

Planning Inspectorate Our ref: NA/2019/114837/01-L01 Room 3/20 Eagle Wing Your ref: TR010031

Date:

Temple Quay House (2 The Square) 04 February 2020

Temple Quay Road **Bristol** Avon BS1 6PN

Dear Sir/Madam

PLANNING ACT 2008 – SECTION 88 AND THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010: APPLICATION BY HIGHWAYS ENGLAND FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE A1 BIRTLEY TO COAL HOUSE IMPROVEMENT **SCHEME (DEADLINE 1: WRITTEN REPRESENTATIONS)**

In accordance with the timetable in Annex A of your letter dated 28 January 2020 please find enclosed our written representations for this Development Consent Order (DCO) on behalf of the Environment Agency. If you have any questions or require any clarification on the points below, please do not hesitate to contact me.

Yours faithfully

Lucy Mo Planning Technical Specialist - Sustainable Places

Direct dial 020847 46524 Direct e-mail lucy.mo@environment-agency.gov.uk





A1 Birtley to Coal House Improvement Scheme DCO Application Planning Inspectorate Reference: TR010031

Summary of Written Representations On behalf of the Environment Agency (EA)

Our response is based upon the DCO information originally submitted and accepted by the Inspector.

Flood Modelling

The Environmental Statement (ES) acknowledges that there are several references within the ES to the flood zone data and maps which have been superseded. In particular, section 2.5.13 of the ES states that "the EA have informed WSP that the published Flood Map for Planning has been superseded by the River Team flood model, the results of which should be used in its place. This new mapping has yet to be published". The EA are still in the process of verifying the updated flood model. It is estimated that this modelling work will be completed within 3 months. However, this cannot be guaranteed. If the baseline flood model is deemed to be acceptable, our flood maps will be updated to reflect the updated modelling. Our flood maps are updated every 3 months.

Temporary possession of the land containing EA gauging station and telemetry software

The EA currently leases a plot of land from Gateshead Council for flood risk purposes (grid reference NZ2496358470). Situated at this location is a flood risk gauging station and telemetry software that serves the Team Valley and the wider area. This infrastructure allows us to understand the river levels along the River Team and is used to issue our flood alerts and warnings as part of our incident response to flooding.

Drawing title 'land Plan sheet 3 of 5 Regulation 5(2)(i) HE551462 /WSP/LS1' dated 24/7/2019 (located within document 2.2. Land Plan) illustrates the temporary possession and use of land, and the permanent acquisition of rights over land. Areas 3/3x and 3/3y show the temporary possession of land. This is also the location of our gauging station and telemetry software. No details have been provided by the applicant regarding what this land will be used for, the types of works to be undertaken and the timescales for any works. This information must be submitted as part of the DCO application. As this is an essential piece of infrastructure for the EA, we will not **allow any works or temporary possession of this land.**

The information submitted to date by the applicant does not provide us with any detail to reassure us that there will be no impact on our gauging station and telemetry software. This information must be submitted as part of the DCO application. It should be noted that we would expect the applicant to fund the

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work our Hydrology team will need to do to recalibrate the gauge. We would welcome further discussions with the applicant regarding this issue or the inclusion a requirement within the DCO regarding this matter.

Flood Plain compensation

It is vital that the flood plain compensation (as a result of the new piers in the floodplain) is in place prior to the implementation of the piers. Further discussions with the applicant is required on this matter.

Flood Risk Model

As part of the DCO application, the applicant will need to submit a flood risk model which assesses the flood risks from the proposed development.

Flood Risk Activity Permit (FRAP)

The applicant has not requested to disapply the need for a FRAP. Therefore, a FRAP will be required for the constructions works next to the River Team and flood plain.

Water voles

A risk assessment is required to assess how the proposal will affect water vole, and to provide clarification between the statements in Biodiversity Chapter (Chapter 8) and Appendix 8.1 Preliminary Ecological Appraisal. This assessment will need to demonstrate how the risk to water voles will be controlled. Where possible, it should identify opportunities for environmental improvements. Until this information is provided, the risk posed by the proposed development to water voles is unacceptable.

Landscape and Ecological Management Plan

We recommend the inclusion of a requirement in relation to the provision of a landscape and ecology management scheme as part of the DCO.

Legally Protected Species and Habitat Protection Plan

We propose the inclusion of the following requirement as part of the DCO in relation to the provision of a Construction Environmental Management Plan detailing the protection and mitigation of damage to fish species, great crested newt and otter, as well as their habitat.

Sedimentation and Biosecurity

We recommend that a detailed specific Method Statement on pollution prevention and sedimentation be written and implemented during construction phases. This should also include biosecurity measures to prevent the spread of non-native invasive species, as well as pathogens harmful to biodiversity.

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Mine water

Mine water is currently being actively pumped by the Coal Authority at a site (Kibblesworth) near Birtley. There is a risk that shallow groundwater may be present, now or in future, along some parts of the proposed route. We recommend that the applicant considers whether mine water may pose a risk to the proposed scheme and that a risk assessment is undertaken.

Statement of Common Ground (SoCG) Update

The applicant has not yet provided the EA with a draft SoCG to review.

Written Questions

We will provide our response to the Examining Authority's written questions and requests for information by Tuesday 25 February 2020 (Deadline 2).





A1 Birtley to Coal House Improvement Scheme DCO Application Planning Inspectorate Reference: TR010031

Written Representations On behalf of the Environment Agency (EA)

Our response is based upon the DCO information originally submitted and accepted by the Examining Authority. We have identified the following the issues and concerns regarding the proposed DCO:

Flood Modelling

The Environmental Statement (ES) acknowledges that there are several references within the ES to the Flood Zone data and maps which have been superseded. In particular, section 2.5.13 of the ES states that "the EA have informed WSP that the published Flood Map for Planning has been superseded by the River Team flood model, the results of which should be used in its place. This new mapping has yet to be published". The EA are still in the process of verifying the updated flood model. It is estimated that this modelling work will be completed within 3 months. However, this cannot be guaranteed. If the baseline flood model is deemed to be acceptable, our flood maps will be updated to reflect the updated modelling. Our flood maps are updated every 3 months.

Temporary possession of the land containing EA gauging station

The EA currently leases a plot of land from Gateshead Council for flood risk purposes (grid reference NZ2496358470). Situated at this location is a flood risk gauging station and telemetry software that serves the Team Valley and the wider area. This infrastructure allows us to understand the river levels along the River Team and is used to issue our flood alerts and warnings as part of our incident response to flooding.

Drawing title 'land Plan sheet 3 of 5 Regulation 5(2)(i) HE551462 /WSP/LS1' dated 24/7/2019 (located within document 2.2. Land Plan) illustrates the temporary possession, and the permanent acquisition of rights over land. Areas 3/3x and 3/3y show the temporary possession of land. This is also the location of our gauging station and telemetry software. It appears sections 3/3x and 3/3y will be used temporarily during the construction of the road scheme. However no details have been provided by the applicant regarding what this land will be used for, the types of works to be undertaken and the timescales for any works. This information must be submitted a as part of the DCO application. As this is an essential piece of infrastructure, we will not allow any works or temporary possession of this land as it may affect our ability to undertake our statutory duties and powers.

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There are limited flood risk impacts associated with the proposed bridge pillar extension and the proposed mitigation next to the River Team. However, the applicant has failed provide any assessment or information regarding the potential impact the proposed works will have on our flood risk gauging station and telemetry software, and how the rating curve may need to be changed due to the increase in channel levels for certain return periods i.e. how the development will affect the accuracy and the performance of the telemetry to read the river levels. This information is fundamental to the development of hydraulic models and the issuing of flood alerts and warnings.

The information submitted to date by the applicant does not provide us with any detail to reassure us there will be no impact on our gauging station and telemetry software. This information must be submitted as part of the DCO application. It should be noted that we would expect the applicant to fund the work our Hydrology team will need to do to recalibrate the gauge. We would welcome further discussions with the applicant regarding this issue or the inclusion a requirement within the DCO regarding this matter.

Flood plain compensation

It is vital that the flood plain compensation (as a result of the new piers in the floodplain) is in place prior to the implementation of the piers. However, this has not been suggested in the submission details submitted to date. Further discussions with the applicant is required on this matter.

Flood Risk Model

In 2019, the EA undertook a review of the Integrated Catchment Model (which included the two scheme options). Our review identified a number of concerns in relation to the hydrology element of the model. Furthermore, a number of model run files were missing. Consequently, a detailed model reviewed could not be undertaken due to the missing modelling files. The applicant will need to submit the revised flood risk model for the EA for review as part of the DCO application.

Flood Risk Activity Permit (FRAP)

The applicant has not requested to disapply the need for a FRAP. Therefore, a FRAP will be required for the any constructions works next to the River Team and floodplain.

Water voles

The applicant has failed to provide an adequate assessment of the risks to water vole.

The Biodiversity Chapter of the ES which assesses the scheme states that 'a habitat assessment was completed as part of the extended Phase I habitat survey and habitats within the Scheme Footprint were considered unsuitable. The River Team has negligible potential to support water vole on this particular

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stretch' (Section 8.7.62). This statement suggests that there is no opportunity for water vole to be present on site. However, appendix 8.1 Preliminary Ecological Appraisal (which provides the information for the assessment on water vole for the Biodiversity Chapter) states that 'the River Team has shallow sparsely vegetated banks with a gentle gradient that have the potential to support burrowing water vole, however as mentioned above, the watercourse is subject to higher levels of disturbance' (Section 3.4.25). This statement contradicts the Biodiversity Chapter in the ES, which does not address the suitable habitat to support burrowing water vole.

Further information is required regarding the assessment for water voles. Firstly, clarification is needed on whether the site has potential for this species (addressing statements in Biodiversity Chapter (Chapter 8) and Appendix 8.1 Preliminary Ecological Appraisal). If any risk of presence is identified, further survey will be required.

A risk assessment is required to assess how the proposal will affect water vole and to provide clarification between the statements in Biodiversity Chapter (Chapter 8) and Appendix 8.1 Preliminary Ecological Appraisal. This assessment will need to demonstrate how this risk will be controlled. Where possible, it should identify opportunities for environmental improvements. Until this information is provided, the risk posed by the proposed development is unacceptable.

To overcome this issue, the applicant will need to carry out and submit an ecological assessment on water vole prior to the development of any detailed plans. The risk assessment (and survey, if required) should:

- Identify whether water vole is or has potential to be present on the scheme.
- If water vole has potential to be present, a scheme to survey water vole
 prior to construction will be devised as part of the scheme and submitted to
 the local planning authority
- It will reassess the importance of water vole at a local, regional and national level if needed
- Identify the impacts of the scheme on those features
- Demonstrate how the development will avoid adverse impacts
- Propose mitigation for any adverse ecological impacts or compensation for loss
- Propose wildlife/habitat enhancement measures

Landscape and Ecological Management Plan

We recommend the inclusion of a requirement in relation to the provision of a landscape and ecology management scheme as part of the DCO. We propose the inclusion of the following requirement as part of the DCO:





Requirement:

No development shall take place until a landscape and ecological management plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except privately owned domestic gardens), shall be submitted to, and approved in writing by, the local planning authority. The landscape and ecological management plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority. The Environment Agency should be consulted on the management plan.

The scheme shall include the following elements:

- Detailed design information on the reinstatement and enhancement of the River Team at the Coalhouse Roundabout that includes measures to improve on the existing river habitat. The proposed measures will need to demonstrate how they contribute to the delivery of the outstanding WFD mitigation measures for this section of the waterbody.
- Details on natural screening / planting along the River Team at the Coalhouse Roundabout to screen the river from the road and allow for species dispersal in this area.
- Detailed design information on the Allerdene Burn once the design option is finalised. This includes environmental improvements to the watercourse and the creation of a connected floodplain for the option chosen which maximises the morphology of the channel and riparian zone for habitats and wildlife.
- Design of the new attenuation SuDS feature which will maximise habitat creation.
- Details of any new habitat created on site.
- Details of treatment of site boundaries and/or buffers around water bodies.
- Details of management responsibilities.

Reason(s)

To ensure the protection of wildlife and supporting habitat and to ensure that the scheme does not degrade watercourses on site, whilst maximising habitat creation as part of the restoration. Also, to secure opportunities for implementing WFD mitigation measures as well as enhancing the site's nature conservation value in line with national

The works proposed as part of this development could have an unacceptable effect on the ecological value of the River Team and Allerdene Burn once the works are complete. The River Team is an important migratory route for Atlantic salmon, sea trout and European eel. These species have been recorded just downstream of the scheme footprint and trout, upstream of it. The River Team also supports European otter at this location. The Allerdene Burn will also be subject to works and potential enhancements, depending on the option chosen. Therefore, these proposed works will require a management plan to be in place.

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This will ensure the landscape provides a maximum benefit to people and the environment, and ensures that the River Team and Allerdene Burn will be restored to an appropriate condition / design once works to these waterbodies are complete. The new attenuation Sustainable Drainage Systems (SuDS) pond also offers an opportunity to design the feature to maximise habitat creation whilst carrying out its attenuation functions.

The River Team at the Coalhouse Roundabout will be subject to a temporary culvert during works. No detail is provided in the assessment on the removal of the culvert and restoration of the river once the works are complete, and no habitat mitigation is shown on the Environmental Masterplan (Figure 2.4) at the river in this location. In reinstating the river post-construction, the applicant will need to ensure that a natural watercourse is designed into the scheme, and includes measures to improve on the existing poor quality habitat available for fish within this straightened and uniform section of the River Team. There is an opportunity here to consider how the scheme can be compliant with the Water Framework Directive (WFD) through the delivery of the relevant mitigation measures for this reach of the River Team. For example; reconnecting the floodplain, remove or soften hard banks, in-channel morphological diversity.

We note that within the roundabout it will be reinstated to species rich grassland. While this is positive, the Landscape Management Plan will need to consider otter passage through this disturbed area and consider shrub planting to screen the watercourse from the road (which is currently present). An open channel here will increase noise and visual disturbance to species commuting through the watercourse such as European otter.

There are two options for the reinstatement for the Allerdene Burn, an updated culvert with greater capacity (embankment option) or an open channel (viaduct option). Both options at detailed design stage will need to be designed in such a way as to maximise environmental benefits:

- For the Allerdene embankment option, there would be a re-engineered culvert. There are in-channel improvements which can be made to increase the flow diversity of the modified channel, which can in turn affect the morphology of the channel and therefore the biodiversity of the channel. This needs to be considered in any detailed design.
- For the Allerdene viaduct option, the Allerdene Burn is noted to be realigned as part of the scheme. There is an opportunity to realign this in such a manner as to work with natural processes in order to gain a more diverse fluvial system than a uniform straight section of channel. This needs to be considered in any detailed design as opposed to an open ditch.
- For both the viaduct and embankment options, it is noted that flow control measures will transfer water from the channel out onto the floodplain





during a 1% event. The design of the channel and the adjacent floodplain could allow more frequent flooding, with the potential to trap and store fines and nutrients, help reduce downstream flooding and benefit local biodiversity. We would welcome proposals as to how this may be achieved.

The new attenuation SuDS pond also offers an opportunity to design the feature to maximise habitat creation whilst carrying out its attenuation functions. This has been considered in the Biodiversity Chapter of the ES, which options for multiple water bodies, or varying depths within a single water body.

Legally Protected Species and Habitat Protection Plan

Fish species, great crested newt and otter are protected species and receive protection through various pieces of legislation. These species have been found to be present or potentially present at the proposed development site. In addition, Invasive Non-Native Species (INNS) have also been found to be present on site and have been identified as requiring management.

The Outline Construction Environmental Management Plan (CEMP) details a number of measures in which those species listed above would be protected and invasive species managed. Otter are not mentioned in the Outline CEMP but are included within the mitigation required within the Biodiversity Chapter of the ES. This Outline CEMP details that a 'Detailed CEMP' will be produced as part of the scheme. We therefore recommend the inclusion of a requirement in the DCO requiring the provision of detailed Construction Environmental Management Plan. The CEMP should aim to protect against damage and mitigate any damage to fish species, great crested newt and otter as well as manage INNS. We recommend the inclusion of the following requirement as part of the DCO:

Requirement:

No development shall take place until the Detailed Construction Environmental Management Plan detailing the protection of and mitigation of damage to fish species, great crested newt and otter as well as their habitat has been submitted to the local planning authority. These species are protected under various pieces of legislation; The Wildlife and Countryside Act 1981 as amended, Habitats Directive Annex II (species), Natural Environment and Rural Communities Act 2006, Eel Regulations 2009 and the Salmon and Freshwater Fisheries Act 1975.

The plan must consider the whole duration of the development, from the construction phase through to development completion. Any change to operational responsibilities, including management, shall be submitted to and approved in writing by the local planning authority. The Detailed Construction Environmental Management Plan shall be carried out in accordance with a timetable for implementation as approved.

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The scheme shall include the elements already detailed in the Outline Construction Environmental Management Plan and Mitigation Requirements detailed in the Biodiversity Chapter of the Environmental Statement (including otter protection), with the addition of specific mitigation requirements that arise during detailed design stages.

Elements will include but not be limited to:

- A Precautionary Working Method Statement for great crested newt.
- Strategy to be implemented for the appropriate treatment of Invasive Non-Native Species.
- Fish protection during temporary culvert installation.
- Monitoring of the freshwater environment for a range of variables that measure water quality.
- Culverts will be designed, where possible, to include natural beds (between 100mm and 250mm) to maintain and assist fish passage.
- Ecological watching brief and fish rescue plan.
- Water vole protection and mitigation if found to be present on site.
- Details and location of baffles or similar structures to be installed within existing culverts for fish passage.

Reason(s)

To protect a range of species dependent on freshwater environments and their habitat within the development site and to prevent the spread on INNS.

Sedimentation and Biosecurity

It is positive to see pollution prevention and sedimentation plans in the ES. We recommend that a detailed specific Method Statement on pollution prevention and sedimentation be written and implemented during construction phases. This should also include biosecurity to prevent the spread of non-native invasive species, as well as pathogens harmful to biodiversity. This will be particularly relevant for the temporary culverting of the River Team, any outfall works and demolition activities near the River.

Groundwater / Mine water

Groundwater within the coal measures underlying the area are currently being managed by the Coal Authority to prevent mine water pollution. Water is currently being actively pumped at a site (Kibblesworth) near Birtley. There is a risk that shallow groundwater may be present, now or in future, along some parts of the proposed route. As such, we recommend that the applicant considers whether rising mine water may pose a risk to the proposed scheme and that a risk assessment is undertaken. It may be beneficial to contact the Coal Authority for further information.

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Statement of Common Ground (SoCG) Update

The applicant has not yet provided the EA with a draft SoCG to review.

Written Questions

We will provide our response to the Examining Authority's written questions and requests for information by Tuesday 25 February 2020.

