by any statutory or non-statutory designations.

There are nine non-statutory sites within 1km of the site; the nearest is immediately west of the River Lea and Lee Bow Creek which is part of the River Thames and Tidal Tributaries Site of Metropolitan Importance and a Site of Importance for Nature Conservation (SINC).

There are records of protected species within 1km of the site, including bats and birds, and there is potential for nesting birds along the vertical wall and
potential for foraging bats along the River Lea. A bird and bat inspection concluded that there were no obvious signs of birds nesting within the river wall. One old bird nest was located in the trusses of the warehouse building. There were no obvious signs of bat roosts.

01.1 The proposed development will require the demolition of part of the existing river wall in order to integrate and link the proposed biodiversity enhancements with the existing river habitats. It is assumed that the breaking down of the wall will be undertaken during the initial demolition period. This activity is predicted to cause short-term minor negative effect on ecological receptors. During river wall works all debris would be carefully dismantled and removed from site to ensure there is no deposition into the riverbed.

01.2 During operation of the development, the creation of an enhanced wetland habitat of increased biodiversity to include emergent vegetation, native terrestrial planting and nesting boxes would substantially enhance this section of the River Lea.

01.3 On site, the installation of green and brown roofs together with native hedges, climbers, sensory planting and mature trees will create a landscape suitable to link into the adjacent River Lea SINC providing a substantial positive impact on the existing site.

Cumulative and Residual Effects

The table below reviews whether the inter-relationship between effects arising from the development may give rise to additional impacts not previously identified. It also considers whether effects may arise when the development is considered alongside other schemes or proposals in the surrounding area, the likelihood of the other developments proceeding and the ability or necessity of the applicant to mitigate any such effects for those other sites.

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Effects during Construction</th>
<th>Effects during Operation</th>
<th>Cumulative Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape and Visual Impacts</td>
<td>Temporary minor to major adverse</td>
<td>Minor to substantial beneficial</td>
<td>No change to proposed development effects</td>
</tr>
<tr>
<td>Ground Conditions and Contamination</td>
<td>Minor beneficial on groundwater and surface water</td>
<td>Minor beneficial</td>
<td>Beneficial impact</td>
</tr>
<tr>
<td>Water Environment</td>
<td>No significant impacts</td>
<td>Minor beneficial to drainage</td>
<td>None anticipated</td>
</tr>
<tr>
<td>Transport</td>
<td>Temporary minor adverse</td>
<td>Minor beneficial to pedestrian amenity and pedestrian delay</td>
<td>None anticipated</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>Temporary minor adverse</td>
<td>Minor adverse to nearby receptors</td>
<td>Minor adverse impacts on Bromley Hall School during construction</td>
</tr>
</tbody>
</table>

Table 16.1 Summary of Effects with Mitigation in Place
### Environmental Topic

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Effects during Construction</th>
<th>Effects during Operation</th>
<th>Cumulative Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>None identified</td>
<td>None identified</td>
<td>None anticipated</td>
</tr>
<tr>
<td>Socio-Economics</td>
<td>Moderate beneficial on construction employment</td>
<td>Minor to moderate beneficial</td>
<td>Beneficial impact</td>
</tr>
<tr>
<td>Daylight and Sunlight</td>
<td>No effects</td>
<td>No overall effects</td>
<td>None anticipated.</td>
</tr>
<tr>
<td>Micro-climate and Wind</td>
<td>Significant adverse impacts on high level areas for construction works</td>
<td>Minor to moderate adverse impacts on 24 receptor points</td>
<td>No change to proposed development effects</td>
</tr>
<tr>
<td>Archaeology</td>
<td>Minor adverse</td>
<td>No effects</td>
<td>None anticipated.</td>
</tr>
<tr>
<td>Heritage</td>
<td>Minor adverse on three nearby heritage assets</td>
<td>Minor to substantial beneficial at certain heritage assets</td>
<td>None anticipated.</td>
</tr>
<tr>
<td>Ecology</td>
<td>Substantial beneficial on the river corridor</td>
<td>Substantial beneficial on the river corridor</td>
<td>None anticipated directly. Only noise impacts.</td>
</tr>
</tbody>
</table>

16.2 A range of mitigation measures have been identified throughout the ES which are capable of being enforced through planning conditions or financial contributions in relation to the development.

16.3 Some minor negative residual effects remain in relation to specific sensitive receptors in relation to noise and vibration (during construction) and micro-climate and wind. However, these are considered to be minor in significance, and must be balanced against the significant beneficial environmental effects, particularly in relation to socio-economics.

16.4 The relationships between the effects identified on site do not give rise to a need for additional mitigation measures in relation to the development. There are minor cumulative effects arising from the development when considered with Bromley Hall School during construction, but no other developments in the surrounding area. Thus the overall conclusion is that the proposed development will not result in unacceptable adverse effects.

### Availability of the Environmental Statement

17.0 A paper or electronic (CD Rom) copy of the full ES can be obtained from:-

- Nathaniel Lichfield & Partners, 14 Regent’s Wharf, All Saints Street, London N1 9RL (Tel: +44(0)20 7837 4477)

17.2 Information on the planning application and the ES can also be viewed on the website of LBTH at:-


All comments on the ES (and planning application) should be issued to LBTH directly.
18.0

Scheme Plans and Elevations

Site Layout Plan