



## DOCUMENT 4 –

### Response to ExA’s Written Questions

| ExQ1  | Question:   | Canal & River Trust Response   |
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| 1.0   | <b>General and Cross-topic Questions</b>  |  |
| 1.0.2 | <p>ES Appendix 12.7 [APP-105] describes Calf Heath Reservoir as “one of two such features to either side of the junction with the M6 motorway serving as balancing ponds from the original construction of the road.” In many other places in the submission documents both Calf Heath and Gailey Reservoirs are described as feeder reservoirs for the Staffordshire &amp; Worcestershire Canal (S&amp;WC). Please confirm the main use of these reservoirs and whether this use continues to comprise their main purpose.</p> | <p>None of the reservoirs were constructed in relation to the M6. They are not and have never been used as balancing ponds in connection with the Motorway.</p> <p>Calf Heath Reservoir was constructed between 1778 and 1799 to supply the summit pound of the Staffordshire &amp; Worcestershire Canal. The reservoir has a surface area of 0.073 km<sup>2</sup> and a capacity of 165,000 m<sup>3</sup> at the normal top water level of 106.64 mOD. The reservoir can still be used to supply the canal and is also used for angling and sailing.</p> <p>Gailey Lower Reservoir and Gailey Upper Reservoir were constructed in about 1855 to supply the Staffordshire &amp; Worcestershire Canal, a function they still serve today. The Lower Reservoir is also used for sailing; the Upper Reservoir is used for angling. Gailey Lower Reservoir has a surface area as 0.251 km<sup>2</sup> and a capacity of 778,000 m<sup>3</sup> at the top water level of 105.09 mOD. Gailey Upper Reservoir has a surface area of 0.146 km<sup>2</sup> and a capacity of 356,000 m<sup>3</sup> at the top water level of 106.99 mOD.</p> <p>Maps showing the reservoirs and feeder channels can be found in Appendix 5 of the Trust’s Written Representation dated 5.4.19</p> |

| 1.9   | Noise, Vibration and Lighting   |   |
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| 1.9.4 | <p>Paragraph 13.182 states that the northern and southern canal-side moorings are considered to be of medium sensitivity.</p> <p>(i) What is the nature of the use of these moorings and can they reasonably be distinguished from other residential properties close to the application site?</p> <p>(ii) Given the Applicant's acknowledgement as to the practical difficulties on including canal boats in the Bespoke Insulation Scheme (paragraphs 13.295-13.298) do the predicted rating levels at these moorings of at least 10dB above background levels represent an acceptable level of impact?</p> | <p>There are no permanent residential mooring sites within WMI Order Limits. There are permanent leisure moorings at Gailey Wharf (L1) that can accommodate up to 10no. boats and these are let individually on a 12month basis. There are no restrictions imposed on the length of time people can stay on the boats at these moorings for leisure purposes.</p> <p>There are permanent moorings at Gailey Marina associated with the business use. There are other moorings points at Gailey where time restrictions apply.</p> <p>to the north of the A5:</p> <ul style="list-style-type: none"> <li>• Gailey Wharf moorings – 4no. moorings restricted to maximum 48hours</li> </ul> <p>To the south of the A5:</p> <ul style="list-style-type: none"> <li>• Gailey Wharf Service Moorings – 2no.short-stay moorings for services and shop</li> <li>• Gailey Bridge moorings – 2no. moorings restricted to maximum 5days and 4no. moorings restricted to maximum 48 hours.</li> </ul> <p>Outside of these designated moorings sites boats can moor anywhere on the canal network for a period of up to 14days.</p> <p>The location of the moorings can be viewed in Appendix 6 of the Trust's Written Representations, dated 5<sup>th</sup> April 2019.</p> |

| 1.13   | Drainage and Flood Risk  |   |
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| 1.13.2 | <p>The proposed Surface Water Drainage Strategy [APP-152] divides the site into 4 separate catchment areas with 2 of these eventually discharging surface water flows from the site into the River Penk and two discharging into the canal.</p> <p>(i) Can evidence be provided of agreement with the relevant bodies as to the following key elements of that strategy:</p> <p>(a) dividing the site into 4 catchment area and the identification of the most suitable and appropriate outfalls;</p> <p>(b) the 'increased' discharge rates (paragraph 7.5.3.6) due to the unsuitability of the site for surface water to be managed through infiltration;</p> <p>(c) the 'Allowable discharge rates' (Table 7.4) and Drainage Outfall Capacities (Table 7.5) set out in the Drainage Strategy;</p> <p>(d) the required volumes of attenuation which have been used in the outline design of the water detention basin proposed as part of the GI provision;</p> <p>(e) the schedule of 'special provisions' set out in paragraphs 9.3.1-9.3.13 of the Drainage Strategy which are required in order to direct surface water from the proposed catchments to existing outfalls whilst maintaining the existing hydraulic regime for the site.</p> | <p>The Trust have previously advised that surface water discharge to the canal from the whole site may be feasible and an Application for surface water discharge to the canal from three of the four catchment areas has recently been submitted. The Application will be considered in accordance with the Trust's Code of Practice. We will update the Examining Authority with an update on this within any future submissions.</p> |
| 1.13.7 | <p>Are the relevant bodies content that the mitigation proposals to secure the attenuation of surface water discharge into the identified water courses would be adequate so as not to increase the risk of flooding off-site?</p>   | <p>As per ExQ1.13.2</p>   |
| 1.13.8 | <p>Are the relevant bodies content that the drainage strategy and associated mitigation proposals would be adequate to remove the risk of any significant adverse effects in terms of the pollution or contamination of any water course, water bodies or groundwater resources?</p>   | <p>As per ExQ1.13.2</p>   |
| 1.14   | Recreational and Leisure Activity  |   |

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| 1.14.2 | <p>Paragraph 14.179 notes that the closest moorings at Gailey Wharf have a 1 year contract for residential use and that up to 10 households could be occupied at these moorings at any one time. The IWA [RR-0654] notes that there are both permanent and visitor moorings at Gailey Wharf and that these form a popular place for boat users to rest preceding or following their working the locks to the north. ES Paragraph 13.182 states that the canal-side moorings are considered to be of medium sensitivity for the purposes of the noise impact assessment but it is not clear from Chapter 14 as to what level of sensitivity these moorings are considered to have as recreational and leisure receptors. Paragraph 14.251 notes that noise effects for users of the moorings are expected to be significant but does not address the effect on those using the moorings as recreational and leisure receptors.</p> <p>(i) Can the Applicant confirm what level of sensitivity these receptors have been assigned for the purposes of the Chapter 14 assessment and the basis of this judgement?</p> <p>(ii) what would the impact of the development be on those using the moorings as recreational and leisure receptors?</p> <p>(iii) Does the Applicant accept that these moorings form an important element in the experience of the experience of boat users using the S&amp;WC as is suggested by the IWA?</p> <p>(iv) If so, what is the Applicant's response to the IWA's assertion that the Proposed Development would render this section of the canal unattractive for mooring and significantly damage the tourism value of the whole canal?</p> | <p>As detailed in the above response to ExQ 1.9.4 there are permanent leisure moorings at Gailey Wharf (L1) that can accommodate up to 10no. boats and these are let individually on a 12month basis.</p> <p>Proof of a main residence is required for the mooring agreement though there are no set restrictions imposed by the Trust as to the length of time people can stay on the boats at these moorings for recreational/leisure purposes. There is an expectation that the boats will move from the mooring at times and the boat will not be occupied all the time though they should be considered as similar to holiday homes.</p> <p>These moorings in addition to the short-term moorings in the area, boat yard and facilities at Gailey Wharf result in this section of canal being an important part of the network. The Trust remain concerned with the impact of the noise levels on these users and the canal corridor.</p> <p>Users of the canal are considered '<i>transient</i>' or '<i>quasi-residential</i>' and it is considered that the function of the canal corridor and reservoir as not simply places that people pass through but treasured, valued recreational / leisure resources in their own right has not been fully appreciated or considered.</p> <p>The development has the potential to '<i>sterilise</i>' this stretch of canal and reduce its attractiveness as a leisure facility and affect the business operations at the marina / reservoir / moorings and along the canal corridor.</p> |
| 1.15   | <b>The Staffordshire and Worcestershire Canal</b>   |  |
| 1.15.1 | <p>ES paragraph 11.142 assesses the S&amp;WC as a medium sensitivity receptor, apparently on the understanding that the canal is "<i>likely to be lined and not in total continuity with regional groundwater.</i>"</p> <p>(i) Can the Applicant/ CRT provide evidence to support this assumption?</p> <p>(ii) To what extent has hydrological continuity between the Canal and watercourses been considered in the ES and is</p>   | <p>The Trust cannot provide evidence to support the assumption and it does not appear that detailed consideration of hydraulic continuity has been undertaken. Although the canal is likely to be lined due to its age it is not unreasonable to assume it is not water tight. Although no notifications of unidentified pollution exist, the construction depth of the canal lining is not known.</p>   |

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|        | <p>this likely to be a significant concern or issue in relation to the Proposed Development?</p>   | <p>Therefore, water may be present on the site and though it may not currently be having an impact as it is hydrologically balanced it could be encountered during works. Excavating close to the canal may disrupt this balance and reveal these water sources. The applicant would be responsible for addressing this and undertaking any remediation works required.</p> <p>The Trust has a right of support and any remediation works that has an impact on the canal infrastructure or water quality will need to adhere to the Trust's Code of Practice.</p> |
| 1.15.2 | <p>(i) Is CRT content in principle that the 3 large diameter pipes which are needed to convey surface water from the eastern to the western side of the canal (paragraphs 9.3.5-9 &amp; 9.3.6 of APP-152) could be installed without significant risk to the structural integrity and operation of the canal?</p> <p>(ii) As the installation of these pipes does not appear to be included under any of the listed Works in the dDCO how would this construction be authorised by the DCO?</p> <p>(iii) How and by whom would the detailed design for these works be approved at the relevant stage of implementation of the development?</p> | <p>The Trust are generally content in principle that the works could be undertaken without significant risk to the structural integrity and operation of the Canal.</p> <p>The works would be authorised by the agreement currently being negotiated between FAL and the Trust.</p> <p>The detailed design and construction of the new bored pipelines are to be agreed by the Trust and all works will follow the Canal &amp; River Trust's "Code of practice for Works affecting the Canal &amp; River Trust"</p>  |
| 1.15.3 | <p>Is CRT content in principle that its requirement that surface water discharged to the canal should not have a transverse discharge velocity of no greater than 0.3m/s can be achieved by means of a reception chamber and weir as suggested at paragraphs 9.3.10-9.3.13 of ES Appendix 16.3?</p>  | <p>This is the maximum permitted velocity as set out in the Trust's surface water discharge process within the Code of Practice.</p> <p>An Application has recently been made to the Trust for surface water discharge to the canal and this will consider in detail the volume, rate and velocity of discharge proposed, and the detailed outfall arrangement in accordance with Code of Practice.</p>  |
| 1.15.4 | <p>CRT [RR 1155] has raised concerns about the proposed retention of the access track from Gravelly Way which it says would result in the proposed new Link Road Bridge over the canal requiring a materially wider span than would otherwise be needed. CRT is concerned about large spaces being created beneath bridges over the canal as these can attract anti-social behaviour.</p>  | <p>In principle the general positioning of the bridge and its proposed height above the canal is accepted by the Trust.</p> <p>The specific layout and design for the proposed road bridge crossing and surrounding pedestrian/cycle linkages though have altered significantly from that presented as part of the</p>   |

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|        | <p>(i) Can the Applicant clarify its proposals in relation to this issue and advise what if any agreement is in place between the parties?</p> <p>(ii) The ExA wishes to receive a signed SoCG between the Applicant and the CRT which provides a position statement on discussions over the CRT's other concerns about the design of the Link Road bridge as set out in its RR and clearly identifies what is and what is not agreed in relation to this key element of the Proposed Development.</p> | <p>pre-application consultations. The bridge layout and design, as currently shown within submitted documents refs: 2.17, 2.18A &amp; 2.18D, is not acceptable to the Trust for the following reasons:</p> <ul style="list-style-type: none"> <li>• Bridge Span</li> <li>• Retention of the access track and pedestrian / cycle connections to existing bridges and the towpath</li> <li>• Offside abutment</li> <li>• Design</li> <li>• Parapets</li> </ul> <p>The Trust acknowledge that the bridge design submitted is only illustrative at this stage though it is not clear if the layout of the bridge and adjacent land is also indicative only. If these aspects are also illustrative only at this stage it is considered that the matters above could be dealt with at a later stage in consultation with the Applicant.</p> <p>The detailed design and construction of the bridge crossing will need to be agreed by the Trust and all works will follow the Canal &amp; River Trust's "<i>Code of practice for Works affecting the Canal &amp; River Trust</i>"</p> <p>The Trust received a first draft of a '<i>Statement of Common Ground</i>' from FAL on the 11<sup>th</sup> March 2019 and have been reviewing this document as a matter of urgency. It has not been possible, in this short period of time, to agree a final version of this document. The Trust have now provided FAL with our comments on this first draft. The concerns of the Trust are however clearly set out above and in our Written Representation dated 5<sup>th</sup> April 2019.</p> |
| 1.15.5 | It is noted that the proposed Canal Towpath enhancement scheme would relate only to that section of towpath which falls within the Order   | The Trust generally seeks to maintain its assets in a "steady state", and in the case of towpath surface and towpath access  |

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|        | <p>Limits. CRT suggests that this would not be sufficient to address the wider impacts of the development on the towpath or to unlock its potential as an off-road cycle path to serve the development as part of the Applicant.</p> <p>(i) Can CRT please set out in more detail what it considers the “<i>wider impacts</i>” on the towpath would be?</p> <p>(ii) Can the Applicant respond to those concerns and clarify its view as to the importance of the use of the canal towpath beyond the Site boundaries in order to help achieve the sustainable transport targets set out in Appendix G to the STS?</p> <p>(iii) Is there a justification, in terms of mitigating the effects of the development on the towpath or on the highway network, of extending the linear scope of the proposed towpath enhancement scheme and, if so, which additional sections of towpath should be included?</p> | <p>maintenance, this is based on current usage. Where new development has the likelihood to increase usage the Trust’s maintenance liabilities will also increase.</p> <p>The canal is a principal pedestrian / cycle route serving the proposed development. Considering its catchment and linkages to key urban areas it is likely that it will experience increased use as a direct result of the proposed development.</p> <p>We therefore consider that it is reasonable and justified for the CES to cover increased maintenance costs, upgrading of the towpath surface and access points, beyond the WMI Order Limits, to a standard which is more durable / accessible and thus able to accommodate the increased usage resulting from the proposed development.</p> <p>The Trust consider the wider impacts will relate to the towpath primarily from Wolverhampton, just south of Junction 2 of the M54, up to Penkridge where trips may be combined with the existing train station. We have previously advised FAL that an assessment of the towpath corridor along this length of canal should be undertaken. This should include a towpath width survey, assessment of existing access points to the towpath and the requirements for any new access points.</p> <p>This baseline assessment should then be used to inform detailed mitigation works to be completed as part of the CES and support use of the canal corridor as a sustainable transport route to serve the proposed development, whilst taking into account the conservation area status of the canal and its current rural character. This should be included as a Requirement within Schedule 2 of the DCO and agreed in consultation with the Trust.</p> |
| 1.15.6 | <p>CRT states that the submitted plans indicate a proposed landscaping bund encroaching into the ditch located to the toe of the west dam at</p>   | <p>The ditch course and a minimum 5-metre-wide maintenance access to facilitate vehicular and a 2metre wide pedestrian</p>  |

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|        | <p>Calf Heath Reservoir and that this ditch needs to remain free from obstruction. CRT also states that there is a need for a strip of land to be reserved to provide access to the west side ditch for maintenance purposes.</p> <p>Have these requirements been reflected in the proposed Works and Parameters Plans and, if not, what amendments are required to safeguard this part of the canal infrastructure?</p>   | <p>access to the ditch course will be required and should be maintained as part of the development.</p> <p>FAL have confirmed to the Trust that these requirements will be provided for within the proposals. and the ditch course around the length of the Reservoir dam will be retained.</p> <p>This is partially shown on the drawing Associated with Canal and Rivers Trust Ditch Network' (1516-0425-WDK-SI-C-301-012) (Doc 6.2 – Appendix 16.3) though this will need to be updated to clearly show the ditch and maintenance strip along the length of the reservoir.</p> |
| 1.15.7 | <p>CRT [RR-1155] refers to ES paragraph 10.238 which states that '<i>pollution events</i>' occurring on the Site could be "<i>flushed through</i>" the drainage system and raises concerns about the potential impact of such an event on fish stocks in the river.</p> <p>(i) Do the EA and CRT agree with the Applicant's conclusion that if pollution events occur the canal "<i>could recover (in months) through flushing, and their integrity would therefore not change in the long terms</i>"?</p> <p>(ii) Can the Applicant provide evidence that if pollution events effecting Staffordshire and Worcestershire Canal occur, significant adverse effects to aquatic ecology (including fish, riverine mammals, amphibians and birds) will not occur?</p> | <p>Flushing will not remove pollutants resting within the sediment structure. Ultimately this could result in sediment being classified as hazardous or failing S4UL's for bankside disposal. The long-term effects therefore cannot be assessed.</p> <p>The Trust would also query where these 'pollution events' would be flushed to.</p>   |