



Canal &
River Trust

High Speed Rail (West Midlands – Crewe)

Consultation on the Environmental Statement

Appendix 1

Please find below the response of the Canal & River Trust. The Trust is the guardian of 2,000 miles of historic waterways across England and Wales. We are among the largest charities in the UK, maintaining the nation's third largest collection of listed structures, as well as museums, archives, navigations, hundreds of important wildlife sites and being the largest owner and manager of fresh water fisheries in the UK.

The Trust has a range of charitable objects:

- to preserve, protect, operate and manage Inland Waterways for public benefit:
 - for navigation;
 - for walking on towpaths; and
 - for recreation or other leisure-time pursuits of the public in the interest of their health and social welfare;
- to protect and conserve for public benefit sites, objects and buildings of archaeological, architectural, engineering or historic interest on, in the vicinity of, or otherwise associated with Inland Waterways;
- to further for the public benefit the conservation protection and improvement of the natural environment and landscape of Inland Waterways;
- to promote, facilitate, undertake and assist in, for public benefit, the restoration and improvement of Inland Waterways;
- to promote and facilitate for public benefit awareness, learning and education about Inland Waterways, their history, development, use, operation and cultural heritage by all appropriate means including the provision of museums;
- to promote sustainable development in the vicinity of any Inland Waterway for the benefit of the public, in particular by:
 - the improvement of the conditions of life in socially and economically disadvantaged communities in such vicinity; and
 - the promotion of sustainable means of achieving economic growth and regeneration and the prudent use of natural resources; and

- to further any purpose which is exclusively charitable under the law of England and Wales connected with Inland Waterways; provided that in each case where the Trust undertakes work in relation to property which it does not own or hold in trust, any private benefit to the owner of the property is merely incidental.

We believe that our canals and rivers are a national treasure and a local haven for people and wildlife. It is our job to care for this wonderful legacy – holding it in trust for the nation in perpetuity and giving people a greater role in the running of their local waterways. **The key objective for the Trust in responding to the consultation is to protect our assets and interests and to ensure that as the proposal develops the impacts of the scheme on our inland waterways network are appropriately mitigated.**

The Trust notes the protective provisions proposed in the Bill relating to the Canal & River Trust at Schedule 32- Part 5. For Phase 1 of HS2 which has received Royal Assent the Trust and the Secretary of State for Transport entered into an agreement, the provisions of which have effect and replace the protective provisions for Canal & River Trust which were set out in the Phase 1 Bill at Schedule 32 part 4. Our response to this consultation is set in the context that the Trust wish to negotiate with HS2 so that the protective provisions for the Canal & River Trust set out in the Bill are replaced with a side agreement, the content of which should reflect the principles agreed in our agreement for Phase 1. This agreement includes the Trust's general requirements relating to routewide issues. There will also be the need for the Trust's specific requirements to be set out for each interface. For information, our phase 1 agreement forms part of our consultation response see Annex 1.

The critical interface for the Trust on Phase 2a is the Great Haywood Viaduct. The landscape and visual assessment shows that the canal lies within the Ingestre Riparian Alluvial Lowlands LCA. It identifies that the magnitude of change and level of effect for this area will be major adverse (significant) from construction up until the last assessment which is at year 60. Given the sensitivity of the landscape we seek a bespoke design for this viaduct and encourage innovation in the design of the noise barriers to reduce the visual impact whilst retaining the noise reduction.

Please direct any queries to Peter Walker, National Infrastructure Services Manager, Canal & River Trust, First Floor North, Station House, 500 Elder Gate, Milton Keynes, MK9 1BB. Telephone: 07733 124609.

Question 1

Please let us know your comments on the Non-Technical Summary

No comment.

Question 2

Please let us know your comments on Volume 1 – Introduction and Methodology

No comment.

Question 3

Please let us know your comments on Volume 2: Community Area (CA) reports and map books

CA	Location	Canal	Issue/Comments	Action
Fradley to Colton	Parish of Fradley and Streethay	Trent & Mersey Canal	THE ADDITION OF NOISE FENCE BARRIERS TO PHASE 1 CROSSING Volume 2: Map book CA1: Fradley to Colton Map Number CT-06-201 Grid J5 The agreement between the Secretary of State for Transport and the Trust on Phase 1 already provided for the acoustic barriers at all crossings. The canal in this location is a conservation area. Visual impact of the noise barriers should be minimised.	The principles to be applied to noise barriers should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase. The Trust has a general requirement that the design of acoustic barriers should be subject to their satisfying the requirement of the EMR's, be low level and as close as reasonably practicable to the tracks to minimise visual impact from the canal.

Fradley to Colton	<p>Bill Volume 1: Plans Sheet 1-01</p> <p>Land Parcels 16, 18 and 23, Parish of Fradley and Streethay</p>	Trent & Mersey Canal	<p>ACQUISITION OF LAND AND RIGHTS</p> <p>Land potentially required during construction</p> <p>Volume 2: Map book</p> <p>CA1: Fradley to Colton</p> <p>Map Number CT-05-200</p> <p>Grid B2, B3, B4, B5 & C5</p> <p>It is proposed that the purpose for which parcel 16 may be acquired or used is for the provision of railway infrastructure and access, and utility works. Parcel 23 may be acquired or used for utility works. The Trust has sought and still requires clarification from HS2 in relation to the purpose that parcel 18 may be acquired or used.</p> <p>The acquisition/use of a section of canal and the towpath is not acceptable to the Trust as we need to maintain operation of the canal and towpath during construction.</p> <p>It is not necessary for the utilities works to use this land. An alternative option should be sought.</p>	<p>The Trust objects due to the impact on our customers. The principles to be applied to the acquisition of land and rights should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
Fradley to Colton	<p>Bill Volume 1 Plans Sheet 1-01 Parish of Fradley and Streethay</p>	Trent & Mersey	<p>BILL WORK No. 2</p> <p>Access Road</p> <p>Volume 2: Map book</p> <p>CA1: Fradley to Colton</p> <p>Map Number CT-06-201</p> <p>Grid J5 & J6</p> <p>An access road is to be formed between the canal and the HS2 embankment to provide access to a balancing pond at grid H6 and possibly to access the agricultural land.</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Impact on the design of the viaduct over the Trent & Mersey Canal. 	<p>To maintain the enclosed visual corridor approaching the canal crossing, either:</p> <ol style="list-style-type: none"> 1. Relocate the balancing pond to the east of the embankment and provide an alternative access to the agricultural land, removing the need for the access road. 2. Discharge water to the canal (subject to the Trust's consenting arrangements), and provide an alternative access to the agricultural land removing the need for the balancing pond and access road. 3. Re-route the access road to the North of Pyford South Embankment. <p>Notice of works and plan approval of works by the Trust.</p>

			<p>The agreement between the Secretary of State for Transport and the Trust on Phase 1 requires the promoter to design the crossing to frame the Canal and towpath with a vertical pier close to the back of the towpath and a vertical pier extending vertically up from the offside wall. There is concern over the likely impact of the proposed access road on the arrangement of the piers for this canal crossing.</p> <p>2. Impact on existing woodland/replacement planting. The agreement between the Secretary of State for Transport and the Trust on Phase 1 requires plan approval for compensation planting and other visual mitigation measures in order to maintain the enclosed visual corridor approaching the crossing. There is concern that the location the access road, as proposed, will increase the amount of existing tree loss, and does not allow for sufficient replacement planting to maintain the enclosed visual corridor approaching the crossing.</p> <p>3. Boundary treatment to the rear of the towpath. The agreement between the Secretary of State for Transport and the Trust on Phase 1 requires that the promoter shall, as far as reasonably practicable, restore the length of hedgerow along the towpath. There is concern that the location of the access road may lead to a requirement for a secure boundary, the design of which may not be appropriate to this rural conservation area setting.</p> <p>4. Impact on the conservation area Volume 2: Community Area report CA1: Fradley to Colton 7.4.67 – 7.4.73 do not appear to assess the impact of the addition of the access road adjacent to the conservation area.</p>	<p>The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
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			<p>5. Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the stability of the canal.</p> <p>The Trust also comments that: It is noted that the drainage ditches for the Pyford South Embankment associated with Phase 1 drain toward the canal whilst those associated with Phase 2 drain towards Pyford Brook.</p>	
Fradley to Colton	Parish of Fradley and Streethay	Trent & Mersey Canal	<p>PROPOSED TEMPORARY WATER SUPPLY CONNECTION</p> <p>Volume 2: Community Area report CA1: Fradley to Colton</p> <p>The Volume 2: Community Area report CA1: Fradley to Colton report states at paragraph 8.4.7 that:</p> <p><i>“A temporary water supply connection to Pyford Brook viaduct satellite compound will result in the permanent loss of approximately 0.6ha (7%) of canal bank and canal habitat within Kings Bromley Wharf to Fradley Junction, Coventry Canal LWS. The loss of this habitat will result in a permanent adverse effect on the structure and function of the site that is significant at the district/borough level”.</i></p> <p>Paragraph 8.4.63 advises of the proposed re-instatement and the establishment of marginal vegetation to compensate for the loss of canal bank and canal habitat.</p> <p>The Trust wish to understand why this route is being proposed resulting in the loss of canal bank and canal habitat when other alternative routes appear to be available for the creation of the temporary water supply connection. We also wish to understand HS2’s definition of canal bank and canal habitat.</p> <p>Volume 2: Community Area report CA1: Fradley to Colton paragraph 8.3.7 refers to ‘Kings Bromley Wharf to Fradley Junction, Coventry Canal LWS’. For accuracy, the designated</p>	<p>The Trust object to the loss of the habitat, there are alternative routes available for provision of a water supply and these should be adopted by HS2.</p> <p>The Trust require further information regarding this element to understand the reference to the loss of both canal bank and canal habitat.</p>

			wildlife site includes sections of both the Trent & Mersey Canal (where the HS2 crossing is intended) and the Coventry Canal. We agree with the statement - notwithstanding the site designation - in 8.3.22 Watercourses: "...these watercourses and adjacent habitats are intrinsically important, and provide corridors for wildlife dispersal. As such they are of up to County value", and therefore consider the error in 8.3.7 not to be significant in terms of the importance attributed to the canal, and the overall impact assessment.	
Fradley to Colton	Parish of Kings Bromley	Trent & Mersey Canal	<p>EARLY ESTABLISHMENT OF MITIGATION PLANTING</p> <p>Volume 2: Map book CA1: Fradley to Colton Map Number CT-06-201 Grid G6, G7, H6, H7, H8, I7 and I8</p> <p>Both the Pyford South embankment and the Pyford Brook Viaduct will have an impact on views out of the canal conservation area.</p> <p>Volume 2 Map book CA1: Fradley to Colton Map Number CT-05-201 shows that much of the woodland habitat to be created in this area is on land potentially required during construction for mitigation planting.</p>	This woodland planting needs to be established as soon as possible to enable it to provide the earliest possible mitigation for the canal corridor.
Fradley to Colton	Parish of Kings Bromley	Trent & Mersey Canal	<p>PYFORD VIADUCT SATELLITE COMPOUND</p> <p>Volume 2: Map book CA1: Fradley to Colton Map Number CT-06-201 Grid F6</p> <p>The visual impact of the satellite compound on the views out of the canal conservation area needs to be addressed.</p>	The use of temporary vegetation, for example instant hedging, and appropriate hoarding should be used to minimise the visual impact on the canal conservation area.
Fradley to Colton	Bill Volume 1: Plans		<p>TEMPORARY POSSESSION AND USE OF LAND</p> <p>Land potentially required during construction</p>	The Trust object due to the impact on our customers. The principles to be applied to the temporary possession and use of land should reflect those in the

	Sheet 1-06 Land Parcel 82 and 83 Parish of Kings Bromley		<p>Volume 2: Map book CA1: Fradley to Colton Map Number CT-05-202-L1 Grid E2 & F2</p> <p>It is proposed that the purpose for which temporary possession may be taken of Parcels 82 and 83 is the diversion or installation of, or works to, utilities apparatus.</p> <p>This temporary possession is required in association with the raising of an 800m section of a National Grid Electricity Transmission 400kV overhead power line by 14m, to cross the route of the Proposed Scheme on its existing alignment.</p> <p>The temporary possession of these parcels of land will prevent access along the towpath and canal for our customers and staff. The work can be undertaken without requiring temporary possession of the land.</p>	agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.
Fradley to Colton	Parish of Kings Bromley	Trent & Mersey Canal	<p>UTILITY CROSSING</p> <p>Volume 2: Map book CA1: Fradley to Colton Map Number CT-05-202 – L1 Grid E2, D2 and D3</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. There is a wooded embankment to the south of the canal where the power lines are to cross. The impact of the works on the existing vegetation must be minimised to retain the local landscape character of the canal and to mitigate the visual impact of the overhead powerlines and pylons. 2. Volume 2: Map Book CA1: Fradley to Colton Map Number CT-05-202L1 shows land on the non-towpath side of the canal (Grid D2, E2 and F2) being land potentially required during construction. Work could be being carried on in close proximity to the canal and 	<p>Mitigate the impact by undergrounding of the cables beneath the canal. This requirement is consistent with the approach set out in the Trust's Code of Practice for Works Affecting the Canal & River Trust.</p> <p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>To mitigate impact of construction traffic using the Trust's bridge the principles relating to surveying and remedying identified impacts should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>

			<p>therefore there is concern over the possible physical impact on the canal.</p> <p>3. Magazine Bridge (Trust ref: TM-107-003, B3) in grid D2 is Trust owned. There may be damage from HS2 or utility companies' construction traffic using the bridge to gain access to the working area.</p>	
Fradley to Colton		Trent & Mersey Canal	<p>TRAFFIC AND TRANSPORT</p> <p>Volume 2: Community Area report CA1: Fradley to Colton</p> <p>Section 14.4.27 states that "The construction of the proposed scheme will not have a significant effect upon the navigable waterways or canals in the Fradley to Colton area". We do not consider this to be correct as the proposed works will have a significant impact on user of the waterway corridor.</p> <p>Volume 1: Plans, Sheet 1-01, Land Parcels 16, 18 and 23, Parish of Fradley and Streethay are sections of the towpath and canal which it is proposed may be acquired or used. Volume 1: Plans Sheet 1-06 Land Parcel 82 and 83 Parish of Kings Bromley are sections of the towpath, canal and non-towpath side canal bank and it is proposed that temporary possession may be taken. The impact of such acquisition or possession does not appear to have been considered in terms of the impact on the canal and its users. We consider that this will have a significant impact on users of the waterway corridor.</p>	<p>The impact on canal in this area needs to be acknowledged and addressed appropriately. The principles to be applied to the acquisition of land and rights should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>Furthermore, the principles to be applied to any restrictions on navigation (which includes towpath users) should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
Fradley to Colton		Trent & Mersey Canal	<p>WATER RESOURCES AND FLOOD RISK</p> <p>Volume 2: Community Area report CA1: Fradley to Colton</p> <p>Paragraph 15.3.5 and Table 29: Key surface water bodies and their WFD status do not identify the Trent & Mersey Canal as</p>	<p>HS2 to acknowledge that the canal is a waterbody under the WFD and the impacts assessed accordingly.</p> <p>The Trust need to establish any small or minor abstractions that may be affected and HS2 need to provide appropriate mitigation.</p>

			<p>a surface water body, yet the canal is within 1km of the proposed scheme.</p> <p>Paragraph 15.3.6 only refers to licensed abstractions. There may be small/minor exempt abstractions operated by the Trust that could be affected (yet are not significant enough to show on a desktop study).</p>	
Colwich to Yarlet	<p>Bill Volume 1 Plans Sheet 1-24 Land Parcel 189 Parish of Colwich</p>	Trent & Mersey Canal	<p>ACQUISITION OF LAND AND RIGHTS</p> <p>Land potentially required during construction Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E5 & E6</p> <p>The Trust has sought and still requires clarification from HS2 in relation to the purpose that parcel 189 may be acquired or used.</p> <p>The acquisition/use of a section of canal and the towpath is not acceptable to the Trust as we need to maintain operation of the canal and towpath during construction.</p>	<p>The Trust object due to the impact on our customers. The principles to be applied to the acquisition of land and rights should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
Colwich to Yarlet	<p>Bill Volume 1 Plans Sheet 1-24 Land Parcel 221 Parish of Colwich</p>	Trent & Mersey Canal	<p>TEMPORARY POSSESSION AND USE OF LAND</p> <p>Land potentially required during construction Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E5</p> <p>It is proposed that the purpose for which temporary possession may be taken of Parcel 221 is the creation of new public right of way.</p> <p>This temporary possession is required in association with the diversion of PROW Colwich 63. Short term towpath closures / diversions will be all that is required.</p>	<p>The Trust object to the impact on our customers. The principles to be applied to the temporary possession and use of land should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>

Colwich to Yarlet	Bill Volume 1 Plans Sheet 1-24 Land Parcels 93, 158, 179, 190, 208, 213 and 220 Parish of Colwich	Trent & Mersey Canal	<p>PROXIMITY OF WORKS TO THE CANAL</p> <p>Land potentially required during construction and Extent of land potentially required during construction for mitigation planting</p> <p>Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E3, E4, E5, E6, E7, E8, E9 & E10 Map Number CT-05-212-L1 Grid E1 & E2</p> <p>Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the canal and to buried services below the Trust's property.</p> <p>Specifically, in relation to Volume 2: Map book, CA2: Colwich to Yarlet, Map CT-05-212 – L1 Grid E1 there is concern over the impact of the access route on the canal environment.</p>	<p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase such as matters relating to the creation of the access road into the construction site commencing at grid E1 on Map CT-05-212-L1.</p> <p>Buried Services below the Trust's property. The principles relating to buried services below the Trust's property should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
Colwich to Yarlet	Bill Volume 1 Plans Sheet 1-24 Work No. 38 Parish of Colwich	Trent & Mersey Canal	<p>BILL WORK NO. 38</p> <p>A temporary bridge over the Trent and Mersey Canal</p> <p>Land potentially required during construction</p> <p>Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E5</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Impact of works on the canal Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the canal and to buried services below the Trust's property. 	<p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>Buried Services below the Trust's property. The principles relating to buried services below the Trust's property should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>The Trust object to the diversion of the towpath due to the impact on our customers. The temporary bridge</p>

		<p>2. Diversion of towpath Volume 2: Community Area report CA2: Colwich to Yarlet states at 2.3.41 that: <i>“two temporary local diversions of Colwich Footpath 63 for a period of one year and six months. The first diversion will be 150m in length, located 150m north of the Great Haywood viaduct, diverting the footpath 40m west of its existing alignment around a temporary bridge to enable the site haul route to cross the Trent and Mersey Canal. The second will pass under the Great Haywood viaduct, diverting the footpath 40m west of its existing alignment”.</i> The diversions are also shown on Volume 2 Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E6 and E5. The towpath carries Colwich Footpath 63. Volume 2: Community Area report CA2: Colwich to Yarlet states at 14.3.16 in relation to the existing baseline of non-motorised users that: <i>“The route with the greatest usage was Colwich Footpath 63, which forms part of the Trent and Mersey Canal towpath adjacent to Great Haywood Marina, with 131 users observed during the survey day”.</i> Diversion of the towpath for 18 months is unacceptable to the Trust due to the impact on our customers, which may include horse drawn boats. The temporary bridge should be designed to allow the towpath to pass underneath it rather than go around it. Short term towpath closures / diversions will be all that is required.</p> <p>3. Visual Impact of the temporary bridge The temporary bridge lies within a sensitive landscape, with the canal being a conservation area and an important waterway destination. It also forms part of a wider sensitive landscape context. Its design needs to be appropriate.</p>	<p>should be designed to allow the towpath to pass underneath it rather than go around it. Short term towpath closures / diversions will be all that is required.</p> <p>Visual Impact of the temporary bridge. The principles applicable to the design of the temporary bridge should reflect the general approach to design of HS2/CRT Crossings and the detailed design principles in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase. Wherever possible a 10m buffer (with early supplementary planting if required) should be provided to protect the canal side vegetation within the land potentially required during construction on both sides of the canal.</p> <p>Combine work nos. 38 and 40 so that there is only one temporary crossing over the canal.</p> <p>Ensure adequate air draft for navigation and towpath clearance at the crossing of the canal. The principles relating to the air draft for navigation and towpath headroom should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
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			<p>4. Requirement for two temporary bridges Two temporary bridges are proposed Work No.38 and Work No. 40 in close proximity to one another. The Trust question the need for two bridges in this sensitive location.</p> <p>5. Adequate air draft and towpath headroom clearance is required. The air draft required for navigation shall be no less than 3m measured across the whole width of the navigation and a minimum of 2.75m for towpath clearance unless otherwise agreed by the Trust. The Bill Volume 2 Sheet 2-22 shows 9.69m from bridge surface to canal water level.</p>	
Colwich to Yarlet	Bill Volume 1 Plans Sheet 1-24 Work No. 40 Parish of Colwich	Trent & Mersey Canal	<p>BILL WORK NO. 40 A temporary bridge over the Trent and Mersey Canal</p> <p>Land potentially required during construction Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E6</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> Adequate air draft and towpath headroom clearance is required. The air draft required for navigation shall be no less than 3m measured across the whole width of the navigation and a minimum of 2.75m for towpath clearance unless otherwise agreed by the Trust. The Bill Volume 2 Sheet 2-22 shows 5.32m from bridge surface to the bottom of the canal. There is concern that there is a risk of insufficient headroom over canal which would restrict or prevent navigation. Impact of works on the canal. 	<p>The Trust object due to risk of insufficient headroom over canal for navigation. Ensure adequate air draft for navigation and towpath clearance at the crossing of the canal. The principles relating to the air draft for navigation and towpath headroom should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>Buried Services below the Trust's property. The principles relating to buried services below the Trust's property should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>

			<p>Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the canal and to buried services below the Trust's property.</p> <p>3. Diversion of towpath Volume 2: Community Area report CA2: Colwich to Yarlet states at 2.3.41 that: <i>"two temporary local diversions of Colwich Footpath 63 for a period of one year and six months. The first diversion will be 150m in length, located 150m north of the Great Haywood viaduct, diverting the footpath 40m west of its existing alignment around a temporary bridge to enable the site haul route to cross the Trent and Mersey Canal. The second will pass under the Great Haywood viaduct, diverting the footpath 40m west of its existing alignment"</i>.</p> <p>The diversions are also shown on Volume 2 Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E6 and E5. The towpath carries Colwich Footpath 63. Volume 2: Community Area report CA2: Colwich to Yarlet states at 14.3.16 in relation to the existing baseline of non-motorised users that: <i>"The route with the greatest usage was Colwich Footpath 63, which forms part of the Trent and Mersey Canal towpath adjacent to Great Haywood Marina, with 131 users observed during the survey day"</i>.</p> <p>Diversion of the towpath for 18 months is unacceptable to the Trust due to the impact on our customers, which may include horse drawn boats. Short term towpath closures / diversions will be all that is required.</p> <p>4. Visual Impact of the temporary bridge The temporary bridge lies within a sensitive landscape, with the canal being a conservation area and an important waterway destination. It also forms</p>	<p>The Trust object to the diversion of the towpath due to the impact on our customers. The temporary bridge should be designed to allow the towpath to pass underneath it rather than go around it. Short term towpath closures / diversions will be all that is required.</p> <p>Visual Impact of the temporary bridge. The principles applicable to the design of the temporary bridge should reflect the general approach to design of HS2/CRT Crossings and the detailed design principles in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase. Wherever possible a 10m buffer (with early supplementary planting if required) should be provided to protect the canal side vegetation within the land potentially required during construction on both sides of the canal.</p> <p>Combine work nos. 38 and 40 so that there is only one temporary crossing over the canal.</p>
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			<p>part of a wider sensitive landscape context. Its design needs to be appropriate.</p> <p>5. Requirement for two temporary bridges Two temporary bridges are proposed Work No.38 and Work No. 40 in close proximity to one another. The Trust question the need for two bridges in this sensitive location.</p>	
Colwich to Yarlet	Bill Vol. 1 Plan Sheet No. 1-24 Parish of Colwich	Trent & Mersey Canal	<p>COMBINED BILL WORK NOS. 37, 38 and 39</p> <p>Temporary Bridge over the Macclesfield to Colwich Line Temporary Bridge over the Trent and Mersey Canal Temporary Bridge over the River Trent</p> <p>Land potentially required during construction Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E5 & F5</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Number of temporary bridges. When combined with work nos. 40 and 41 there are proposed to be 5 temporary bridges, in close proximity to one another, in this sensitive landscape. 2. Visual impact. The Trust has concerns regarding the combined visual impact of work nos. 37, 38 and 39 and any associated earth works within a conservation area and sensitive landscape setting. 	<p>Rationalise the number of temporary bridges to minimise the visual impact in this sensitive landscape.</p> <p>Given the significance of the local landscape, the combined impact of any temporary bridge arrangement and adjoining embankment structures requires a bespoke, high quality, elegant, holistic design with fast growing native planting to the associated embankments. This planting should be established as early as possible.</p> <p>The principles applicable to the design of the temporary bridges should reflect the general approach to design of HS2/CRT crossings.</p>

Colwich to Yarlet	Bill Vol. 1 Plan Sheet No. 1-24 Parish of Colwich	Trent & Mersey Canal	<p>COMBINED BILL WORK NO's 40 AND 41</p> <p>Temporary Bridge over the Trent & Mersey Canal Temporary Bridge over the River Trent</p> <p>Land potentially required during construction Volume 2: Map book CA2: Colwich to Yarlet Map Number CT-05-212 Grid E6 & F6</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Number of temporary bridges. When combined with work nos. 37, 38 and 39 there are proposed to be 5 temporary bridges, in close proximity to one another, in this sensitive landscape. 2. Visual impact. The Trust has concerns regarding the combined visual impact of work nos. 37, 38 and 39 and any associated earth works within a conservation area and sensitive landscape setting. 	<p>Rationalise the number of temporary bridges to minimise the visual impact in this sensitive landscape.</p> <p>Given the significance of the local landscape, the combined impact of any temporary bridge arrangement and adjoining embankment structures requires a bespoke, high quality, elegant, holistic design with fast growing native planting to the associated embankments. This planting should be established as early as possible.</p> <p>The principles applicable to the design of the temporary bridges should reflect the general approach to design of HS2/CRT crossings.</p>
Colwich to Yarlet	Bill Vol. 1 Plan Sheet No. 1-24 Parish of Colwich	Trent & Mersey Canal	<p>CLOSURE OF THE CANAL</p> <p>Volume 2: Community Area report CA2: Colwich to Yarlet and Volume 2: Map Book CA2: Colwich to Yarlet Map No CT-05-212 Grid E5 & E6</p> <p>Volume 2: Community Area report CA2: Colwich to Yarlet states at 14.4.33 that: <i>"The Proposed Scheme will cross over the Trent and Mersey Canal on a viaduct at Great Haywood. The construction of the Proposed Scheme will require short closures (approximately 24hrs) of the Trent and Mersey Canal. HS2 Ltd will work with</i></p>	<p>The impact of the proposed diversion of the towpath has not been assessed. Diversion of the towpath is not acceptable to the Trust. The short-term nature of closures should equally apply to the canal and the towpath.</p> <p>The principles to be applied to any restrictions on navigation (including use of the towpath) should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>

			<p><i>the Canal & River Trust to ensure that any need for closures can be minimised. As the closures will be short term in nature, the effect on users of the waterway and the associated canal towpath will not be significant”.</i></p> <p>This statement is incorrect as it does not recognise that the towpath would be impacted if it were to be diverted as a result of the construction of the temporary bridges and viaduct (see Volume 2: Map Book, CA2: Colwich to Yarlet, Map No CT-05-212, Grid E5 & E6). The diversion is not acceptable to the Trust.</p>	
Colwich to Yarlet	<p>Bill Volume 1 Plans Sheet 1-24 Work No. 17</p> <p>Parish of Colwich</p> <p>Parish of Ingestre</p> <p>Parish of Tixall</p>	Trent & Mersey Canal and Staffs & Worcs Canal	<p>BILL WORK No.17 - A RAILWAY INCLUDING A VIADUCT OVER THE TRENT & MERSEY CANAL</p> <p>Volume 2: Map Book CA2: Colwich to Yarlet Map No CT-06-212 Grid B6, C6, D6, E6 & F6</p> <p>and</p> <p>Volume 2: Community Area report CA2: Colwich to Yarlet</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Impact of works on the canal Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the canal and to buried services below the Trust’s property. 2. Visual Impact of the Viaduct The Trent & Mersey canal is a conservation area in the location where the railway crosses the canal. Volume 5: Technical appendices CA2: Colwich to Yarlet Landscape and visual assessment and photomontages show that the canal lies within the Ingestre Riparian Alluvial Lowlands LCA. It identifies that the magnitude of change and level of effect will 	<p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>Buried Services below the Trust’s property. The principles relating to buried services below the Trust’s property should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>The quality and sensitivity of the landscape demands a high quality, bespoke, viaduct design. The principles applicable to the design of the viaduct where it crosses the Trent & Mersey Canal should reflect the general approach to design of HS2/CRT Crossings and the detailed design principles in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase. In this location, we wish to see only the beam of the crossing over the canal with piers set back behind the tree line.</p> <p>Minimise the impact on the existing vegetation in the canal corridor to mitigate the visual impact. Any canal side vegetation lost should be replaced.</p>

			<p>be major adverse (significant) from construction up until the last assessment which is at year 60. The impact is shown in Viewpoint 009.03.007: View north along the Trent & Mersey Canal towpath, Viewpoint 009.03.008: View north long Trent & Mersey Canal towpath and Viewpoint 009.03.021: View south-west along Trent and Mersey Canal towpath. The illustrated indicative design is a very heavy and inelegant structure over the line of the Trent & Mersey Canal. The photomontages highlight the visual impact of the noise barrier (in addition to the scale of the structural crossing). Viewpoint 009.03.021 indicates the scale of the structure across the valley (although doesn't show the termination into abutment). The viaduct structure's horizontal elements, beam and noise barrier, appear heavy and overly dominant. This will also have a major impact on the Trent Valley Landscape (visible from the canal corridor). The detail of the viaduct span needs to be appropriate. The design needs to consider the local historic environment and landscape, particularly given its lasting major adverse impact.</p> <p>The Bill Volume 2 Sheet 2-13 shows that the arrangement of the viaduct has regular piers. This results in a continuous rhythm of c.45m spans, a consequence of this is a deep beam to the significant span.</p> <p>The bridge hole spaces should be appropriately designed.</p> <p>The viaduct will also have a visual and acoustic impact on receptors in the marinas and moorings.</p> <p>The Viewpoint 009.03.007 photomontage indicates how critical the retention of the canal side tree canopy is to reduce the impact of the wider structure and to form a "closed crossing scenario" with the beam of the</p>	<p>Consideration should be given to whether the viaduct should be extended to the west.</p> <p>Either retention of the existing wooded edge to the canal in Volume 2: map Book CA2: Colwich to Yarlet Map No CT-06-212 Grid E6 and E5 or if the canal side woodland is to be lost this should be replaced.</p> <p>The principles to be applied to noise barriers should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p> <p>The Trust has a general requirement that the design of acoustic barriers should be subject to their satisfying the requirement of the EMR's, be low level and as close as reasonably practicable to the tracks to minimise visual impact from the canal. In this instance, we encourage innovation in the noise barrier design to reduce the visual impact whilst retaining the noise reduction.</p> <p>Consider appropriate planting to mitigate any wider landscape impact on the Staffordshire & Worcestershire Canal (especially the Broad Water).</p> <p>Ensure adequate air draft for navigation and towpath clearance at the crossing of the canal. The principles relating to the air draft for navigation and towpath headroom should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
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			<p>viaduct extending from the tree line with minimal visibility of abutments. Volume 2: map Book CA2: Colwich to Yarlet Map No CT-05-212 shows that a significant area of land to the north of the viaduct is land potentially required during construction. It is questioned how much of the existing vegetation will be retained. No replacement woodland planting is shown. In any event it is questioned how close to the railway any replacement planting will be allowed.</p> <p>Appropriate treatment of the void beneath the viaduct is required, particularly adjacent to the marina.</p> <p>The viaduct will also be visible from the Staffordshire & Worcestershire canal. This canal was specifically designed to integrate with the landscape with the introduction of an area of wide water to give it the appearance of a river. The Broad Water is a unique site. The introduction of HS2 to the Trent Valley may affect the appreciation and enjoyment of this peaceful and unusual setting on the canal network. Volume 2: Community Area report CA2: Colwich to Yarlet states at 7.5.11 "Potential opportunities for further mitigation such as planting and noise fencing have not been identified at this stage, but will be considered as part of the detailed design process".</p> <p>3. Adequate air draft and towpath headroom clearance is required. The air draft required for navigation shall be no less than 3m measured across the whole width of the navigation and a minimum of 2.75m for towpath clearance unless otherwise agreed by the Trust. The Bill Volume 2 Sheet 2-13 shows 10.65m clearance over the canal.</p>	
Colwich to Yarlet	Parish of Colwich	Trent & Mersey Canal	BATCHING PLANT, TRENT SOUTH MAIN COMPOUND AND TRENT SOUTH EMBANKMENT TEMPORARY WORKER ACCOMMODATION	The vegetation along western side of the Macclesfield to Colwich Rail line should be retained and supplemented

			<p>Volume 2: Map book CA2: Colwich to Yarlet Map CT-05-212 Grid F2, F3, F4 and F5</p> <p>To the east of the canal and Hoo Mill marina there is an extensive compound, batching plants and workers accommodation. The Trust has concerns regarding this proposal:</p> <p>The canal is a conservation area where it runs parallel with these compounds. The visual impact of these construction related activities is largely mitigated by the vegetation along the Macclesfield to Colwich Railway line and canal side vegetation in E6 and E5.</p>	<p>to mitigate the visual impact on the canal during construction.</p> <p>A 10m buffer of canal side vegetation should be retained within the land potentially required during construction on the eastern side of the canal.</p> <p>HS2 should discuss mitigation for the marina with the marina operator.</p>
Colwich to Yarlet	Parish of Colwich	Trent & Mersey Canal	<p>WETLAND CREATION</p> <p>Volume 2: Map book CA2: Colwich to Yarlet Map CT-06-212 Grid D3, D4, D6, D7, E3, E4, E5, E6 and E7</p> <p>This wetland habitat creation is in close proximity to the canal.</p>	<p>The Trust would like to input into the species proposed for this wetland habitat creation.</p>
Colwich to Yarlet		Trent & Mersey Canal	<p>ECOLOGY & BIODIVERSITY</p> <p>Volume 2: Community Area report CA2: Colwich to Yarlet</p> <p>Volume 2: Community Area report CA2: Colwich to Yarlet paragraph 8.3.29 Table 16 of protected and notable species does not mention the records which the Trust holds for kingfisher along the Trent & Mersey Canal at Hoo Mill Bridge and Daubentons bat at Pasturefields Bridge further north.</p>	<p>Wherever possible a 10m buffer (with early supplementary planting if required) should be provided to protect the canal side vegetation and ecology within the land potentially required during construction on both sides of the canal.</p>

			<p>These features and the canal corridor itself need to be protected from the construction impacts alongside the canal including the compounds shown on Volume 2: Map book CA2: Colwich to Yarlet CT-05-212.</p>	
Colwich to Yarlet	Parish of Colwich	Trent & Mersey Canal	<p>BALANCING POND AND RAILWAY DRAINAGE</p> <p>Volume 2: Map book CA2: Colwich to Yarlet Map CT-06-212 Grid G7 & G8</p> <p>The railway drainage discharges into a brook that then passes under the Trent & Mersey Canal via the Trust's culvert 72 (our reference TM-089-006). This will result in increased flows through the culvert with consequential increase in wear and tear.</p> <p>Further detail about the route of the drainage from the balancing pond is required. Will this also to pass through the culvert?</p>	<p>To mitigate the risk to the Trust of the additional flows through the culvert and the consequential increase in wear and tear the Trust will require HS2 to acquire the culvert.</p>

Question 4

Please let me know your comments on Volume 3: Route-wide effects

No comments

Question 5

Please let us know your comments on Volume 4: Off-route effects and map book

Location	Canal	Issue/Comments	Action
<p>Bill Volume 1: Plans Sheet 1-69 Land Parcel 1</p> <p>Parish of Moston</p>	<p>Trent & Mersey Canal</p>	<p>ACQUISITION OF LAND AND RIGHTS</p> <p>Land potentially required during construction Volume 4: Map book Off-route effects Map Number CT-05-244 Grid D5</p> <p>It is proposed that the purpose for which parcel 1 may be acquired or used is for the provision of railway infrastructure and access. The Trust is listed as an occupier in the Book of Reference.</p> <p>The acquisition/use of a section of canal and the towpath is not acceptable to the Trust as we need to maintain operation of the canal and towpath during construction.</p>	<p>The Trust object due to the impact on our customers. The principles to be applied to the acquisition of land and rights should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
<p>Rookery Bridge RRAP Satellite Compound</p>	<p>Trent & Mersey</p>	<p>PROXIMITY OF WORKS TO THE CANAL</p> <p>Volume 4: Map Book Off-route effects CT-05-244 Grid C6, D5 & D6</p> <p>The Trust has concerns regarding this proposal:</p> <ol style="list-style-type: none"> 1. Work could be being carried on in close proximity to the canal and therefore there is concern over the possible physical impact on the canal and to buried services below the Trust's property. 2. There is a strip of land excluded from the Bill Limits along the canal. Within this there are two promontories of land. The Trust requires clarity on how these are to be treated. 	<p>Notice of works and plan approval of works by the Trust. The principles relating to Notice of works and plan approval of works by the Trust should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase. Specific matters may include appropriate hoarding to the canal side to screen activity in the depot from the canal; all existing vegetation to the canal side should be retained to reduce the visual impact of the Depot works.</p> <p>Buried Services below the Trust's property. The principles relating to buried services below the Trust's property should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>

		<p>3. Rookery Bridge (Trust ref: TM-035-002) in grid C6 is owned by the Trust. There may be damage from construction traffic using the bridge to gain access to the working area.</p>	<p>Clarification is required on how the two promontories of land excluded from the Bill limits are to be treated.</p> <p>To mitigate impact of construction traffic using the Trust's bridge the principles relating to surveying and remedying identified impacts should reflect those in the agreement between the Trust and the Secretary of State for HS2 Phase 1, along with any specific interface requirements identified as a result of this phase.</p>
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Question 6

Please let us know your comments on Volume 5: Technical appendices and map books

Document	Paragraph	Issue/comment	Action
Volume 5: Technical appendices CA2: Colwich to Yarlet	Numerous references in the appendix	The text assumes that the canal is likely to be lined and hence has limited or no connectivity of water issues affecting the HS2 route. This may not be appropriate.	It would be useful for HS2 to do sensitivity analysis, with input from the Trust on the likely range of canal leakage rates, to see what scale of impact there would be if the canal has a greater degree of connectivity via the lack of lining or a poor lining.
Volume 5: Technical appendices Sound, noise and vibration Sound, noise and vibration methodology, assumptions and assessment (SV-001-000) Annex G	2.2.3 and 2.2.4	These statements do not appear to reflect the varied nature of mooring. People may visit their mooring without cruising. Generally, boaters can moor on the towpath side of the canal for up to 14 days at a time.	For information.
	4.2.2	Embedded Mitigation Proposals have not included considering waterborne transport	Recommend that waterborne transport is given detailed consideration.

Volume 5: Technical appendices Traffic and transport Transport Assessment (TR- 001-000) Part 1	4.2.2	Embedded Mitigation Proposals have not included considering canal towpaths a sustainable access routes for workers	Recommend that use of towpaths is given detailed consideration as part of the Workforce Travel Plan
	5.3.119	Surveys undertaken as part of the HS2 Phase One baseline assessment indicated a frequency of five boats a day using this stretch of the canal. However, it is understood that the area around Fradley junction and the marina is very popular with tourists during the spring and summer months particularly at weekends. These numbers look low.	For information: Annual lockage data for Woodend (Lk20) and Colwich (Lk21) on the Trent & Mersey canal is: Year Woodend Colwich 2014 – 7068 8239 2015 – 7009 8348 2016 – 6828 7970 Of all the monitored locks across our network, Colwich was the 4 th busiest lock in 2016, and Woodend was the 7 th busiest. The Long-Term Average weekly lockage at Colwich shows a summer peak of 357 lockages per week, so that is around 51 lockages per day. That could be as many as 100 boat movements per day if the locks are fully utilised.
Volume 5: Technical appendices Traffic and transport Transport Assessment (TR- 001-000) Part 2	7.2.87	Compared to the existing baseline, no (waterway and canal) changes are assumed.	Temporary acquisition of the canal and towpath is planned near Fradley, we consider this to be a change
	7.4.137	No diversions or closures of navigable waterways or canals are required during construction and consequently there are no construction impacts on navigable waterways in the Fradley to Colton area.	Temporary acquisition of the canal and towpath is planned near Fradley, we consider this to be a change
	7.6.48	The Proposed Scheme makes no changes to waterways or canals in CA1 and consequently, has no impact upon them.	Temporary acquisition of the canal & towpath is planned near Fradley we consider this to be a change
	8.2.62	Compared to the existing baseline, no changes are assumed.	Temporary towpath diversions are planned around the Gt Haywood viaduct, we consider this to be a change
	8.4.83	Doesn't reference the 131 users reported on the canal towpath. Mentions a minor diversion of the towpath.	The towpath needs to remain open during construction and operation.
	8.4.85	Doesn't mention that the proposal is to divert the towpath.	The towpath needs to remain open during construction and operation.
Volume 5: Technical appendices	4.4.1	Contractors method statements	The Trust would like to be involved in the decision-making process to determine which operations need a method statement.

Draft Code of Construction Practice (CT-003-000)	5.2	Working Hours	The actual working hours (when there will be noise, dust etc) are 0700-1900 M-F and 0700-1400 Sat. In addition, contractors will be allowed to carry out “repairs or maintenance of construction plant “(5.2.10) on Saturday afternoons or Sundays between 1000 and 1700. This means there could be work going on seven days a week up to 7pm on weekdays and 5pm on weekends. This highlights the need for appropriate noise mitigation proposals in the construction planning.
	8.1.3	Cultural Heritage management	The Trust would like to be involved with the preparation of the GWSI:HERD as we are the third largest owner of listed buildings after the National Trust and the Church of England.
	13.1.1	Noise and vibration management	The Trust would like to see Residential mooring sites specifically identified here.
	14.2.7	Traffic and transport	The Trust owns around 1000 public road bridges. Many of these are historic structures that are vulnerable to impact damage. We would want to see a requirement to take all reasonable measures to route HS2 traffic way from the Trusts historic bridges.
Volume 5: Technical appendices Borrow pits restoration strategy (CT-009-000)	1.2.3 & others	Dredged materials from inland waterways is typically fine, silty material for which detailed characterisation and analysis is done prior to the dredging operation. Disposal is often to adjacent and agricultural land, but this is not always practical, and sometimes goes to landfill. During the period of construction of the scheme, there are likely to be opportunities for material dredged from the canal to be transported from the canal to a borrow pit which could contribute to restoration, and avoid unnecessary landfill disposal.	For information
	1.4.1	There will be further consultation with a wide range of relevant stakeholders as part of the preparation of the site specific restoration plan for each borrow pit.	The Trust would wish to be included in consultations on site specific restoration plans for each borrow pit.
	5.2.4	A specification detailing the acceptable backfill material properties will be defined at detailed design.	The Trust propose that consideration that the use of dredged material from maintenance dredging's of canals be included within this specification.

<p>Background Information and Data CA1: Fradley to Colton Hydraulic modelling report – River Trent and Bourne Brook (BID-WR-004-002)</p>	<p>Numerous references in the report</p>	<p>Accounts for the canal passing over the Pyford Brook, via an aqueduct, in the hydraulic modelling of the flood extent. It does not mention if the Trent & Mersey Canal could introduce additional flood flows (two canal weirs are mentioned, but not modelled in further details. It is unclear if these are waste weirs from the canal).</p>	<p>The report highlights the need for more detailed modelling as the scheme design progresses. HS2 should verify if the Trent & Mersey Canal waste weirs will pass water into Pyford Brook. The Trust can provide advice on levels/dimensions of weirs (if known) and potential flow rates.</p>
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