

A303 Amesbury to Berwick Down

TR010025

Deadline 2
8.10.6 Design (De.1)

APFP Regulation 5(2)(q)

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

May 2019



Infrastructure Planning

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The Infrastructure Planning (Examination Procedure)

Rules 2010

A303 Amesbury to Berwick Down

Development Consent Order 20[**]

Design (De.1)

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme Reference	TR010025
Application Document Reference	8.10.6
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Version	Date	Status of Version
Rev 0	03.05.2019	Deadline 2 Issue

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6 Design (De.1)

Question De.1.1

Despite the intentions set out in the Design and Access Statement, only basic outline information is shown on the drawings and related ES documentation regarding the design of the scheme components and the way they would relate holistically and contextually, in an integrated way, to the Scheme as a whole.

How is the detailed design to be developed, how is it to be assessed, agreed, and approved, and how is the process to be secured in the DCO?

Response

1. The level of information displayed on the plans and drawings accompanying the DCO are sufficient to describe the Scheme and assess its environmental impacts. The impacts of the Scheme as applied for – and therefore of the detailed design developed within its envelope - are assessed in the Environmental Statement [APP-040], paragraph 2.3.1-2.
2. The Applicant recognises that in the particular circumstances of this Scheme there is a need to give key stakeholders confidence that the detailed design of the Scheme will be carried out appropriately. The Applicant is currently discussing or about to discuss with heritage stakeholders a mechanism:
 - a. obliging the Applicant to consult with them on detailed design of key aspects of the Scheme;
 - b. setting out design principles according to which the Applicant will require the detailed design of those key aspects of the Scheme to be undertaken; and
 - c. committing to certain additional key aspects of design, additional to those already contained in the OEMP.
3. Once the Applicant has had the opportunity to discuss matters with all heritage stakeholders, it intends to draft for the obligations in the OEMP and submit an updated draft at Deadline 3.

Question De.1.2

In the ExA's view, a design approach document, setting out the possible routes to be followed in developing the detailed design would be helpful. This would include explorations of combinations of materials, texture, and colour in different light conditions, relationship to landscaping, ways of softening motorway architecture, and so on. The document would not prescribe a single solution but would set out interconnected themes from which the design would develop. It would be secured in the DCO as a means of guiding the detailed design and assuring well considered, high standards.

Examples where this approach has been used include:

- HS2 – Headhouses and Portals Design Approach, Martin Short RIBA, Technical Lead HS2 Ltd, March 2016.
- Wendover Dean and Small Dean Viaducts and Green Tunnel South Portal Engagement Event, September 2018.
- Hinkley C Connection, NSIP Examination Document 8.32, Updated Appendix 2.9.26.1 (Design Approach to Site Specific Superstructure), and corresponding Requirement 38 in the DCO.
- North Killingholme Power Project, NSIP Examination Document – Architectural Study, January 2014, and corresponding Requirement 5 in the DCO.

Response

1. Please see the Applicant's response to DE.1.1. This is the general approach intended to be taken in the design principles referred to in that response.

Question De.1.3

Specific design related points are as follows:

- i. The only indication of the setting out of the components within the scheme appears to be the longitudinal chainage shown at 500m intervals on the various layout drawings, following the general route of the road from west to east. There appears to be no indication of setting out laterally. It is impossible to define the intended location of the components, or to see how the LoDs, which are not shown on the drawings, would apply. Please explain.
- ii. There is some confusion between tunnel portal and canopy on the structures drawings – what is described in the ES as the canopy, comprising a lid over the cutting, is labelled as the portal on the drawings. Please explain.
- iii. Please respond to Historic England’s comment in its RR 1897, regarding the absence of design and visual representations for key elements within the WHS, including the western tunnel portal and its extension, the eastern tunnel portal, the articulation and form of the open cutting retaining walls, and the design, construction, form and appearance of Green Bridge 4.

Response

- i. **The only indication of the setting out of the components within the scheme appears to be the longitudinal chainage shown at 500m intervals on the various layout drawings, following the general route of the road from west to east. There appears to be no indication of setting out laterally. It is impossible to define the intended location of the components, or to see how the LoDs, which are not shown on the drawings, would apply. Please explain.**
1. The lateral layout of proposed road scheme elements is shown by means of a centreline on the Works Plans [APP-008], in accordance with Regulation 5(2)(j) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations) which requires the Applicant to show, for a linear scheme (such as this) the proposed route and alignment of the development and works, in relation to existing features. The limit of deviation applicable to the linear works is prescribed by article 7(3) of the draft DCO [APP-020], which permits variation of the position of the centreline by up to 3 metres either side of the centreline as shown on the Works Plans. As the scale of the Works Plans is 1:2500, the Applicant has elected, in the interests of clarity, not to show these 3 metre parallel limits either side of the centreline; however, having regard to the scale of the Works Plans it is clear that the degree of variance permitted is small. The proposed locations of non-linear works are shown on the Works Plans by way of the limits of deviation for those works. This approach (in relation to limits of deviation for both linear and non-linear works) has precedent in the made Silvertown Tunnel Order 2018. Further details of road elements are provided on the Engineering Section Drawings (plan and profiles) [APP-010] and Engineering Section Drawings (cross sections) [APP-011], which, in accordance with APFP Regulations 5(2)(p) and (6)(2) show, by reference to Chart Datum, the

levels of the proposed works. Article 7 to the draft DCO [APP-020] prescribes the vertical (upwards/downwards) limits of deviation applicable to each numbered work (or component element thereof). The chainage references, which feature in both the 'plan' parts and the 'profiles' parts of the Engineering Section Drawings (Plan and Profiles) [APP-010] provide readers with a means of linking the cross-sectional information with what is shown in 'plan' view. When read in combination, the above-mentioned application documents create a three-dimensional 'envelope' within which appropriate design refinement may be considered during detailed design. For more detailed guidance on the interpretation of the above-mentioned DCO application documents, please refer to the Applicant's DCO application 'signposting' document [AS-009], and in particular Appendix A thereof.

- ii. There is some confusion between tunnel portal and canopy on the structures drawings – what is described in the ES as the canopy, comprising a lid over the cutting, is labelled as the portal on the drawings. Please explain.**
2. With respect to the Structures Drawings [APP-017], the definition of the tunnel portal for the permanent works is the point where the open highway enters/exits the tunnel. In the development of the preliminary design, partial canopies were initially included. These canopies did not create roofed-over spaces so were defined as outside the tunnel (i.e. the portals were considered to be at the ends of the bored tunnel, chainages 7+400 and 10+400). As the reference design for the Scheme evolved, the early form of canopies then became full canopies otherwise referred to as a 'lid over the cutting' or more correctly as lengths of "cut and cover tunnel". At this point works 1E and 1G (refer to Works Plans [APP-008]) became roofed-over spaces and were included in the overall definition of the enclosed tunnel (i.e. the portals moved to the ends of the cut and cover tunnel at chainages 7+200 and 10+485). The Environmental Statement has continued to use the colloquial term 'canopy' to reference these cut and cover sections of the tunnel.
- iii. Please respond to Historic England's comment in its RR 1897, regarding the absence of design and visual representations for key elements within the WHS, including the western tunnel portal and its extension, the eastern tunnel portal, the articulation and form of the open cutting retaining walls, and the design, construction, form and appearance of Green Bridge 4.**
3. Highways England considers that the application has provided sufficient information to allow the English Heritage Trust to understand and comment on the Scheme. The current proposals for each of the design elements referred to by English Heritage Trust are set out below:

- The redundant parts of the road surface of the existing A303 and A360 within the World Heritage Site (WHS) would be removed in accordance with references D-CH2 and D-CH3 of Environmental Statement Appendix 2.2 - Outline Environmental Management Plan (OEMP) [APP-187]. Compliance with the OEMP is secured by Requirement 4 of Schedule 2 to the draft Development Consent Order (DCO) [APP-020]. The new restricted byway within the WHS would provide a durable surface for non-motorised users including those needing mobility aids, and those vehicles permitted to use the route such as agricultural and maintenance vehicles. Details, including width and surface treatment, are under discussion with Historic England, the National Trust, English Heritage and Wiltshire Council. The surplus areas of redundant road surface would be replaced by chalk grassland and existing roadside furniture and infrastructure (signage, lighting columns etc.) would be removed (this approach is described in section 2.3.56 (d) of Environmental statement Chapter 2 - The Proposed Scheme [APP-040]. Other new Non-motorised User (NMU) routes within the WHS (A360 north to the Stonehenge Visitor Centre; A360 South to Druids Lodge) would be of similar form and design and would be constructed at or just above existing ground level and would utilise a no-dig construction solution. There would be no new street furniture adjacent to the new NMU routes and public rights of way.
- Fencing in the WHS shall be developed in consultation with the National Trust, Historic England, English Heritage and Wiltshire Council, as secured in the Outline Environmental Management Plan (OEMP) [APP-187] (OEMP Ref: D-CH14). The main works contractor shall consult with the relevant bodies to determine the type of construction boundary fencing to be used within the WHS or within the setting of the WHS. The type of fencing would be sympathetic to the setting of the WHS. The OEMP is secured under Requirement 4 of Schedule 2 within the draft DCO [APP-020].
- The majority of the Scheme would not be lit. There would be no lighting within the WHS beyond that necessary within the tunnel and beneath the c.150-metre-wide Green Bridge Four (operating during day time only). There would be no lighting within the open cutting, and tunnel lighting would be designed to minimise light spill outside of the tunnel portals. There would be no roadside lighting at the new Longbarrow Junction, and the improved Countess junction would utilise new directional roadside lighting to minimise light spill. These are significant improvements over the current situation, where both Countess and Longbarrow junctions are brightly lit. This lighting is provided for in the Outline Environmental Management Plan (OEMP) [APP-187] (OEMP Refs: D-CH9 to D-CH12), and Requirement 4 of Schedule 2 to the draft DCO [APP-020] requires the Scheme to be carried out in accordance with the OEMP.
- In the context of the WHS, the Scheme has committed to no signage or other vertical installations (such as CCTV) above the top of the cutting and no lighting of signs at the western end of the Scheme in order to protect the WHS's Outstanding Universal Value (OUV) [see OEMP Ref: D-CH8]. Appropriate signage and infrastructure will also be provided outside the WHS to manage traffic through the corridor.

The details of cuttings, walls, and green bridges within the WHS will be developed through the detailed design process in consultation with the English Heritage Trust. This engagement will be confirmed within a Statement of Common Ground between the parties, to be issued to the Examination in due course.

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