

The Planning Inspectorate  
Temple Quay House (2 The Square)  
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Bristol  
BS1 6PN

**Our ref:** LT/2019/124440/01-L01  
**Your ref:** A38 NSIP  
**Date:** 31 July 2019

Dear Sir/Madam

## **APPLICATION BY HIGHWAYS ENGLAND FOR A38 DERBY JUNCTIONS IMPROVEMENTS**

Please find enclosed our relevant representation for the A38 Highways Improvements.

### **The Role of the Environment Agency**

The Environment Agency has a responsibility for protecting and improving the environment, as well as contributing to sustainable development.

We have three main roles:

We are an **environmental regulator** – we take a risk-based approach and target our effort to maintain and improve environmental standards and to minimise unnecessary burdens on business. We issue a range of permits and consents.

We are an **environmental operator** – we are a national organisation that operates locally. We work with people and communities across England to protect and improve the environment in an integrated way. We provide a vital incident response capability.

We are an **environmental advisor** – we compile and assess the best available evidence and use this to report on the state of the environment. We use our own monitoring information and that of others to inform this activity. We provide technical information and advice to national and local governments to support their roles in policy and decision-making.

One of our specific functions is as a Flood Risk Management Authority. We have a general supervisory duty relating to specific flood risk management matters in respect of flood risk arising from Main Rivers or the sea.

### **Outstanding information and issues of concern**

Our relevant representation outlines where further work, clarification or mitigation is required to ensure that the proposal has no detrimental impact on the environment. Some of our comments raise concerns which we believe need to be addressed prior to a development consent order being granted. In other instances, it may be acceptable for additional information to be provided later, by requirement. We would particularly highlight our comments on Groundwater and Contaminated Land (Sections 4.0 – 10.0) and Fisheries (Section 3).

Please do not hesitate to contact me if you require any further information. We look forward to continuing to work with the applicant to resolve the matters outlined above, and to ensure the best environmental outcome for this project.

Yours faithfully

**Mr Joseph Drewry  
Planning Specialist**

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**Relevant Representations  
On behalf of the Environment Agency**

The Environment Agency has undertaken extensive pre application work with Highways England and their appointed consultants in respect of the matters of flood risk and biodiversity.

**1.0. Flood Risk**

1.1 Having read the Draft Development Consent Order (DCO) in conjunction with the FRA for the Little Eaton junction of the A38 the Environment Agency are satisfied that proposed mitigation measures are robust. The Environment Agency have reviewed and agreed with the hydraulic model outputs for the Little Eaton junction and the proposed mitigation has been produced in line with the modelled outputs.

**2.0. Biodiversity**

2.1 The Environment Agency have reviewed chapter 8, Biodiversity, of the Environmental Statement. We are satisfied that biosecurity has been considered (especially in terms of crayfish plague) and that there will be a management plan put in place.

2.2 We are satisfied that ecological monitoring will take place prior to construction including additional surveys, during construction and that there will be a 5 year aftercare period following completion of scheme construction.

2.3 We are satisfied that a precautionary mitigation strategy has been proposed for if Water Vole are found within the Dam Brook. We would want to be updated on further survey work undertaken on Dam Brook.

2.4 Throughout chapter 8, there is reference to a proposal to create 2 ecological/wildlife ponds (Table 8.15 Standing Water) as part of the Dam Brook realignment. These are also described as backwaters on other pages. We would like to know whether these ponds are going to be online, and whether there is potential for offline ponds to be created to benefit different species?

**3.0. Fisheries**

3.1 We welcome the opportunity to review the proposed plans for fisheries as part of this NSIP proposal. We have the following comments that will need to be taken into account.

3.2 Any in-channel works must not be carried out during fish spawning (closed) seasons. In this case we have both salmonids (brown trout) and coarse fish present, therefore both seasons will need to be considered. The closed season for trout is 8th October-15th March and the closed season for coarse species is 15th March-15th June. We would expect the coarse closed season rules to be applied, however the substrate in Dam Brook is unlikely to be suitable for trout spawning. We can assess the situation nearer the time if avoiding works during the trout closed season can't be avoided and ask to be contacted if this situation arises.

3.3 An additional area to consider when electric fishing and translocating fish is temperature. Trout are especially prone to additional stress in higher summer temperatures, therefore it is recommended to avoid these activities in air temperatures above 18°C if possible. Coarse fish can be a little more tolerant, but it is still best avoided in the interest of fish health and their ability to recover. Ideally the temperature of the donor and receiving waters should be within a couple of degrees of each other to avoid thermal shock to the fish.

3.4 Before de-watering the channel, all fish must be rescued and translocated in advance. We are satisfied by the method (electric fishing) and that sufficient research has already been conducted to identify suitable relocation sites with similar habitats. The river Derwent supports substantial populations of brown trout and as Dam Brook and Watermeadow Ditch are connected to the Derwent, they are regarded as tributaries and the translocation of trout to the Derwent shouldn't be an issue.

3.5 An equipment permit will need to be applied for (from the EA Fish Movements team) before using electric fishing equipment, however a site permit is not required to move the fish. In this instance it would be treated as a fish rescue within the same waterbody.

3.6 There is potential for runoff of sediment/silt into the watercourse from operations on the riverbanks. We are satisfied that there is effective water pollution prevention control in place to minimise this risk (as illustrated in Chapter 13), however we would recommend a watching brief during operations, whereby water quality parameters (specifically temperature, dissolved oxygen and pH levels) are monitored using a YSI multimeter before, during and after the works. Silt curtains also add an additional safety measure to this kind of operation, when focusing on minimising mobilisation of fine sediment and avoiding smothering eggs/asphyxiation of fish.

3.7 If at any point during the operation, dead or dying fish are observed, all work must stop immediately. The incident must be reported to the Environment Agency's Incident Hotline (0800 80 70 60) and methodology reviewed.

3.8 The Environment Agency would be interested to attend the works when electric fishing and relocation are to take place and ask to be informed when this is to be undertaken.

#### **4.0. Groundwater & Contaminated Land**

4.1. Chapter 10 of the Environmental Statement ultimately suggests mitigation measures in the form of further investigation and remedial measures to reduce the impact on controlled waters from the development. Whilst we have no objection to the principle of this proposal, the chapter summarises the underpinning investigation and assessment reports which are provided in Appendix 10.

4.2. We have reviewed the Preliminary Sources Study, its associated addendum report, and the Groundwater Investigation Report submitted within Appendix 10, and have a number of comments on the reports, as outlined below.

## **5.0. Preliminary Sources Study**

5.1. This report uses a range of different data sources to characterise the environmental setting in each junction, and potential contamination sources. Table 7.1 presents a Geotechnical Risk Register which highlights contamination risks which need to be further investigated. However it does not identify potentially complete pollutant linkages using the Source-Pathway-Receptor framework or provide a clear Conceptual Site Model as set out in our CLR11 guidance.

## **6.0. Ground Investigation Report**

6.1. A number of tables within Section 6 of this report summarise data collected from the site investigation, including soil leachability analysis, groundwater quality data, and surface water quality data. The report compares the calculated UCL95 value of the data to a chosen environmental standard. The use of statistical analyses is not always appropriate when site investigations have targeted sources of potential contamination, or for example where the samples have been collected from differing geologies or soil horizons.

6.2. In line with CLR 11, (and its new replacement guidance document Land Contamination: Risk Management), Site Investigations should aim to provide additional information on potentially complete pollutant linkages identified in a preliminary risk assessment. Assessment/ interpretation of this data should be made in the context of those linkages.

6.3. Further, whilst these tables provide a “snapshot” indication of the range of contamination identified, it does not provide an account or description of the spatial distribution of the results.

6.4. We are not confident that all of the data in the screening tables has been assessed (e.g. there are some high concentrations of TPH bands from exploratory hole location BK14). We do not understand why the concentrations of 4-Bromofluorobenzene and Dibromofluoromethane have been provided in the screening table, as we assume these were used as standards during laboratory analysis. The results of analysis should also be submitted as data sheets provided by the laboratory.

6.5. Given the points that we have raised at this stage in the risk assessment process we will not be providing comment on the controlled waters Detailed Quantitative Risk Assessment until our comments have been addressed. It is worth

noting however that a DQRA must have supportive dialogue and justification of the parameters used and the potentially complete pollutant linkage being tested.

## **7.0. Draft Development Consent Order**

7.1 Requirement 8 within Schedule 2 of the draft Development Consent Order (DCO) makes reference to the production of contamination risk assessment in respect of controlled waters.

7.2. The actions required given our comments above will be covered by requirement 8, but we would point out that these risk assessments must be produced in line with new Environment Agency webpage guidance “Land Contamination: Risk Management”, which can be accessed via the link below:

<https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>

7.3. The wording of requirement 8 does not refer to the production of a verification report which provides a record of the remedial activities undertaken, and demonstrates the effectiveness of the remedial measures. This is an essential part of the risk management process and we would recommend that the requirement to produce a verification report should be included within paragraph 8 of schedule 2 part 1 of the DCO.

7.4. At this stage in the process it is clear that both the applicant and the Environment Agency agree that location-specific piling risk assessments will be necessary to prevent the potential for pollution of controlled waters during piling. We interpret from the report that these assessments will take place at the detailed design stage, and therefore do not need to be addressed with a requirement on the DCO.

## **Groundwater Informatives**

### **8.0. Human Health Risks**

8.1. The current proposal involves interfering with historic landfill materials associated with the former Rowditch tip. We understand that a passive gas system is in place for this landfill site, and therefore proposals must ensure they do not disrupt this system. The risks associated with the disruption of this system are likely to relate to human health receptors, and therefore we recommend that the Local Authority Environmental Health Department are aware of this proposal.

### **9.0. Model Procedures and good practice**

9.1. We recommend that developers should:

- Follow the risk management framework provided in [Land contamination: risk management](#), when dealing with land affected by contamination
- Refer to our [Guiding principles for land contamination](#) for the type of information that we require in order to assess risks to controlled waters from the site - the local authority can advise on risk to other receptors, such as human health

- Consider using the [National Quality Mark Scheme for Land Contamination Management](#) which involves the use of competent persons to ensure that land contamination risks are appropriately managed
- Refer to the [contaminated land](#) pages on gov.uk for more information

## **10.0. Dewatering**

10.1. The submitted information refers to the potential for dewatering operations during construction. Since 1<sup>st</sup> January 2018, most previously exempt water abstractions (such as dewatering) require an abstraction licence. Please use the link below for more information on abstraction licences.

<https://www.gov.uk/guidance/water-management-abstract-or-impound-water#abstractions-that-need-a-licence>

## **11.0. Protective Provisions**

11.1. Highways England seeks to disapply various pieces of legislation (Article 3 of the draft Development Consent Order submitted with the application). We are currently considering our position in relation to the legislation which is relevant to the Environment Agency. We will be responding to the applicant on these issues in due course and will provide the Examining Authority with an update. However, at this stage we would advise that Highways England have not incorporated the current version of the Environment Agency's protective provisions within Schedule 9 Part 3 of the draft DCO. This will need to be addressed prior to finalisation of the DCO.

## **12.0. Water Quality (Surface)**

12.1. After review of chapter 13 of the Environmental Statement, the information adequately addresses and water quality issues that were previously raised and we have no further comments to raise.

## **13.0 Waste and Permitting**

13.1. In terms of the Environmental Statement, we don't have anything particular to add, except that we would like to see greater use of recycled materials within the scheme, than currently appear to be proposed. The ES states that a target of 14% recycled aggregate will be pursued for this scheme. This is the target set for construction projects in the East Midlands. However, these targets which are set for each region vary with some being significantly higher than that set for the East Midlands. For example, East of England and Yorkshire and the Humber have targets of 31% recycled aggregate, whilst London has a target of 48%. We would encourage a higher recycled target aggregate to be aimed for than is currently specified.

13.2. We are pleased to see that the applicant intends to produce a Site Waste Management Plan (SWMP) for the scheme. This should not only cover the recycling and disposal of waste, but also consider waste minimisation in terms of design and

construction of the scheme, including using construction methods and practices which will minimise waste and spoilage or damage to materials.

13.3. The SWMP should also consider to whom waste will be passed, and ensure that appropriate checks are made and recorded on the waste carriers and sites to whom the waste will be transferred. This is to ensure that waste is only passed to persons appropriately authorised to receive it. This is a requirement under Duty of Care (Section 34 Environmental Protection Act 1990).

13.4. In terms of the excavation of waste materials from the Kingsway Junction area, a large proportion of this material is waste formerly deposited in a landfill site. The current proposal is for this material to be disposed of to landfill, and this may be the best overall option. However, other options such as Complex Sorting are potentially available to deal with waste from former landfill sites, including those in which solid asbestos (eg cement bonded or asbestos insulation board) have been deposited, and should be considered. The current ES does not consider the practicality or efficacy of Complex Sorting for remediating wastes from the former landfill area. Such methods may recover additional quantities of waste which would be suitable for use, and help reduce the amount of waste requiring disposal. This in turn would reduce the importation requirement of primary or secondary materials to complete the scheme.

13.5. The use of recycled materials or waste materials in the scheme would require an exemption or an environmental permit, or the use of an end of waste quality protocol, such as the Wrap Quality Protocol for Aggregates or the CL:AIRE Definition of Waste Development Industry Code of Practice.

13.6. Whilst the use and deposit of waste materials to complete the scheme could potentially be undertaken using the CL:AIRE Definition of Waste Code of Practice, any treatment of waste to make it suitable for use would need to be undertaken under an appropriate environmental permit or mobile plant permit. Different types of mobile plant permit are available for specific activities involving waste treatment or waste use. The appropriate permit would be required for the particular activity.

13.7. If the CL:AIRE Definition of Waste Code of Practice was to be used, then the applicant is advised to contact the Environment Agency to discuss their plans.