#### **TRANSPORT AND WORKS ACT 1992**

## TRANSPORT AND WORKS (INQUIRIES PROCEDURES) RULES 2004

## NETWORK RAIL (CAMBRIDGE SOUTH INFRASTRUCTURE ENHANCEMENTS) ORDER

# SUPPLEMENTARY PROOF OF EVIDENCE IN RESPONSE TO SUE BROCKEN PROOF OF EVIDENCE (NRE 5.2) ON MATTERS OF DRAINAGE

### PAUL JENKIN ON BEHALF OF THE UNIVERSITY OF CAMBRIDGE

Inquiry Document Reference	OBJ-08-W5/SUPP		
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### 1 <u>INTRODUCTION</u>

- 1.1 I have produced this supplementary evidence in response to the Proof of Evidence of Sue Brocken (NRE 5.2) ("**SB**") to highlight the areas of agreement and where further information could be provided to increase those areas of agreement.
- 1.2 Where I have not addressed specific points from the Network Rail evidence, this should not be taken to mean that I accept this evidence. Where Network Rail or other parties produce further evidence by way of rebuttal, I reserve the right to comment on this as necessary.

## 2 <u>DETAILED SURVEY WORK REQUIRED</u>

2.1 SB has recognised the issue highlighted by UoC- that more detailed work is requiredin Table 4.1 at the top of page 28 (*our emphasis added*):

"Presentation to the UoC representatives to advise how the current stage of design has acknowledged the presence of the existing assets and has incorporated them into the proposed outline design stage. This includes a temporary connection during construction into the track drainage network to compensate for loss of swale/ pond capacity to facilitate the temporary haul road. Further detailed topographical survey will be required to confirm the exact position and depth of the UoC assets in relation to the proposed temporary and permanent boundary fence line at the next stage to fully consider the UoC assets in the design to ensure that there is no negative impact on the network as a result of the NR scheme."

#### 3 SUGGESTED WAY FORWARD

- 3.1 The acknowledged need for further detailed topographical information mirrors the approach set out in the draft Heads of Terms for a Land and Works Agreement with Network Rail which are currently being discussed.
- 3.2 The University seeks a commitment whereby Network Rail provide details of any temporary accommodation works which are proposed which may impact the drainage systems within the AMB plot and Plot 9 and undertake that the University will be in no worse position in respect of drainage and flood risk by maintaining the flows equating to 2 Litres, per second per hectare based on the original land holding area. The University also requires Network Rail undertake to provide sufficient temporary attenuation facilities beneath the proposed construction haul to ensure that the current

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flood storage capacity of the swale and balancing pond are replicated and that flood levels are not increased. Those facilities would need to be modelled and designed through agreement with the University before construction commences. Network Rail also need to undertake to provide suitable measures to ensure that the quality of water leaving the AMB plot and plot 9 is not reduced, after surveying the existing drainage infrastructure to form an agreed baseline. In relation to the operational phase, Network Rail would need to provide the University with the final scheme drainage design before submission and confirm again that the University would be in no worse position in respect of drainage and flood risk. Network Rail would also have to commit to fully reinstating the swales and balancing pond, situated within the AMB plot and Plot 9, following completion of the CSIE construction phase, with the same storage capacity as before. The modelling and design of the reinstated facilities would need to be agreed with the University. Suitable measures would need to be provided to ensure that the quality of water leaving the AMB plot and plot 9 is not reduced.

- 3.3 As set out in my main Proof of Evidence the mitigation as proposed by Network Rail could well deliver a scheme which ensures that the University is in no worse position than before the Scheme works were undertaken. However, as the University has indicated, it would be necessary to demonstrate this in advance through detailed modelling and assessment to the satisfaction of the University as set out above in the proposed Heads of Terms. Ideally this work would be undertaken before the Inquiry begins so that we could reach a position of common ground on this subject.
- 3.4 SB provides some additional detail in her Proof of Evidence, particularly in Figures 6.1 and 6.2 but, without seeing more detail on levels and potential pipe capacity, I am not in a position to determine whether the proposed mitigation objectives as set out in the Heads of Terms can be achieved.

#### 4 WITNESS DECLARATION

I hereby declare as follows:

- 4.1 This proof of evidence includes all facts which I regard as being relevant to the opinions that I have expressed and that the inquiry's attention has been drawn to any matter which would affect the validity of that opinion.
- 4.2 I believe the facts that I have stated in this proof of evidence are true and that the opinions expressed are correct.

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4.3 I understand my duty to the inquiry to help it with matters within my expertise and have complied with that duty.

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