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# ARUP

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Dear Chris

## **HULL 2017 - ZEPHYR FEE PROPOSAL FOR FEASIBILITY STUDY – REV B**

Further to our meeting with yourselves and Siemens on the 4<sup>th</sup> May and our subsequent correspondence, we are pleased to submit an updated proposal to provide you with a Feasibility Study for the “Zephyr” installation.

The meeting with Siemens was very helpful to understand their offer and the level of specialist support they are willing to provide. The offer from Siemens to assist with the specialist transport input and route choice allows us to reduce our scope considerably whilst still being able to prepare a Feasibility Study to a similar level of detail. We have therefore updated this proposal to reflect Siemens’ offer.

### **Appreciation of Task**

The key questions that the Feasibility Study is expected to answer are:

- Is it possible to transport a 75m wind turbine blade from Alexandra Dock such that it can be situated in a city centre location (to be agreed) for 12 weeks?
- Where are the viable locations in the city centre?
- What arrangements/consents will be required?
- How can the blade be displayed (including alignment, maintenance, security and H&S)?
- What scale of costs are likely to be incurred?
- What would be the most effective management/governance structure to deliver this installation?
- How will it be disposed/removed?

Arup will be expected to collaborate with Hull UK City of Culture 2017, Siemens, Nayan Kulkarni and Hull City Council (including the Public Realm team) in order to address the questions posed above.

Arup will rely on the services of ALE (Siemens’ specialist haulier) to provide specialist advice relating to the transport of abnormal loads in order to identify route choice, impact on infrastructure, escorting and permit requirements, structural constraints and the type of vehicle to be able to transport the blade. Siemens have offered to transport the blade to a

location (to be agreed) in Hull City Centre and therefore are also expected to apply for permits/licences relating to the blade's transportation.

Siemens have stated that the blade would be a loan and that Hull UK City of Culture 2017 will be liable whilst the blade is operational in the city centre. As part of the study, a Risk Register will be prepared to identify risks and measures to mitigate/minimise them.

The Feasibility Study will provide a cost estimate of the overall works in considering the preparation, installation, transport, operation and removal for the Zephyr installation. A programme will also be provided.

Following our meeting with Siemens, it is clear that (subject to senior management approval) their offer is:

- To supply a wind turbine blade.
- To transport the blade by sea from Denmark.
- To scope out land transport routes from King George's Dock and to scope viable sites (from a transport perspective) in the City Centre.
- To transport the blade by road from King George's dock to the chosen site, including all necessary permissions.
- To provide the supports for the blade.
- To lift the blade from its transport onto the supports.
- To remove the blade at the end of the exhibition period and return it to King George's Dock or another site of Siemen's choosing.

Hull UK City of Culture 2017 to arrange of the following:

- Alteration, removal and reinstallation of street furniture, lighting columns, etc. to provide clearance along route during transport.
- Plinth/supporting structure.
- Security.
- Maintenance.
- Lighting.
- Risk Register.
- Access for Siemens to collect blade at the end of the loan (and clearance of route).
- Liability/insurances.

We understand that we will need to sign a Non-Disclosure Agreement in recognition of the confidential nature of the scheme and we are happy to do so.

### **Scope of Services**

Considering the above and the discussions to date, we anticipate the following to form our scope of works to prepare a Feasibility Study:

1. Collaborate with Hull 2017, Nayan Kulkarni, Siemens and Hull City Council.
2. Work with Nayan Kulkarni to identify how the blade will be displayed and prepare general arrangement drawings showing the agreed position and set up arrangements. These drawings will also show safe working zone(s) and operational space.
3. Liaise with Hull City Council to identify what permissions and consents may be required.
4. Once Siemens / ALE have identified viable locations, work Hull City Council and ALE to identify alterations required within the highway (including the temporary

removal and replacement of street furniture, signage etc.) in order to deliver and remove the blade.

5. With reference to point 4. above, work with Nayan Kulkarni to identify the preferred location.
6. Prepare a Risk Register.
7. Prepare a cost estimate based on the findings of the feasibility study.
8. Summarise the above findings in a report for submission to Hull 2017 in electronic format (PDF).
9. Attend up to 6 project meetings/workshops as required.

For the avoidance of doubt, please note the following specific exclusions from this proposal. These services could be provided by Arup at a later date should this project proceed beyond Feasibility:

- Design (i.e. for lighting, water, power, etc.), procurement, planning support, etc, have been excluded from the current scope/fee as the requirements for such is dependent upon the Artists requirements which are unknown at this stage.
- Structural assessment of the blade/art piece and its supports to verify integrity – we expect Siemens to provide this information.
- Project Management services to implement the transport measures and install/remove the artwork

### **Deliverables**

The deliverable of this project is a Feasibility Study report which comprises:

- Brief overview of Working Constraints and site selection.
- General arrangement drawing for agreed location.
- Preferred transport route(s) for delivery and removal of the blade and the impact on infrastructure (for costing) – this information will be provided by Siemens/ALE.
- Cost Estimate including budget costs for street works and transport.
- Risk Register.
- Outline programme.
- Next Steps.

### **Arup Team**

**Richard Bickers** leads Arup's Consulting business in the North West, Yorkshire and The Humber and is currently responsible for delivering the design of the Hull Public Realm improvements. Richard will be the Project Director for this commission and will be responsible for agreeing the terms of reference for the study and for ensuring that the project delivers against these requirements. He would be the high level contact with Hull 2017 regarding any concerns they may have about the project's progress, or contractual or budgetary issues.

The feasibility study will be led by **Javed Hussain** who is a Senior Engineer within Arup's Transport Consulting team based in Leeds. Javed will be your main contact and be responsible for the day to day running of the project. Javed led the transport work for the Hull Public Realm scheme and worked with Hull City Council's Major Projects Team and Streetscene to agree the transport strategy.

Input will be drawn from other Arup staff as and when required. This will be required for preparing the Risk Register and Cost Estimate, and for advising on the management/governance structure.

## Programme

Based on our discussions to date, the following table sets out the anticipated timescales for the feasibility work.

<b>Programme Stage</b>	<b>Timescales</b>
Identify position of Zephyr, potential delivery routes and agree preferred location	3 weeks
Liaison with HCC Highways.	2 weeks
Liaise with HCC/Highways England to confirm permit, licence and consent requirements. "Ownership" will also be considered at this stage.	2 weeks
Prepare Cost Estimate and Risk Register	2 week
Prepare and issue Feasibility Study	2 week

Some of the work identified in the above table can be undertaken concurrently and therefore we estimate a programme period of 6 – 8 weeks to complete the feasibility work.

## Fee Proposal

We have calculated our lump sum fee as follows, based on our understanding of the project, the proposed scope of services we will provide, the likely programme and our assumptions, as outlined in this letter.

### **Arup Fee for Feasibility Study**

**£17,850**

Our fees are inclusive of normal office expenses and travel costs, but excludes VAT. Charges levied by third parties are not included in our fee.

If there is any significant changes to the scope or assumptions which result in additional work, we would wish to discuss an appropriate adjustment to the fee and our expenses.

## **Attendance at Meetings, Workshops and Site Visits**

Our fee has allowed for attending the meeting with Siemens on 4<sup>th</sup> May 2016 and for a further 5 meetings, workshops or site visits in Hull.

Attendance required at additional meetings, workshops or site visits in Hull will be charged at a rate of £500 per day (excluding VAT) for a Senior Engineer. The day rate includes for travel expenses.

## Invoicing

We propose to invoice you in accordance with the following invoicing schedule.

Invoice Point	Fee (excl. VAT)
End of May 2016 (for Tasks 1 – 3)	£5,950
End of June 2016	£5,950
Issue of draft report	£5,950
<b>Total</b>	<b>£17,850</b>

## Conditions of Appointment

This proposal for the appointment of Ove Arup & Partners Ltd to Hull UK City of Culture 2017 Ltd shall be under our standard terms and conditions as attached. The scope of our services shall be as generally defined by our standard terms and conditions and specifically by this proposal.

We propose that our total liability under or in connection with this commission shall not exceed £200,000 (two hundred thousand pounds). We will commit to maintain Professional Indemnity Insurance of not less than £200,000 provided that such insurance remains available at reasonable rates.

We hope that this proposal is acceptable to yourselves, and we look forward to receiving your written confirmation.

Please feel free to contact me should you wish to discuss any of the above.

Yours sincerely



Richard Bickers  
Associate Director

Enc Arup standard terms and conditions

**ARUP**  
**STANDARD TERMS AND CONDITIONS**

**General**

1. These terms and conditions form part of our formal proposal. In the event of any conflict between these terms and any other terms proposed these terms shall apply.
2. We will use reasonable skill, care and diligence in the performance of the services and will be liable only to the extent that we have breached this obligation. Our liability shall be limited to such proportion of your losses as is fair and reasonable having regard to the extent of our responsibility for the same.
3. When the fee is a lump sum this is based on the assumptions/criteria set out in the proposal. Should one or more of these assumptions/criteria change resulting in additional costs to us, an appropriate adjustment to the fee shall be made by such sum as is fair and reasonable. If we are required to modify and/or revise any completed designs, specifications or reports and/or are delayed or disrupted (in either case for reasons other than our default) then you will pay us such sum as is fair and reasonable. Unless otherwise agreed, the sum will be calculated in accordance with the schedule of rates set out in the proposal (or, if none stated, in accordance our standard schedule of rates) to cover the additional resources employed by us in respect of such additional work.
4. Notwithstanding any other term of this agreement our total liability under or in connection with this agreement whether in contract, tort (including negligence), for breach of statutory duty or otherwise shall be limited to the figure stated in the proposal/covering letter. We shall have no liability under or in connection with this commission after the expiry of six years from the date of our proposal.
5. Copyright and all intellectual property rights arising out of our services shall vest in us. Subject to payment of all fees properly due we shall grant you a royalty free, non-exclusive licence to use such intellectual property for any purpose connected with the project. We shall not be liable for the use by any person of any drawings or documents for any purpose other than that for which they were provided.
6. The detailed content of our proposal is the copyright of Arup, is confidential, and may be used by you only for the purposes of considering the proposal. It remains valid for 3 months from the date of the proposal.
7. If you fail to make payment in accordance with the terms of our proposal we may, upon seven days' written notice to you, suspend performance of services until such outstanding amounts are paid in full. We shall have no liability for delay or damage caused by such suspension.
8. Neither we nor you may assign our rights under this commission and no term of this agreement confers on any third party any benefit or right to enforce any term of this agreement. Unless otherwise agreed, any report is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party for it.
9. Our agreement with you shall be subject to English law and any disputes referred to the English Courts.

**Payment**

10. Time basis rates are subject to review each year on April 1 and will be adjusted in line with salary inflation. Save for any items which are included in the fee (as stated in the proposal/covering letter) disbursements and expenses will be charged separately at cost. Our fees are net of all taxes, levies, imposts or other duties. Invoices for any lump sum will be submitted in accordance with the schedule referred to in the covering letter. Invoices for time basis services will be submitted for payment on a monthly basis. Payment is due on presentation of our invoices and final date for payment shall be thirty days thereafter. Interest at the statutory rate will be charged on any overdue amounts.