



Norwich Western Link

Environmental Statement

Chapter 12: Road Drainage and the Water Environment

Appendix 6: Road Drainage and the Water Environment Consultation

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1 Consultation

1.1.1 **Table 1.1** below provides a full summary of the consultation undertaken to support the road drainage and the water environment assessments.

Table 1.1 – Summary of consultation undertaken

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Joint Environment Agency / Natural England meeting with Norfolk County Council	Sustainable Places, Flood Risk Management, Natural England representative	18 October 2018	Initial discussions on flood risk, design levels and requirements for climate change, water quality, biodiversity, and Water Framework Directive.
Joint Environment Agency / Natural England meeting with Norfolk County Council	Sustainable Places, Flood Risk Management, Natural England representative	08 March 2019	Discussion regarding flood risk, design levels and requirements for climate change; potential construction mitigation for effects of the bridge structure to rivers and floodplains; and opportunities for surface water design, SuDS, infiltration as possible drainage strategy.
Joint Environment Agency / Natural England meeting with Norfolk County Council	Sustainable Places, Flood Risk Management, Natural England representative	13 June 2019	Discussion of proposed scope to inform the Outline Business Case and understanding of the Flood Risk Assessment.
Environment Agency	Sustainable Places, Flood Risk Management	09 August 2019	Discussion of requirements for the Water Framework Directive Screening Assessment.
Joint Environment Agency / Natural England meeting with Norfolk County Council	Sustainable Places, Flood Risk Management, Natural England representative	13 August 2019	Discussion of flood risk scope and surface water surveys.
Environment Agency	Sustainable Places, Flood Risk Management	16 August 2019	E-conference meeting to discuss the preliminary ground investigation observation borehole placement rationale. Agreement of proposed borehole placement strategy and proposed monitoring scheduling.
Environment Agency	Sustainable Places, Flood Risk Management	28 August 2019	Scope of works for the Water Environment Environmental Assessment Report Chapter and Flood Risk Appraisal to support Outline Business Case shared.
Environment Agency	Sustainable Places, Flood Risk Management	04 November 2019	Methodology for updating the Environment Agency approved CH2M 2016 1D model of the Upper Wensum to inform the Flood Risk Appraisal and Flood Risk Assessment.
Joint Environment Agency / Natural England meeting with Norfolk County Council	Sustainable Places, Flood Risk Management, Natural England representative	05 November 2019	Discussion on surface water modelling and Flood Risk Assessment.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Sustainable Places, Flood Risk Management	04 November 2019	The Environment Agency agreed with the Flood Risk Appraisal at Outline Business Case stage.
Environment Agency	Sustainable Places, Flood Risk Management	21 November 2019	Methodology for updating the Environment Agency approved CH2M 2016 1D model of the Upper Wensum to inform the Flood Risk Appraisal and Flood Risk Assessment.
Environment Agency / Natural England	Sustainable Places, Flood Risk Management, Natural England representative	14 January 2020	Response from the Environment Agency to confirm understanding that updated 1D hydraulic model will be developed to support the Outline Business Case. After which the hydraulic model will be further developed into a 1D-2D linked hydraulic model to support the Flood Risk Assessment for the submission of the planning application. Comments provided on methodology.
Environment Agency	Sustainable Places	16 January 2020	Response provided by WSP to Environment Agency comments regarding the approach to the hydraulic modelling. The letter acknowledges receipt and provides clarity on the approach.
Environment Agency	Sustainable Places	21 January 2020	Viaduct alignment discussed along with maintenance access. Water Framework Directive assessment methodology was discussed.
Environment Agency	Sustainable Places	24 January 2020	Viaduct substructure plans shared with the Environment Agency and Natural England.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	29 January 2020	Revised methodology for flood risk modelling following receipt of Environment Agency comments on 21 November 2019 issued.
Environment Agency	Sustainable Places, Flood Risk Management	03 February 2020	Data request covering gauge data, flood history data, flora and fauna surveys, water quality data, borehole data, groundwater monitoring data and hydrogeological report amongst other requests.
Environment Agency	Sustainable Places, Flood Risk Management	03 February 2020	In person and Skype meeting to discuss proposed drainage strategy and design for watercourse crossings and water quality treatment measures.
Environment Agency	General Enquiries	10 February 2020	Data request letter with an accompanying study area of interest sent to Environment Agency. The letter is to inform the Road Drainage and Water Environment chapter of the Environment Statement.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Sustainable Places, Flood Risk Management	21 February 2020	Environment Agency provided comment on constructability and implications for flood risk, water quality and Water Framework Directive. Environment Agency also confirmed floodplain compensation is to be provided during construction phase of the Proposed Scheme.
Environment Agency / Natural England	Natural England representative	30 March 2020	Meeting pack issued providing updates in relation to the Norwich Western Link project. Flood risk, Water Framework Directive, surface water drainage and construction information pertinent to the water environment.
Environment Agency	Sustainable Places, Flood Risk Management	24 April 2020	Environment Agency issued response to meeting pack outlining requirements expected of the Flood Risk Assessment and surface water drainage strategy.
Natural England	Natural England representative	05 May 2020	Natural England commented specifically on the proposed maintenance track, stating that the permanent roadway across the floodplain will be detrimental to the function and restoration potential of the River Wensum Special Area of Conservation.
Wildlife Rivers Trust	Organisation	28 August 2020	Wildlife Trust issues formal objection to Norwich Western Link Scheme due to the concerns held of the impact of the scheme to the floodplain habitats which are functionally linked to the health of the River Wensum Special Area of Conservation. The Wildlife Trust also state they consider the River Tud on the southern edge of the proposal to be of equal ecological value to the River Wensum. impacts on the flow and water quality of the Tud.
Environment Agency	Fisheries, Biodiversity and Geomorphology team	8 September 2020	Water Framework Directive screening and scoping assessment issued to the Environment Agency for comment.
Environment Agency	Sustainable Places, Flood Risk Management	29 September 2020	Meeting held with Environment Agency to query Flood Risk model being used for River Wensum Restoration. Discussions confirmed this is an iteration of the Wensum model and should be used for the study.
Natural England	Natural England representative	01 October 2020	Water Framework Directive screening and scoping assessment issued to Natural England for comment.

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Environment Agency / Natural England	Environment Agency Fisheries, Biodiversity and Geomorphology team including Natural England representative	06 October 2020	Meeting held with Environment Agency and Natural England regarding geomorphology and Water Framework Directive Assessment to agree the scoping and level of detailed assessment required.
Environment Agency	Environment Agency Sustainable Places and Fisheries, Biodiversity and Geomorphology team.	09 October 2020	Viaduct Construction Methodology Technical Note (TN035) submitted for review and request meeting with the Environment Agency to discuss any comments the Environment Agency may have.
Norfolk Rivers Trust	Organisation	12 October 2020	Written letter to Norfolk County Council to formally object to Norfolk County Council's Norwich Western Link proposal. Objection specifically concerns impacts to the permanent damage to two chalk rivers (River Wensum and River Tud), both globally rare and increasingly threatened habitats.
Norfolk Rivers Trust	Organisation	16 October 2020	Response to Norfolk Rivers Trust Objection stating that an Environmental Impact Assessment, Water Framework Directive Assessment and Habitat Regulations Assessment will be undertaken for the Norwich Western Link Scheme in due course and the River Wensum Special Area of Conservation will be a primary focus of this work. The assessments will investigate the effects of the Norwich Western Link on the integrity of the River Wensum Special Area of Conservation, but the design of the viaduct and the construction methods proposed have been considered from an early stage and these set out to avoid and minimise the potential impacts on the river as far as practicable.
Environment Agency	Environment Agency Fisheries, Biodiversity and Geomorphology team.	21 October 2020	Formal consultation feedback received from the Environment Agency following on from the Water Framework Directive and Geomorphology meeting held on the 6 October.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Environment Agency Sustainable Places and Fisheries, Biodiversity and Geomorphology team	21 October 2020	Viaduct Design Technical Note (TN030) submitted for review and request meeting with the Environment Agency to discuss any comments the Environment Agency may have.
Environment Agency	Environment Agency Sustainable Places and Fisheries, Biodiversity and Geomorphology team	28 October 2020	Flood Risk Modelling meeting minutes (29/09/20) and Water Framework Directive / Geomorphology Consultation Meeting (06/10/20) issued to the Environment Agency.
Natural England	Natural England representative	28 October 2020	Water Framework Directive / Geomorphology consultation meeting minutes (06/10/20) issued to Natural England.
Broadland District Council	Broadland District Council	6 November 2020	Abstraction request for an extended buffer zone submitted.
Environment Agency	Sustainable Places, Flood Risk Management	8 January 2021	Issued hydrology for Ringland Lane and Foxburrow Stream watercourses to the Environment Agency for review and comment
Environment Agency	Sustainable Places, Flood Risk Management	4 February 2021	Received confirmation from the Environment Agency that the hydrology for Ringland Lane and Foxburrow Stream watercourses is fit for purpose.
Environment Agency	Sustainable Places, Flood Risk Management	19 April 2021	Communication setting out proposed approach to the incorporation of River Wensum restoration proposals into the hydraulic modelling.
Environment Agency	Sustainable Places, Flood Risk Management	7 May 2021	Feedback received confirming the proposed approach to the incorporation of River Wensum restoration proposals into the hydraulic modelling is acceptable.
Environment Agency	Sustainable Places, Flood Risk Management	28 June 2021	Submission to the Environment Agency of the baseline River Wensum hydraulic model for review.
Environment Agency	Sustainable Places, Flood Risk Management	22 July 2021	Confirmation from the Environment Agency that the climate change allowances to be used in the study were revised and published on 20 July 2021.
Environment Agency	Sustainable Places, Flood Risk Management	11 August 2021	Comments received on the baseline River Wensum hydraulic model from the Environment Agency following a technical review.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Sustainable Places, Flood Risk Management	23 August 2021	Discussion on the acceptability of the use of the River Wensum hydrology for the purposes of the study with recommendations made on work to confirm its suitability.
Environment Agency and Natural England	Natural England representative Environment Agency Sustainable Places and Fisheries, Biodiversity and Geomorphology team	21 September 2021	Meeting held with Environment Agency and Natural England regarding geomorphology and Water Framework Directive Assessment to discuss mitigation and enhancements. Further discussion on the acceptability of the River Wensum hydrology.
Environment Agency	Sustainable Places, Flood Risk Management	22 September 2021	Further proposals submitted to the Environment Agency to confirm suitability of the River Wensum hydrology and requests for gauge data at Costessy Mill.
Environment Agency and Natural England	Environment Agency representative Natural England representative	16 December 2021	Meeting to discuss the scale, extent and potential impacts of the River Wensum Temporary Works proposals. The objective was to highlight that the proposals will increase the risk of scour to the bed of the River Wensum. Options to mitigate this centred around scour protection and increases to conveyance capacity through the structure. There was a preference that scour mitigation in the River Wensum should be avoided and conveyance capacity the preferred mitigation. Conveyance capacity cannot remove the risk of scour, however it was accepted that some scour could introduce channel diversity.
Environment Agency and Natural England	Environment Agency representative Natural England representative	Email dated 20 February 2023	Salt spraying assessment methodology confirmation with Environment Agency and Natural England (Environment Agency confirmed on 23rd February 2023).
Environment Agency	Sustainable Places, Flood Risk Management	3 February 2022	Confirmation from the Environment Agency that the review of the hydrology for the River Wensum model confirming that no updates are required to the hydrology is acceptable.
Environment Agency	Sustainable Places, Flood Risk Management	5 May 2022	Reissue of River Wensum baseline hydraulic model to the Environment Agency following updates received as part of the first review.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Sustainable Places, Flood Risk Management	17 June 2022	Confirmation from the Environment Agency that the second issue of the baseline hydraulic model of the River Wensum is suitable for use for planning purposes.
Environment Agency	Environment Agency representative	15 March 2023	Private abstraction data request.
Environment Agency and Natural England	Sustainable Places, Flood Risk Management Natural England representatives	13 June 2023	Discussion regarding the HEWRAT assessment results, groundwater salt spray modelling results and outstanding flood risk queries.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	30 March 2023	Submission of draft Flood Risk Assessment to the LLFA for comment.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	2 May 2023	Receipt of comments from the LLFA on the draft Flood Risk Assessment
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	17 July 2023	Response provided to LLFA on comments received on the draft Flood Risk Assessment providing clarifications and proposed updates to the report.
Environment Agency	Sustainable Places, Flood Risk Management	18 July 2023	Communication from the Environment Agency setting out the requirements in the NPPF to provide floodplain compensation for temporary works proposals.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	31 July 2023	Receipt of comments from the LLFA to responses provided to first round of LLFA comments received on the draft Flood Risk Assessment.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	29 August 2023	Revised methodology for flood risk modelling following receipt of Environment Agency comments on 21 November 2019 issued.
Norfolk County Council (as Lead Local Flood Authority) Environment Agency	Flood Risk Management Officer Sustainable Places, Flood Risk Management	17 November 2023	Issue of second draft Flood Risk Assessment and associated appendices to the LLFA and Environment Agency for comment.

Body / Organisation	Individual / Statutory body / Organisation	Meeting dates and other forms of consultation	Summary of discussions
Environment Agency	Sustainable Places, Flood Risk Management	5 December 2023	Comments received from the Environment Agency on a draft submission of the Flood Risk Assessment.
Natural England	Soils Specialist and Peat Specialist	7 December 2023	Meeting to address Natural England queries relating to the hydrological and hydrogeological impact of the proposed construction works of the viaduct on the soils within the River Wensum floodplain.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	11 December 2023	Meeting to discuss preliminary comments and written receipt of comments providing feedback from the LLFA on elements of the draft Flood Risk Assessment and associated appendices.
Environment Agency	Sustainable Places, Flood Risk Management	13 December 2023	Meeting to discuss in further detail the comments received on the draft submission of the Flood Risk Assessment and the way forward to resolve some outstanding comments relating to the residual risks associated with the temporary works.
Norfolk County Council (as Lead Local Flood Authority)	Flood Risk Management Officer	1 February 2024	Receipt of further comments on the draft Flood Risk Assessment and associated appendices.