Merseyside Environmental Advisory Service 1<sup>st</sup> Floor Merton House, Stanley Road Bootle, Merseyside, L20 3DL Director: Alan Jemmett, PhD, MBA

Enquiries: 0151 934 4951

Contact:Lucy AtkinsonDirect Dial:0151 934 4953Email:Lucy.atkinson@eas.sefton.gov.uk

# **DEVELOPMENT MANAGEMENT ADVICE**

To: Peter Jones Organisation: Development Management Liverpool City Council

From: Lucy Atkinson

Your Ref: PreApp File Ref: LI17-027 W/P Ref: Date: 23<sup>rd</sup> June 2017

### Proposed EFC Stadium, Bramley Moore Dock, Liverpool EIA Scoping Opinion

- 1. Thank you for consulting Merseyside Environmental Advisory Service in respect of this planning application. The proposals comprises involve infilling/partial infilling of BMD, demolition of non-listed structures, partial demolition of listed structures; construction of 60,000 seater stadium with retail, museum, ancillary offices, betting shop, associated facilities, concourse, 900 space car park, footways and public realm.
- 2. Having reviewed the application and supporting documentation, our advice is set out below in two parts.
  - Part One deals with issues of regulatory compliance, action required prior to determination and matters to be dealt with through <u>planning conditions</u>. Advice is only included here where action is required or where a positive statement of compliance is necessary for statutory purposes.
  - Part Two sets out guidance to facilitate the implementation of Part One advice and informative notes.

In this case Part One comprises paragraphs 3 to 42, while Part Two comprises paragraphs 43 and 44.

#### Part One

3. The applicant has submitted an EIA Scoping Report *(CBRE May 2017)* to inform the request and identify the EIA process and identify areas that will be scoped in and scoped out. The scoping opinion has been submitted under the 2011 Regulations



but in the spirit of the 2017 Regulations will consider climate change, biodiversity, human health, major accidents and disasters. This is welcomed.

The EIA Scoping Report discusses the EIA methodology, phasing, the structure of the EIA, and the topics that will be scoped in and scoped out, as well as methods for assessing the impacts. The ES will also consider cumulative impacts with other significant developments and in-combination effects between different topics within the EIA. The report also refers to provision of qualifications and expertise of authors of the individual topic specialists.

- 4. The topic areas that will be scoped in are: transportation, air quality, noise, water environment, biodiversity, ground conditions, archaeology, heritage, townscape and visual amenity and socio-economics. In addition to this human health impacts will be considered under relevant chapters such as socioeconomics, air quality and noise and vibration. Climate change will also be considered under relevant chapters and will include vulnerability of baseline assessments to projected changes, vulnerability of proposed changes and the effect of proposed development within the context of climate change. The ES will also consider major accidents/disasters.
- 5. Also, the ES will consider the impacts on land particularly the change from a waterbody to an infilled site. I advise that consideration is also given to the impacts on the Port of Liverpool with respect to loss of this operational dock, and the displacement of existing businesses. For example, the dock is a minerals wharf for marine-won sand. NPPF paragraph 143 (bullet point 4) states that mineral wharves are safeguarded from development, and a recent aggregate assessment report for the NW (*North West Marine Aggregates Study, The Crown Estate November 2016*) identified the increasing importance of safeguarding wharfage for marine won aggregates in response to decreasing supply and minerals planning consents from land-won sources.
- 6. It is proposed that Solid Waste Management should be scoped down in the ES i.e. the scoping report indicates that scoped down technical topics are considered unlikely to exhibit significant environmental effects and does not merit detailed consideration in the main body of the ES document. I do not agree with this position as significant volumes of waste are likely to be generated during both the construction and operational phases of the development. This is discussed in more detail later in this memo.
- 7. I have not considered the proposed methodologies for each chapter as this will be role of individual specialists.
- 8. In the main, I consider the submitted EIA Scoping Report satisfactorily addresses the issues that should be covered by the Environmental Statement and an appropriate basis for undertaking the EIA, subject to the following issues on specific topics/ES chapters being taken into account.

#### <u>Archaeology</u>



- 9. The proposed development lies within the World Heritage Site and its buffer zone. There are also a number of other heritage assets, both designated and nondesignated, that lie within the proposed development and its redline boundary. Recent archaeological work at the adjacent Wellington Dock encountered the buried remains of a number of former Dock-related structures, and it would not be unreasonable to expect a similar state of affairs within the current proposals.
- 10. The proposal (section 6.10 & 6.11 of the CBRE Scoping Report), to include Chapters in the Environmental Statement on both Archaeology & Heritage, as well as the appointment of Oxford Archaeology North (OAN) to undertake the Archaeology desk-based assessment and walkover in accordance with Cl*f*A standards and guidance, is welcomed, as is the statement on p.6.77 that:

"The study will identify and characterise the significance of the below ground archaeological assets identified. In accordance with the extent of that significance, it will identify strategies to record, preserve or manage those archaeological assets, and any necessity for further evaluation, where their character or value is not sufficiently defined. The assessment will be informed by WHS, national and local planning policy relating to the historic environment, and appropriate curatorial bodies will be consulted regarding mitigation strategy."

11. MEAS can confirm that this approach is considered to be an appropriate means of quantifying the archaeological resource, assessing its significance and informing any mitigation required for the proposed development.

### Ecology and Habitats Regulations

12. In support of the EIA Scoping Opinion request, the applicant has submitted an EIA Scoping Report (*CBRE, 15 May 2017, 150517\_EFCStadium\_Scoping\_Final.docx, F1*) and a letter from the applicant's ecological consultant which sets out the proposed scope of the ecological surveys and assessments which will be undertaken to inform the Ecological Impact Assessment (*WYG, 10 May 2017, A100795*). I have reviewed these documents and make the following comments.

# Desktop study

13. The proposed desktop study is to include consultation with the local biological record centre (Merseyside BioBank) which is welcome. The EIA Scoping Report refers to the use of aquatic ecology data from the NBN Gateway (now known as NBN Atlas). However, in accordance with the NBN Terms and Conditions, permission from the data provider will be required to use this information otherwise the data could not be relied upon during the determination of the planning application.

#### Extended Phase 1 Habitat Survey

14. I understand that the Extended Phase 1 Habitat Survey has already been undertaken and that no invasive plant species were recorded within the site.

#### Breeding birds

15. The breeding bird survey is proposed to comprise a single visit in April 2017, two visits in May 2017 and a single visit in June 2017. Considering the scale of the



proposals and potential impacts, weekly visits during the April to June period would have been preferable.

- 15. There was a common tern nesting site is present at the adjacent Sandon half-tide dock in 2015 which will need to be considered as part of a breeding bird survey. The Liverpool Bay proposed SPA extension, which lies directly adjacent to the application site, includes foraging areas important for common tern, from the Mersey Narrows and North Wirral Foreshore SPA, during their breeding season.
- 17. In addition to this, kittiwakes are known to breed on the outside of the Bramley Moore Dock wall and impacts upon this species as a result of the proposed development will need to be assessed. However, it will not be possible to view them for survey from the landward side. One option to enable a survey is to board the Mersey ferry, which runs adjacent to the breeding site, and take video footage of them, alternatively a small boat or drone could be used.

Bats

- 18. I understand that bat roost potential surveys of the structures on the site, including the boundary wall, have already been undertaken. Due to timescales, I advise that the applicant submits the bat roost potential survey report to the Council as soon as possible, to ensure that the recommendations made by the applicant's ecological consultant with regard to further survey requirements are acceptable. The survey report should include photographs and detailed descriptions of the buildings and structures which have been assessed.
- 19. The results of the aquatic surveys (see below) should be used to determine the requirement for bat activity surveys to be undertaken. If large aquatic invertebrate population, for example, flies or emerging larvae, are found to be present, bat activity surveys will be warranted.

#### Passage and wintering birds

- 20. Wintering bird surveys have been undertaken on the site from November 2016 to February 2017 inclusive, using two vantage points (VP1 and VP2). According to the applicant's ecological consultant, VP1 allowed for monthly bird counts of the site, whereas VP2 covered a wider area encompassing half way across the Mersey and adjacent docks.
- 21. The winter surveys have not included autumn passage and, from the vantage point locations which have been provided, it does not appear that the entire zone of influence of the proposed development has been included in the wintering bird surveys undertaken to date.
- 22. The applicant must ensure that further wintering bird surveys are undertaken to include autumn passage (commencing in September) and the entire zone of influence of the proposed development. A minimum of 36 hours vantage point survey will be required (in accordance with the current best practice for vantage point surveys (*currently Recommended Bird Survey Methods to Inform Impact Assessment of Onshore Wind Farms, Scottish Natural Heritage, 2014*).



#### Aquatic Surveys

- 23. An integrated aquatic survey sampling methodology is needed to (i) characterize the aquatic communities / habitats present (ii) enable impact assessment to be completed and (iii) advise on any avoidance measures, mitigation and compensation needed. A key point will be to identify potential prey items, such as fish species, for any of the designation features of the Mersey Estuary and Liverpool Bay Natura 2000 sites e.g. cormorant / grebe, which form part of the overwintering water bird assemblage. The ROV survey will be undertaken of dock walls to provide information on the benthic communities present within the dock. The video must be of a good quality to ensure that benthic communities and any invasive species can be adequately identified and be recorded at different water depths. The applicant should also give consideration to undertaking scrapes of the dock wall to provide further information on the species present if the video quality is not sufficient as can occur within docks.
- 24. I advise that a biosecurity plan will be required in support of the application which describes how the spread of invasive non-native marine species will be prevented during the works. Grab samples of fauna within the dock sediment are also proposed. The grabs should be of a sufficient size and number to ensure that sampling effort is robust.
- 25. Sediment samples taken at the same time as the grab samples are also to be analysed for chemical contamination. This analysis must be undertaken at an accredited laboratory. The physical and chemical composition of the dock sediments to be removed and/or disturbed by the proposed development will need to be known to inform impact assessment and mitigation, re-use potential and disposal options e.g. environmental permit requirements.
- 26. The applicant's ecological consultant considers that sufficient data on water quality and fish will be available from existing sources. However, the sources and age of these data have not been specified and will be required within the Environmental Statement. They should be no older than 3 years.

#### Ecological Impact Assessment (EcIA)

27. The proposed EcIA should follow the CIEEM (2010 and 2016) guidelines. As part of the EcIA, the applicant's ecological consultant proposes undertaking a cumulative impact assessment which is based upon details of schemes obtained from the Local Authority. However, in addition to the Local Planning Authority, details of schemes should also be obtained from other authorities, including Wirral and Sefton Councils and the Marine Maritime Organisation.

#### Habitats Regulations Assessment (HRA)

28. The applicant's ecological consultant proposes to undertake a shadow HRA Stage 1 Screening Report in order to determine whether the scheme is likely to impact upon features of the Mersey Estuary SPA.



- 29. Rather than screening, this should be referred to as an Assessment of Likely Significant Effects (ALSE) and it will be used by the Council to determine whether the scheme is likely to impact upon European sites. In addition to the Mersey Estuary SPA (and Ramsar sites), the ALSE will also need to include, but not be limited to, the following European sites:
  - the Liverpool Bay proposed SPA extension (which lies immediately adjacent to the application site boundary);
  - Mersey Narrows and North Wirral Foreshore SPA and Ramsar sites;
  - Ribble and Alt Estuaries SPA and Ramsar sites; and
  - The Dee Estuary SPA and Ramsar sites.

# Other issues

- 30. I advise that an integrated approach and liaison between the applicant's environmental specialists will be required to ensure that any archaeological or intrusive site investigation works do not have harmful ecological impacts.
- 31. Air quality, noise and lighting assessments are proposed to inform the EIA. These assessments should consider impacts upon statutory designated nature conservation sites.
- 32. The application site lies adjacent to the Mersey Estuary Nature Improvement Area (NIA), although the site only provides very limited opportunities for the creation of additional habitat. Any planting of trees on the site should form part of an integrated green infrastructure approach which includes other options for enhancing the site's ecological value, such as the creation of green walls / roof areas. There may be potential to use connections along the canal to improve accessibility (links into Ecological Network, emerging LCR SUD and The Mersey Forest GI Strategy and Nature Connected GI prospectus). Widespread planting of trees is however not appropriate for the site. This could be realized through a Green Infrastructure Plan for the proposal.

# <u>Waste</u>

33. As raised in paragraph 8 above, I do not agree with the proposed position to scope down waste as significant volumes of waste are likely to be generated during both the construction and operational phases of the development. Generation of waste during both construction and operation may have impacts on air quality, noise, management of ground conditions, water environment and visual amenity. An assessment of waste impacts is proposed is intended to focus on the ability of the existing waste infrastructure capacity to cope with this development. Whilst it is appreciated that many of the waste impacts can be dealt with through other ES chapters, there are some issues which have not been considered and which do merit further consideration as part of the proposed development and its impact assessment. I advise that a Sustainable Resource Management Plan or similar approach, which considers sustainable resource matters, beyond WLP policy, such as minerals and energy, may be appropriate.



- 34. Given the location of the proposed stadium, and the windiness of the site, match day litter and litter from events is an issue which does need to be assessed. This has not been considered as part of the scoped down assessment. For example, generation of litter on-site and along the main access routes to the proposed stadium could have pollution and amenity impacts on the water environment including the River Mersey, docks and canal systems. Effects on the designated sites and biodiversity of the river, as well as a visual impact for local residents, businesses and visitors will need to be assessed within the ES and appropriate avoidance and mitigation measures proposed. Consideration should also be given to the provision of information to users of the stadium / venue (litter management policy / code) to help avoid litter generation.
- 35. In addition, consideration should be given to food waste generated during the operation of the new stadium (e.g. match days, and through day to day operation of the club) with a view to managing this as far up the waste hierarchy as possible, perhaps through an on-site, small-scale AD or CHP facility that could also make a positive contribution to meeting the energy needs of the proposed stadium and reduce carbon emissions.
- 36. Further, it is proposed that BMD will be infilled with marine-won sand, NPPF paragraph 143 bullet point 2 encourages the substitution of secondary and recycled aggregates over primary minerals. Construction, demolition and excavation waste (CDEW) is how many of the Liverpool docks have been infilled in the past, but would obviously be subject to an Environmental Permit and the necessary controls to avoid pollution. Therefore I will advise that infilling with CDEW and not just relying on virgin marine won sand would be appropriate subject to supply and engineering considerations.
- 37. The 'Relevant Planning Policy section' should also refer to the Merseyside and Halton Joint Waste Local Plan. Policies WM8 and WM9 apply.

#### **Minerals**

- 38. As referred to in paragraph 7 above, consideration needs to be given to the displacement of existing businesses, and the impacts the proposal will have on land, and in this case the Port of Liverpool operations in terms of loss of the dock. Specifically, the loss of a minerals wharf for marine-won sand which should be safeguarded under NPPF paragraph 143.
- 39. Merseyside has very limited minerals resources with only two active quarries and two active wharves for marine-won sand and gravel. Protecting these primary resources for the highest end uses would be preferable, and as referred to in paragraph 29 above, consideration should be given to using secondary or recycled aggregates for the infilling of the dock.

#### Low Carbon/Renewable Energy

40. The EIA Scoping report does not discuss inclusion of low carbon or renewable energy for the proposed stadium. This is a significant omission, given the scale of



the proposed development. Consideration should be given to this in ES and stadium design as a means of reducing the GHG emissions and climate change impacts arising from the proposed development. This could be linked to the sustainable resource management plan referred to in paragraph 33 above. There are many examples around the world of sports stadiums that are reducing their grid energy requirements and energy consumption through a range of measures including energy conservation and efficiency measures and; installation of renewable technologies e.g. sensitively located and designed on-building solar photovoltaics. Whilst all proposed renewable energy technologies would need to be assessed, installation of wind turbines in this location is likely to raise impact pathways with bird receptors and some designs may not be appropriate. The following links provide useful examples:

http://www.power-technology.com/features/featuregreen-clean-mean---the-worldsmost-environmentally-friendly-sports-stadiums-4278520/

http://www.energysavingtrust.org.uk/blog/sports-stadiums-seek-score-highsustainability

### Construction Environment Management Plan

- 41. The applicant should also prepare a Construction Environmental Management Plan (CEMP) document to manage and mitigate the main environmental effects during the construction phases of the proposed development. The CEMP should address and propose measures to minimise the main construction effects of the development and, amongst other things, should include details of ecological mitigation, construction and demolition waste management, pollution prevention and soil resource management. The CEMP would normally be expected to include the agreed method statements to mitigate or avoid adverse environmental impacts.
- 42. The CEMP should be compiled in a coherent and integrated document and should be accessible to site managers, all contractors and sub-contractors working on site as a simple point of reference for site environmental management systems and procedures.

#### Part Two

- 43. MEAS can offer advice on the relevant archives and other sources that should be consulted.
- 44. Guidance on the Merseyside and Halton Joint Waste Local Plan can be found here: <u>http://meas.org.uk/media/4981/ADP-001-WasteLocalPlan Final LoRes opt.pdf</u>

I would be pleased to discuss these issues further and to provide additional information in respect of any of the matters raised.

Lucy Atkinson Waste Appraisal and Support Services Team Leader

