

Factory, Manchester

Preface to Environmental Impact Assessment

April 2018

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1 EIA Preface

Introduction

- 1.1. This Environmental Impact Assessment (EIA) Statement Preface (the 'EIA Preface') accompanies an application for Full Planning Permission in support of the proposed development of the Factory in St John's, Manchester.
- 1.2. The Factory scheme will comprise a new ultra-flexible performing arts space alongside a range of ancillary facilities including retail and bar uses, offices, back of house functions and training and educational facilities.
- 1.3. This application follows the grant of Planning Permission Ref. 114294/VO/2016 and Listed Building Consent Ref. 114370/LO/2016 in January 2017 (the 'Approved Scheme'), which provides for the demolition of the existing Starlight Theatre and surrounding structures to facilitate the delivery of the Factory and surrounding public realm, alongside associated works to the Grade II Listed Colonnaded Railway Viaduct.
- 1.4. This application is being submitted to secure a number of design development changes to the Approved Scheme, which reflect ongoing work by the specialist consultant team, contractors and Manchester International Festival, the confirmed operator of the Factory.
- 1.5. The revised scheme will facilitate the delivery of this key site, reduce programme risks and ensure that in the long term, development can be managed and maintained as a high quality arts and cultural facility as part of the St. John's Masterplan.
- 1.6. The Approved Scheme was supported by an EIA (the "October 2016 EIA"), the scope of which was informed by a scoping exercise and a formal EIA Scoping Opinion was issued by the Local Planning Authority (LPA) on 31 October 2016.
- 1.7. This EIA Preface briefly describes the proposed amendments and confirms that the conclusions of the October 2016 EIA remain unchanged as a result of the proposed changes. It should be read together with the planning documents, which explain the rationale for the proposed amendments and assess them against key planning considerations.

Planning Background

- 1.8. Planning Permission Ref. 114294/VO/2016 was granted for the Factory development on 16 January 2017. The description of development was as follows:

"Demolition of the Starlight theatre, existing workshop and other structures and perimeter wall, removal of four existing trees, and alterations to the Grade II Listed Colonnaded Railway Viaduct, in order to facilitate the development of a new flexible arts space to be used for a range of activities including theatre, music, dance, art, other performance-related events and conferences (Sui Generis) with ancillary facilities, including retail and bar uses, offices, administrative and back of house functions, training and educational facilities, servicing and access arrangements, highways works, creation of new public realm, cycle parking, provision of new plant and associated works."
- 1.9. Listed Building Consent Ref. 114370/LO/2016 was also granted on 16 January 2017. The description of development was as follows:

"Listed Building Consent application for alterations to the Grade II listed Colonnaded Railway Viaduct to accommodate structural elements, an entrance foyer and support facilities for a new flexible arts space."

Proposed Amendments

1.10. A summary of the proposed design adjustments to the Approved Scheme is provided below. Please refer to the submitted Design and Access Statement Addendum prepared by OMA for further details.

- Reduction in scale and seating capacity of the theatre (from 1,600 seated to 1,520 seated);
- Alteration in the design of the outer skin of the theatre to become more faceted;
- Redesign of the dedicated internal orchestra pit and increase in capacity (from 60 musicians to 80 musicians);
- Truck lifts to become external to the theatre;
- Glazing to the north and south elevations of the warehouse to be removed and replaced with articulation through a trapezoidal profile;
- Finessing of internal circulation arrangements and layout; and,
- Minor changes to the layout of Grade II Listed Colonnaded Viaduct, including a reduction in the number of penetrations to the arches to deliver the structural solution and slight re-location of the columns.

1.11. The descriptions of development and site red line boundary plan remain unchanged from the Approved Scheme.

1.12. The development parameters of the Approved Scheme and anticipated changes are summarised in the table below for comparison:

Table 1: Development Parameters

Development	Quantum – Approved Scheme	Quantum – Proposed Revised Scheme
Site area	Approx. 1.80 ha	Red line boundary unchanged.
Proposed development	Demolition of the Starlight theatre, existing workshop and other structures and perimeter wall, removal of four existing trees, and alterations to the Grade II Listed Colonnaded Railway Viaduct, in order to facilitate the development of a new flexible arts space to be used for a range of activities including theatre, music, dance, art, other performance-related events and conferences (Sui Generis) with ancillary facilities, including retail and bar uses, offices, administrative and back of house functions, training and educational facilities, servicing and access arrangements, highways works, creation of new public realm, cycle	Unchanged.

Development	Quantum – Approved Scheme	Quantum – Proposed Revised Scheme
	parking, provision of new plant and associated works.	
Proposed development footprint (ground floor)	3,528 sq.m.	3,115 sq.m.
Proposed development footprint (roof level)	5,479 sq.m.	5,652 sq.m.
Proposed height (approximate)	Height point - up to 38.6m A.G.L. (Back of House Towers).	Not expected to change.
Proposed commercial floorspace (approximate)	Up to 13,400 sq. m. (GIA)	13,750 sq.m (GIA).
Proposed capacity	Up to 7,300 in total. Theatre – 1,600 (seated or 2,300 (standing or seated)). Warehouse – 5,000.	Up to 7,090 in total. Theatre – 1,520 seated or 2,090 standing/seated. Warehouse – 5,000.
Parking provision	Five blue badge bays within the public realm. 40 undercover cycle parking spaces for visitors. 20 cycle spaces for staff.	Unchanged.

1.13. In all other respects, the development will remain unchanged from the Approved Scheme.

1.14. In accordance with the Approved Scheme, the design and construction of the development continues to address Manchester City Council and planning policy requirements with regard to sustainability, waste management, policing and security.

Pre-Application Consultation

1.15. As an outcome of pre-application discussions with the LPA between May 2017 and March 2018, it has been agreed that the planning amendments should be subject to a new application for Planning Permission, whilst the changes to the Listed Building Consent can be handled via an amendment under Section 19 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

1.16. As part of the design development process in advance of this revised application, the project team

has undertaken on-going engagement with key stakeholders and the outcome of this process is summarised within the Planning Statement Addendum prepared by Deloitte.

EIA Screening and Scoping Exercise for the Proposed Revised Scheme

- 1.17. As there is a requirement to submit a new application for Planning Permission to facilitate the design changes and the Approved Scheme was supported by a focused EIA, for the purposes of the EIA Regulations it is necessary to carry out an EIA Screening and Scoping Exercise to obtain confirmation from the LPA as to whether any of the information provided within the October 2016 EIA needs to be updated as a result of the proposed amendments.
- 1.18. An update would only be required in the case where the proposed amendments are considered to have a significant effect on the environment beyond the extent identified in the conclusions of the October 2016 EIA.
- 1.19. An EIA Scoping exercise, which was completed between July and October 2016 in respect of the Approved Scheme, confirmed that the proposals constituted EIA development, in accordance with the requirements of the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2011 (as amended in 2015).
- 1.20. The EIA Scoping Opinion dated 31 October 2016 confirmed the technical matters that should be considered as part of the EIA and these matters formed the basis of the October 2016 EIA, which was produced in line with the consultation comments received as part of that EIA Scoping process and included a comprehensive survey of the baseline conditions and impact assessment of the proposals:
 - Townscape and Visual Impact – Chris Burnett Associates.
 - Historic Environment – Heritage Architecture.
 - Air Quality – Hilson Moran.
 - Noise and Vibration – Arup.
 - Wind Microclimate – Urban Microclimate.
 - Traffic and Transport – Vectos.
 - Ground Conditions – Buro Happold.
 - Water Resources and Drainage – RoC.
- 1.21. A subsequent EIA Screening and Scoping Exercise was carried out, with a request submitted to the LPA on 6 October 2017 to obtain confirmation as to whether any of the information provided within the October 2016 EIA in respect of these disciplines would need to be updated as a result of the proposed amendments.
- 1.22. The EIA Screening and Scoping Exercise was completed in accordance with the new EIA Regulations, which came into force on 16 May 2017 ('the 2017 EIA Regulations').
- 1.23. The EIA Screening Report concluded that the proposed amendments would not result in any significant effects on the environment beyond the extent identified in the conclusions of the October 2016 EIA.
- 1.24. The LPA issued an EIA Screening Opinion on 5 January 2018 confirming that the amendments to the proposals are not significant and would not warrant any amendments to the October 2016 EIA. A copy of the 2018 EIA Screening Opinion is included as Appendix 2.3.

2017 EIA Regulations – Compliance of October 2016 EIA

1.25. The 2017 EIA Regulations introduced changes to the EIA Screening process, as well as the wording of Schedule 4, which sets out the mandatory information for inclusion in Environmental Statements (ES).

1.26. Consideration has therefore been given to the following requirements and factors:

- The requirement for use of competent experts in the preparation of ES.

The October 2016 EIA was co-ordinated by Deloitte, an 'EIA Quality Mark' registrant with the Institute of Environmental Management and Assessment (IEMA). Technical chapters were prepared by consultants with experience of EIA assessment in the relevant fields. Table 2 summarises the expertise of the authors of the technical chapters of the 2016 EIA.

Table 2: Environmental Statement Chapters and Authors

Chapter	Organisation	Experience
Townscape and Visual Impact	Chris Burnett Associates (CBA)	CBA was established in 1985 and was founded by Chris Burnett, a Chartered Member of the Landscape Institute with experience of townscape and visual impact assessment including preparation of Environmental Statement Chapters.
Historic Environment	Stephen Levrant: Heritage Architecture (SL:HA)	SL:HA is the continuation of a specialist practice originally founded in 1948, which provides planning and urban design services within the historic cultural environment. The assessment was carried out about by Kirsten McKnight, a Historic Building Consultant and member of the IHBC who has experience of undertaking heritage impact assessment including preparation of Environmental Statement chapters.
Air Quality	Hilson Moran	Hilson Moran was established in 1977 as an engineering consultancy, which provides services including sustainability and air quality advice. The assessment was carried out by Kathryn Woolley, a member of the IES and IAQM who has experience of undertaking air quality assessment including preparation of Environmental Statement chapters.
Noise and Vibration	Arup	Arup was founded in 1946 and is an independent firm of designers, engineers, consultants and technical specialists working across every aspect of today's built environment. Arup is a global leader in acoustic consulting. The assessment work was prepared by David Hiller, a Chartered Engineer and member of the Institute of Acoustics who has experience of undertaking heritage impact assessment including preparation of Environmental Statement chapters.
Wind Microclimate	Urban Microclimate	Urban Microclimate was founded in 2014 by Dr Graeme Flynn, one of the UK's most experienced microclimate specialists with more than 20 years' experience in aerodynamics and wind engineering. Urban Microclimate regularly contribute to the preparation of Environmental Statements in respect of wind microclimate.
Traffic and Transport	Vectos	Vectos is a transport planning, infrastructure design and flood risk, hydrology and sustainable drainage consultancy. The assessment work was prepared under the supervision of Gareth Davis, a transport planner with 25 years' experience and a member of the Chartered Institution of Highways and Transportation, with experience of

Chapter	Organisation	Experience
		undertaking transport impact assessment work including preparation of Environmental Statement chapters.
Ground Conditions	Buro Happold	BuroHappold Engineering is an international, integrated engineering consultancy operating in 23 locations worldwide, with over 50 partners and 1,800 employees including some of the world's leading consulting engineers.
Water Resources and Drainage	RoC	RoC Consulting is an experienced team of civil, structural, geotechnical and geo-environmental engineers. The assessment work was prepared by Andy Rain, a Chartered Civil Engineer with 17 years' experience, including in the preparation of flood risk assessment work for Environmental Impact Assessment.

- The requirement for developers to provide a description of any features and / or measures envisaged to avoid or prevent what otherwise might have been significant adverse effects on the environment through the EIA Screening process.

Chapters 6 to 13 of the October 2016 EIA include a description of the features and measures that will be incorporated to avoid or prevent significant adverse effects resulting from the proposed development and the residual impact following mitigation. These are summarised in Chapter 14 of the October 2016 EIA, which is re-submitted with the application. The proposed amendments to the scheme do not alter the mitigation measures proposed and the effects identified within the October 2016 EIA.

Information for inclusion in the Environmental Statement

- A description of the development, including in particular:
 - a description of the location of the development;
 - a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;
 - a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; and,
 - an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.

The information required is provided within the October 2016 EIA and is unchanged.
- A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

The information required is provided within Chapter 5 of the October 2016 EIA and is unchanged.
- A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

The information required is provided within Chapter 3 (Site and Development Description) and technical Chapters 6 to 13 of the October 2016 EIA and is unchanged.
- A description of the factors specified in Regulation 4(2) likely to be significantly affected by the development: population, **human health, biodiversity, land**, soil, water, air, **climate**, material assets, cultural heritage, including architectural and archaeological aspects, and landscape.

The items in bold are amended / additional factors introduced through the 2017 EIA Regulations and consideration has been given to these factors by reference to the guidance provided within the Screening Matrix provided at National Planning Practice Guidance Paragraph: 018 Reference ID: 4-018-20170728.

Human Health – *it is not considered that there will be any risk of major accidents or that the project will present a risk to population and human health during construction, operation or decommissioning of the proposed development, given the nature of the proposals as a flexible arts' space within a City Centre location on previously developed land. The construction period will be managed in accordance with a Construction Environment Management Plan to mitigate any potential risk of impact. Potential effects on human health have been considered in relation to noise, air quality, flood risk and water resources, and ground conditions through the relevant technical chapters of the October 2016 EIA. No significant adverse effects were identified. The proposed development is expected to have a beneficial impact in respect of mental and social health, as it will provide a new arts and cultural facility for Manchester and beyond, with a range of performance types and ticket options. The information required is therefore provided within the October 2016 EIA and is unchanged.*

Biodiversity – *the site was assessed for its ecological significance and biodiversity. An Ecological Assessment and Bat Survey was prepared by ERAP in October 2016 and submitted with the original planning application as a standalone technical document to identify any potential ecological features, protected species or habitats. The report confirmed that the site is of low ecological importance and that the proposals will have no adverse effect on statutory or non-statutory designated sites for nature conservation. No habitats within the site are Priority Habitat. No sign of protected species were detected within the site. As such, it is not considered that biodiversity would be significantly affected by the proposed development. Ecology and Nature conservation was scoped out of the October 2016 EIA and for the reasons outlined above Biodiversity is therefore scoped out as an EIA topic for the revised application.*

Land – *the site forms part of the St. John's Masterplan on the former ITV Quay Street estate in Manchester City Centre and is previously developed land. It is currently used on an ad hoc basis for filming and storage use. The area around the site is defined by a mix of leisure, commercial and residential uses; the St. John's Masterplan will introduce new leisure, commercial and residential floorspace, and a series of Planning Permissions have been granted between 2015 and 2017 to support the redevelopment of the wider site. It is not considered that the existing or proposed land uses would be significantly affected by the proposed development as the uses are considered to be compatible, City Centre uses. The October 2016 EIA considers the potential effects arising from the interaction of these land uses through technical assessments, for example in relation to noise and transport. The future St. John's development is considered as part of the October 2016 EIA as it is identified within the list of committed developments. The information required is therefore provided within the October 2016 EIA and is unchanged.*

Climate – *the site is not susceptible to earthquakes, subsidence, landslides, erosion or extreme / adverse climatic conditions that could cause the project to present environmental problems. The October 2016 EIA considered the likely significant effects of the proposed development in respect of wind microclimate and concluded that there would be a negligible effect with regard to pedestrian safety and a generally negligible to no worse than localised minor adverse effect with regard to pedestrian comfort. The conclusions are unchanged from the October 2016 EIA. Climate has therefore been scoped out as an EIA topic for this application.*

- A description of the likely significant effects of the development on the environment resulting from, inter alia:
 - (a) the construction and existence of the development, including, where relevant, demolition works;
 - (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;
 - (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;
 - (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);
 - (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;
 - (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; and,

(g) the technologies and the substances used.

As relevant to the proposed development, a description of the likely significant effects of the development on the environment resulting from these factors is provided within Chapters 6 to 13 of the October 2016 EIA, which remains unchanged as a result of the amended scheme.

Human health, biodiversity, land and climate are either considered within existing chapters of the October 2016 EIA or are not considered to give rise to significant effects.

In terms of the impact of the project on climate, the Approved Scheme was supported by an Energy Statement and Environmental Standards Statement, setting out the sustainability credentials of the proposed development and these are unchanged as a result of the revised design.

These documents demonstrate that the proposed development will achieve a 6% improvement over Part L 2013 compliance for carbon emissions reduction through the application of the "mean-lean-green" energy hierarchy. There is also potential for the proposed development to connect into the St. John's District Heat Network in the future. The proposed development will achieve a BREEAM rating of Very Good, with a strong aspiration to achieve BREEAM Excellent reflected in the BREEAM Pre-Assessment. In terms of adaptation to climate change, steps taken to increase the resilience of the proposed development include: setting the ground floor levels with 300mm freeboard above the 1 in 100 year plus climate change water level; implantation of flood resilient construction techniques; the thermal comfort assessment will review the likely impact of projected climate change scenarios using CIBSE weather data and the results will inform the building owner of possible future adaptation measures; and, a climate change risk assessment for the structure and fabric.

- A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

The information required is provided within technical Chapters 6 to 13 of the October 2016 EIA under the heading "Assessment Methodology and Significance Criteria" where relevant to the assessment and is unchanged as a result of the amendments to the proposed development.

- A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the proposed development to major accidents and / or disasters relevant to the project concerned.

It is not considered that the proposed development is vulnerable to major accidents or disasters given the nature of the proposals as a flexible arts' space within a City Centre location on previously developed land. Therefore no significant adverse effect on the environment are anticipated and the October 2016 EIA remains unchanged in this respect.

- A non-technical summary of the information provided.

The information required is provided within October 2016 EIA Non-Technical Summary and is unchanged.

- A reference list detailing the sources used for the descriptions and assessments included in the ES.

The information required is provided within technical Chapters 6 to 13 of the October 2016 EIA where relevant to the assessment, under the headings "Legislation and Policy Context", "Assessment Methodology and Significance Criteria" and / or "References".

Review of Matters Scoped Out of the October 2016 EIA

1.27. The topics of socio-economic, ecology and nature conservation, telecommunications, daylight and sunlight, archaeology, arboriculture and odour were scoped out of the October 2016 EIA and it is not considered that the proposed amendments to the scheme will trigger additional significant environmental effects that would warrant these matters being considered. These technical areas continue to be scoped out for the following reasons:

1.28. **Socio-economic** – The Proposed Development is for a new performance space and cultural venue, with associated retail, leisure, office, back of house, public realm and access arrangements, in accordance with adopted planning policy and proposed uses planned for the St. John's masterplan area. It is not considered that the proposed amendments will significantly alter the socio-economic

benefits of the scheme. The socio-economic effects have been considered in detail as part of the supporting planning justification for the Proposed Development.

- 1.29. **Ecology and Nature Conservation** – A standalone Ecological Survey and Assessment (including a Licensed Bat Survey) was prepared by ERAP and submitted in support of the original application, which assessed the site for its ecological features, protected species and habitats, including those relating to the River Irwell and identified mitigation measures to deal with any issues.
- 1.30. The report concluded that the original proposals would have no adverse effect on statutory or non-statutory designated sites for nature conservation and that there are no habitats within the site that are species-rich or examples of natural or semi-natural habitats.
- 1.31. ERAP, who produced the original survey report have reviewed the proposed amendments and current site circumstances and confirmed that there is no requirement to undertake any further survey or assessment work in respect of ecology.
- 1.32. It is not considered that the proposed amendments will affect the conclusions of the Ecological Survey and Assessment. The site is of low ecological importance and therefore it is considered that an ES chapter is not required.
- 1.33. **Telecommunications** – Tall buildings and structures could disrupt wireless services by physically blocking the signal or reflecting signals from the sides of the structure. However, in the United Kingdom, TV signals switched over to digital during 2012 and are less susceptible to interference.
- 1.34. As with the Approved Scheme, the proposed amendments to the proposals are not considered to significantly disrupt telecommunications infrastructure and therefore significant effects are not considered likely. On this basis, it is considered that the assessment of electronic interference can be scoped out of the EIA; however, the TV Reception Survey conducted for the original application, which identifies and mitigates potential impacts on telecommunications infrastructure, has been re-submitted in support of the revised application.
- 1.35. **Daylight / Sunlight** – As noted within the 2016 EIA Scoping Report and the EIA Scoping Opinion, the site has no existing nearby habitable rooms and therefore the impact of the Proposed Development will be negligible with regards to residential receptors. The updated list of cumulative developments included at Appendix 2.2 demonstrates that there have been no new planning applications submitted or permitted that will be affected by the Proposed Development other than those identified in the Daylight Sunlight Assessment submitted in support of the Approved Scheme. The assessment also considers the Proposed Development in relation to existing and proposed public space.
- 1.36. From a review of the revised proposals by Watts, the authors of the Sunlight Daylight Assessment, it is anticipated that access to daylight to the north elevation windows of the 1830s Warehouse located within the Museum of Science and Industry complex will be improved slightly against the previous scheme and otherwise, the conclusions have not changed. The original assessment has been re-submitted in support of the revised planning application.
- 1.37. As the revisions are expected to be neutral or improve the conclusions of the original report, it is therefore not considered that the scheme would have significant environmental effects in respect of Daylight and Sunlight and that this matter remains scoped out of the EIA.
- 1.38. **Archaeology** – a detailed desk-based assessment of the archaeological resource at the Site was produced to inform and support the planning application, which confirmed that the Site does not contain any Scheduled Monuments or Registered Parks and Gardens. 14 sites of potential below-ground interest were identified; of these, it is likely that only six have potential to survive as buried remains. In consultation with Greater Manchester Archaeological Advisory Service, Salford Archaeology have completed a series of trial trenches to establish the presence or absence of buried remains. An Evaluation Report dated July 2017 confirmed that no remains of significance were

discovered in two of the trial trenches. A hand-made brick wall was discovered in the third trial trench; however, it was surrounded by services and was located outside of the site boundary and therefore would not be affected by the proposals.

- 1.39. Considering the above, a dedicated ES chapter on the below-ground historic environment is not considered to be necessary as it has been established through further site investigation that the impacts will not be significant. Salford Archaeology have confirmed that the proposed amendments will not cause any further impact to the below-ground historic environment and, therefore, archaeology remains scoped out of the EIA.
- 1.40. **Arboriculture** – the Proposed Development involves the loss of four trees, none of which are considered to be of ecological significance, as identified by the tree survey submitted in support of the Approved Scheme. The survey concludes that two of the trees are of moderate quality and two are of low quality; the removal of each of these trees can be mitigated by replacement tree planting. As such, it is not considered that arboriculture will cause a significant environmental effect and it continues to be scoped out of the EIA.
- 1.41. **Odour** – the Proposed Development and associated land uses are not considered to present any significant issues with regard to odour; any potential odour impact would be controlled by the use of appropriate odour abatement and stacks in individual uses. As such, it is not considered that odour will cause a significant environmental effect and it continues to be scoped out of the EIA.
- 1.42. **Agricultural Circumstances** – the site is located entirely on brownfield land so there are no likely significant effects with respect to agriculture. This discipline therefore continues to be scoped out of the EIA.

Review of Matters Scoped in to the October 2016 EIA

- 1.43. In terms of disciplines that were included within the October 2016 EIA, the technical team who produced the assessment and chapters have reviewed the scope of the proposed amendments and the revised list of committed developments (at Appendix 2.2).
- 1.44. In respect of each technical chapter, the proposals have been tested to consider if they affect or modify the conclusion and if, as a result, that information remains robust in relation to the proposed revised scheme.
- 1.45. Each of the technical EIA consultants has confirmed that the conclusions of their approved ES Chapters are not materially changed as a result of the proposed amendments.

Construction Phasing

- 1.46. The outline construction programme for the Proposed Development remains as detailed in Chapter 4 of the October 2016 EIA and will span over a period of approximately three years. However, construction is now scheduled to commence in June 2018 with initial enabling works.
- 1.47. Please refer to the the supporting Construction Management Plan prepared by Laing O'Rourke, which has been updated to reflect stage 3 design developments, and is submitted in support of the revised application.

Townscape and Visual Impact

- 1.48. The Townscape and Visual Impact Assessment prepared by Chris Burnett Associates in support of the Approved Scheme confirmed that it was relatively small in scale, particularly in terms of height, and had a very limited influence zone. It was concluded that the impact of the Approved Scheme on townscape was minor beneficial to negligible but with a few selected viewpoints closer to the Site where the magnitude of impact is higher and effects become moderate.

- 1.49. Since the main field assessment was undertaken in June 2016, the change in surrounding context has been reflected through updated baseline photography in relation to the completion of the Ordsall Chord and the ongoing development of Middlewood Locks and No. 1 Spinningfields, as well as an update to heritage view no. 5 (as detailed below in respect of Historic Environment), to reflect the changes to the external appearance of the theatre and warehouse as visible within these views.
- 1.50. The updated baseline photography viewpoints are presented in Appendix 6.3.
- 1.51. Heritage View no. 5 is now dominated by the Ordsall Chord railway bridge, and as a result, the Proposed Development now becomes a background component in this view. The Proposed Development will completely fill the remaining void between the Liverpool Road buildings and associated bridge, and the Ordsall Chord bridge. As such, the impact magnitude is now considered to be **negligible** for townscape character in this instance and similarly for visual receptors.
- 1.52. Viewpoint No. 13 (Water Street) has also been influenced by development of the Ordsall Chord and the recently completed No. 1 Spinningfields on the horizon, to which the later will be eclipsed by the Proposed Development upon completion. The impact of the Proposed Development in this view has not changed.
- 1.53. Viewpoint no. 14 (Oldfield Road) is now at the epicentre of the Middlewood Locks development and is symptomatic of the speed in which Salford and Manchester are changing. Wilburn Street and Water Street towers are now part of the view. The Middlewood Locks development now completely obscures view of the Proposed Development, rendering a judgement of **no impact** from this viewpoint.
- 1.54. In respect of viewpoint no. 10 (Trinity Way), the Proposed Development will now be completely eclipsed by the Slate Yard New Bailey development that now rises above the railway from this intersection between Trinity Way and Chapel Street. Receptor sensitivity is low in both townscape and visual receptor terms and impact magnitude is now negligible, resulting in a significance of effects value of **no impact**.
- 1.55. In terms of cumulative effects with other committed developments (as listed in Appendix 2.2), the revised scheme results in a change from a negligible impact to no impact in Viewpoint 10 and Viewpoint 14. All other cumulative impacts remain as presented in the October 2016 EIA.

Historic Built Environment

- 1.56. Heritage Architecture has confirmed that neither the assessment, nor the conclusions, have changed in any material way as a result of the amendments. The amendments to the external appearance are not considered to affect the assessment of impact on the setting of identified heritage assets.
- 1.57. The change in surrounding context has been reflected as outlined above in respect of Townscape and Visual Impact through updated baseline photography (Appendix 6.3), which included the impact of the Ordsall Chord development on Heritage View no. 5.
- 1.58. As agreed with the Local Planning Authority and Historic England, revised AVR images have been prepared from two of the previously agreed heritage viewpoints to reflect the proposed external changes to scheme. These viewpoints were selected as the proposed amendments will be clearly visible within them.

- 1.59. Heritage Viewpoint 2 - Museum of Science and Industry Lower Yard, looking north-west to the site.



- 1.60. Heritage Viewpoint 6 - north side of Water Street, looking south-west to the site.



- 1.61. From the six other agreed heritage viewpoints, the Proposed Development is either not visible (viewpoint 3), or the Proposed Development is only glimpsed within the view and the changes to the elevations will not be read differently (viewpoints 1, 4, 5 and 7), or the view incorporates only elements of the scheme that will not change externally (viewpoint 8).

- 1.62. The updated baseline photography and rendered views do not affect or modify the conclusions of the previously approved ES chapter.

Air Quality

- 1.63. An Air Quality Assessment was carried out by Hilson Moran in support of the Approved Scheme, which considered the impact of the Proposed Development during demolition, construction and operation on local air quality and its subsequent effect on sensitive locations, such as residential properties and educational facilities.
- 1.64. Vectos have confirmed that the traffic flows as set out within the October 2016 EIA have not changed as a result of the proposed amendments.
- 1.65. Hilson Moran have reviewed the proposed changes to the scheme and have confirmed that the conclusions of the approved Air Quality chapter remain the same. The design adjustments are therefore not considered to affect or modify the conclusions of the previously approved ES chapter.

Noise and Vibration

- 1.66. An assessment of Noise and Vibration was carried out by Arup in support of the Approved Scheme, which considered the likely significant effects arising from the Proposed Development during construction and operation phases.
- 1.67. The approved ES chapter noted that there would be no significant effect of noise or vibration on residential buildings, including hotels in the vicinity of the Proposed Development. Local mitigation of the temporary impacts of construction noise and vibration will be required to minimise residential effects at the Museum of Science and Industry.
- 1.68. The chapter concluded noise from events within the Proposed Development will be controlled by the design of the building envelope. Events held outdoors within the public realm would need to be managed to control noise impacts at the proposed new residential buildings.
- 1.69. Arup have confirmed that it is considered that the reduced capacity of the theatre would potentially lead to slightly lower impacts due to traffic and pedestrian access. No additional noise effects are expected to be likely as a result of the amended scheme.
- 1.70. Level Acoustics is now appointed to advise on the project. Level has reviewed the assessment completed by Arup within the context of the proposed amendments and the updated commitment developments. Level has confirmed that the conclusions presented in the Arup ES Chapter do not change as a result of the proposed amendments.
- 1.71. An updated Appendix 9.4 Event Noise Emission Calculation is included with this submission, to reflect the updated modelling exercise completed by Level.

Wind Microclimate

- 1.72. A wind microclimate assessment was carried out in support of the Approved Scheme by Urban Microclimate, which confirmed that the Proposed Development was expected to have a generally negligible, to no worse than localised minor adverse effect with respect to pedestrian comfort.
- 1.73. Urban Microclimate has confirmed that the proposed amendments have potential for slight, localised, effects on pedestrian level winds. However, these changes are not expected to materially affect the suitability of conditions for existing and proposed pedestrian activities in and around the Site.
- 1.74. The conclusion of the October 2016 EIA are therefore considered to remain valid.

Traffic and Transport

- 1.75. A Transport Assessment was undertaken by Vectos in support of the Approved Scheme, which considered the environmental implications of additional road traffic arising from the Proposed Development and the wider St John's Masterplan area.
- 1.76. A wide range of mitigation measures are proposed that will reduce the number of journeys by private car, reduce traffic speeds and enhance road safety. These form part of a Sustainable Travel Plan Strategy covering pedestrian, cycle, public transport and sustainable car use. These measures combine to mitigate a Moderate-Minor Adverse impact in the case of local residents to a Minor Adverse Impact. There is a Minor Negligible impact for Pedestrians and Cyclists.
- 1.77. The assessment concluded that the environmental impact from construction traffic to nearby properties was expected to be Minor Adverse when mitigation measures are implemented. Pedestrians and cyclists would experience a Minor – Negligible impact during construction.
- 1.78. Vectos have confirmed that the Proposed Development has very limited impact on the Peak hour flows and as such the Saturn model flows used for the previous assessment remain valid. Whilst revised traffic modelling data has been produced by Transport for Greater Manchester in respect of the wider St. John's masterplan, it is considered that because of the nature and timing of the trips to the Factory, the data originally produced through the Saturn model remains robust.
- 1.79. As a result of the proposed changes, it is expected that the event forecasts will reduce slightly; the previous forecast based on an event of 6,850 persons is therefore still considered to be robust for the basis of the transport assessment.
- 1.80. On this basis, it is not considered that the proposed changes to the scheme will alter the conclusions of the October 2016 EIA and the ES Chapter and its conclusions remain valid.

Ground Conditions

- 1.81. An assessment of ground conditions impact was informed by a desk study by ESG, which included a review of site history and limited historical ground investigation. The assessment concluded that with all mitigation measures in place, no significant impacts to human health or environmental receptors are expected to arise from the ground conditions on site.
- 1.82. Buro Happold has completed further site investigation in the period since the Planning Permission Reference 114294/VO/2016 was granted (ESG 'The Factory Site, Factual Report on Additional Ground Investigation' dated May 2017, and Socotec Factual Letter Report 'Factual Letter Report for Additional Works at the Factory, Manchester' dated March 2018). The results of this assessment are included at Appendix 12.10 and 12.11, respectively.
- 1.83. Site specific ground investigations, including 14 No. soil chemical tests have been undertaken. Out of the 14 No. samples tested, no exceedances were recorded above the relevant commercial assessment thresholds. Based on the site history, it is not considered that the ground conditions pose any significant risks to future users of the Proposed Development, providing suitable mitigation measures are undertaken and any 'hot spots' which may be identified during construction works are removed. This may include provision of appropriate 'clean cover' in proposed soft landscaping areas.
- 1.84. Impacts associated with ground gas such as methane or carbon dioxide, if any, will be mitigated by the provision of appropriate gas protection measures in accordance with best practice guidelines. However, it should be noted that the data obtained from the ground investigation monitoring classifies the site ground gas regime to be Characteristic Situation 1 (CS1). Based on the data available and the assessment undertaken in accordance with current industry guidance, no special ground gas protection measures are currently envisaged.

- 1.85. Health impacts associated with the inhalation of ground gases, if any, will be mitigated by the provision of appropriate gas protection measures in accordance with best practice guidelines. However, it should be noted that the data obtained from the ground investigation monitoring classifies the site ground gas regime to be Characteristic Situation 1 (CS1). Based on the data available and the assessment undertaken in accordance with current industry guidance, no special ground gas protection measures are currently envisaged.
- 1.86. Buro Happold have confirmed that the baseline conditions, receptors, construction philosophy and mitigation measures remain unchanged. As such, there are no unresolved effects that need to be considered further within the EIA.
- 1.87. Buro Happold have confirmed that it is not considered that the design adjustments affect or modify the conclusions of the approved ES Chapter.

Water Resources, Flood Risk and Drainage

- 1.88. The Water Resources, Flood Risk and Drainage chapter and appended Flood Risk Assessment prepared by RoC Consulting concluded that the Proposed Development would have some impact on the surrounding water environment. The mitigation measures set out within the body of the chapter allow the various impacts to be addressed as far as practicable. In some cases, residual risk remains; however, the mitigation measures attempt to ensure that the likelihood of such an event occurring is low and the consequences will be adequately managed to limit any impact.
- 1.89. RoC have confirmed that the changes to the scheme are not anticipated to affect the site location and hence regional flood risk factors. All recommended mitigation measures remain unchanged. As such, it is considered that the design adjustments will not affect or modify the conclusions of the previously approved Flood Risk Assessment and ES Chapter.

Cumulative Impact

- 1.90. A review of the committed developments assessed as part of the October 2016 EIA has been completed; this confirmed that the following additional schemes need to be considered:
 - Water Street Masterplan and Strategic Regeneration Framework (endorsed by Manchester City Council (January 2017; the potential cumulative effects of this development has been considered qualitatively in the review of the revised scheme).
 - Big Yellow Storage building, Water Street (approved September 2017).
 - Hardman Square Pavilion (amended scheme, submitted September 2017).
 - Oast House Extension (redesign of public realm, approved October 2017).
 - Temporary marketing suite associated with Middlewood Locks (approved September 2017).
- 1.91. The status of some schemes identified as committed developments has changed, in terms of schemes progressing on site, Planning Permission having been granted or applications becoming live.
- 1.92. The updated list of committed developments is included at Appendix 2.2 of the October 2016 ES.
- 1.93. It is not considered that the changes to the committed developments would have a material effect on the conclusions of October 2016 EIA.

Conclusion

- 1.94. In view of the above information, it can be concluded that there will be no significant effects on the environment, beyond those already identified and mitigated for within the October 2016 EIA, as a result of the proposed amendments to the Approved Scheme.



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