

**THE PLANNING ACT 2008**

**M4 (JUNCTIONS 3 TO 12) (SMART MOTORWAY) DEVELOPMENT CONSENT ORDER  
APPLICATION**

**TR010019**

**Written Summary of Issue Specific Hearing Dealing With Matters Relating to Water  
Environment**

**Date: Thursday 11 February 2016**

**Venue: Holiday Inn Maidenhead/Windsor, Manor Lane, Maidenhead, West Berkshire, SL6  
2RA**

## WATER ENVIRONMENT

### Opening Remarks

#### 1. *DCO requirements*

**In the Statement of Common Ground (SoCG) with the Environment Agency (EA) REP5-002 at 4.3 it states that the wording of requirements relating to floodplain compensation and maintenance, water quality, biodiversity management and the CEMP have still to be agreed.**

- i. **Can the applicant and the EA provide an update on the wording of these requirements (R8, R14, R23, and R26)? Where there has been agreement, the wording should be submitted?**

#### Highways England Comment

1. Highways England understands that the EA has no further comments regarding requirements 12 and 14, and that it supports the wording suggested by the Examining Authority in relation to requirement 8.
2. Highways England and the Environment Agency confirmed that discussions regarding the wording of the flood compensation requirement had been on-going between the parties. However, when the last DCO was submitted, it contained two flood risk requirements - requirement 23 and 26. That was not intended to be the case. These requirements have now been amalgamated into a single flood compensation requirement at requirement 23, and wording for this requirement has now been agreed between the parties as follows:

#### ***Flood risk***

*23.—(1) No scheduled works within Flood Zone 3 as shown on annex H to the flood risk assessment are to commence until a detailed scheme of compensation works for the effects of the authorised development upon flood risk in Flood Zone 3 (“flood compensation scheme”) has been submitted to and approved in writing by the Secretary of State, in consultation with the Environment Agency and the relevant planning authorities.*

*(2) The flood compensation scheme must ensure that compensation works:*

- (a) be substantially in accordance with the outline flood compensation scheme shown on drawing TR010019-2.3-v-20 sheets 1 to 13; or*
- (b) where alternate mitigation works or measures not detailed in the flood risk assessment are proposed, demonstrate that the works or measures are at least as effective as those set out in paragraph (a);*
- (c) provide sufficient compensation to ensure that the authorised development will not increase flood risk for all events up to and including the 1% annual exceedance probability plus a 20 per cent allowance for climate change.*

*(3) The flood compensation scheme must provide for phasing of the provision of flood risk compensation in accordance with any phasing of the construction of the authorised works.*

*(4) The authorised development and the flood compensation scheme must be implemented in accordance with the approved scheme.*

*(5) No part of the Order land situated in Flood Zone 3 plus a 20 per cent allowance for climate change is to be used for storage, except as shown on annex H to the flood risk assessment.*

3. This wording was provided to the Examining Authority in the Schedule of Amendments to the Deadline V DCO, submitted on 15 February 2016.

**At 4.4 of the SoCG, the EA has reserved its judgment on the potential mechanism for discharging the requirements of the DCO involving the Secretary of State.**

- ii. **Has the EA reached a formal position? If so, the EA is requested to provide it.**

#### Highways England Comment

1. This item is not addressed to Highways England. However, Highways England notes that further detail on the procedure for the discharge of requirements is provided in Highways England's summary of the submissions made at the Issue Specific Hearing into the DCO.

2. ***Flood Risk and mitigation –***

**At 4.6 of the SoCG the EA did not agree that the Flood Risk Assessment (FRA) adequately assessed the fluvial flood risk, but would review the new FRA submitted at Deadline V.**

- i. **Is the EA now satisfied that the risks are adequately assessed? If not, please identify any outstanding issues.**

#### Highways England Comment

1. This item is not addressed to Highways England. However, Highways England met with the Environment Agency on 26 January 2016. At that meeting, the Environment Agency expressed agreement that the Flood Risk Assessment ("FRA") submitted at Deadline V was satisfactory, subject to the following small modifications outlined below:

- I. Since Deadline V, the FRA has been updated to include the assessment of ERA E6-B1 (eastbound), where a loss of floodplain storage equal to 10m<sup>3</sup> has been calculated and suitable compensation identified as shown on Drawing 514451-MUH-00-ZZ-DR-DR-400131 in Annex F of the FRA.
- II. Construction Compound 7 was not shown to be within the floodplain defined by the 100 year flood plus climate change on Drawing TR010019 - 2.3 - v – 20 included in the FRA submitted at Deadline V. This was an error, and this drawing has been updated to show the parts of Construction Compound 7 located within the floodplain defined by the 100 year flood plus climate change and will be included within an updated FRA submitted at Deadline VII.
- III. The FRA submitted at Deadline V also showed that small areas of Compound 5 are subject to flood risk. The Environment Agency agreed that this would be addressed by Highways England's suggested commitment to be included in the next version of the CEMP that the contractor would be required not to increase ground levels in the floodplain and to only use open fencing in these areas.
- IV. Highways England advised that, in order to minimise the loss of vegetation screening, it is continuing to review the details of the floodplain compensation near Monkey Island Lane. Any revisions to the floodplain compensation strategy at this site will be reported in the updated FRA at Deadline VII.

- V. Further assessment work has been undertaken at sites R18 and R19, which confirmed that the previously proposed westbound floodplain compensation area is not required by the Scheme. However, the area will remain indicated in the FRA as it could be an alternative option if necessary.
2. These issues will all be addressed in the updated FRA to be submitted at Deadline VII.

**At 4.7 of the SoCG it is stated that further discussions will take place to ensure that where floodplain compensation is required it can be demonstrated that it is viable, hydraulically linked and on land within the order limits and in HE's control.**

- ii. **Could both parties provide an update including the discussion on suitable alternative floodplain compensation areas if the current areas are not viable?**

#### Highways England Comment

3. Highways England and the Environment Agency discussed floodplain compensation areas at the meeting on the 26 January 2016. These discussions were based on the supplementary information provided in the FRA at Deadline V.
4. Highways England and the Environment Agency agree, as stated in the SoCG, that floodplain compensation schemes cannot be finalised until surveys and the detailed design are completed. The FRA submitted at Deadline V states at paragraph 6.3.7 that, if during the detailed design stage, alternative sites for flood compensation are found to be better than the options currently shown in the FRA, then the alternative sites will be assessed in more detail, with arrangements submitted for approval to the Secretary of State in consultation with the Environment Agency. This is secured by Requirement 23 of the draft DCO, as reflected in the Schedule of Amendments to the Deadline V DCO, which was submitted on 15 February 2016.

**At 4.9 it is not agreed that an increase of 10mm of flood level is acceptable. However HE has stated that they are seeking no increase in flood level.**

- iii. **Please confirm if the EA is now satisfied with the position in the updated FRA.**

#### Highways England Comment

5. This item is not addressed to Highways England. However, the FRA submitted at Deadline V clarifies this matter in paragraph 4.2.9 and commits to the provision of mitigation measures that would deliver no increase in flood risk, in line with the requirements of paragraph 5.99 of the National Policy Statement for National Networks. Following the meeting on 26 January 2016 with the Environment Agency, and representations made by the Environment Agency at the Issue Specific Hearing, Highways England understands that the Environment Agency is now satisfied with the position on this matter.

**BCC, in the summary of oral submission at question 6, raised concerns from South East Water (SEW) regarding ponding of water and poor operational capacity of the drainage system and requested a more detailed maintenance plan to cover drainage REP4-032. HE in its response says the M4 was not designed to the current HE design standards and that the design is not resilient to the predicted impacts of climate change REP5-005. HE also states that it is required to carry out maintenance in accordance with its**

licence <sup>REP5-004</sup>. Section 4.2(b) of the licence states that HE should ‘ensure the maintenance, resilience, renewal, and replacement of the network’.

- iv. **What assurance can the applicant give that the terms of the licence are sufficient to ensure the maintenance, resilience, renewal and replacement of elements of the network such as the drainage systems?**

Highways England Comment

6. Highways England was appointed by the Secretary of State as a strategic highways company by way of an Order in accordance with section 1 of the Infrastructure Act 2015.
7. Section 6 of the Infrastructure Act 2015 provides that the "*Secretary of State may from time to time give a strategic highways company directions or guidance as to the manner in which it is to exercise its functions*". The Secretary of State's statutory directions and guidance are set out in the Highways England: Licence (the "Licence").
8. The Licence came into force on 1 April 2015, and will continue to be in force unless and until it is revoked in accordance with the conditions in the Licence.
9. Where the Secretary of State gives a statutory direction under the Licence, Highways England must comply with that direction.
10. Part 4 of the Licence addresses aims and objectives. Paragraph 4.1 provides that Highways England must provide "effective stewardship of [the network's] long-term operation and integrity".
11. Paragraph 4.2 of the Licence provides that Highways England must act in a manner which it considers best calculated to:
  - a. Ensure the effective operation of the network;
  - b. Ensure the maintenance, resilience, renewal, and replacement of the network;
  - c. Ensure the improvement, enhancement and long-term development of the network...
12. Paragraph 5.10 of the Licence provides that Highways England must "develop, maintain and implement an asset management policy and strategy...setting out how it will apply a best practice approach to managing the lifecycle of its assets..."
13. Since Highways England's appointment, its performance has been monitored by the Office of Rail and Road ("ORR"), which set up the highways monitor, a directorate of the ORR, to carry out its monitoring functions. The highways monitor role has been established to place a greater level of scrutiny on Highways England and to independently and transparently monitor how Highways England is delivering against its performance requirements, its required investment plan and its licence requirements. The ORR advises the Secretary of State on Highways England's performance, and advises the UK Government on the levels of funding and performance requirements for future road periods to help frame challenging and deliverable performance and efficiency requirements.
14. As part of that monitoring function, the ORR reports to the Secretary of State for Transport on Highways England's performance under its Licence. The first report by the ORR on Highways England (included as Appendix A to this response), which was published on 3

December 2015, concludes that Highways England has made a good start in its first six months of operation. Highways England is exceeding its targets on keeping lanes open and clearing up incidents quickly, supporting the smooth flow of traffic. The road surface on motorways and main 'A' roads is also being well maintained. The ORR report confirms that Highways England needs to push ahead with plans to improve safety performance on the strategic roads – tackling the engineering challenges as well as influencing the behaviour of drivers on the network. Highways England also needs to provide a clearer picture of how they will deliver the planned improvements to motorways and “A” roads.

15. The ORR six month report also sets out how the ORR monitors Key Performance Indicators ("KPIs"), what data is used and how success is measured. The report is aimed at providing a clear statement of Highways England's KPI requirements including those on network safety, noise, air quality, user satisfaction, better environmental outcomes, network condition, smooth flow of traffic and encouraging economic growth.
16. Given that drainage is critical to the efficient and safe operation of the network, Highways England considers that the legislation and policy referred to above is sufficient to assure the Examining Authority that Highways England is under a statutory duty to ensure the maintenance, resilience, renewal and replacement of the elements of the network such as the drainage systems.
17. Further, Highways England is under a duty pursuant to s.41 of the Highways Act 1980 (the "Act") to maintain the strategic road network. As Mr Whale explained at the ISH on behalf of Highways England, it has to be presumed that Highways England will act in accordance with its statutory duty.
18. The surface of a highway vests in the highways authority under section 263 of the Act. Under section 264 of the Act, the drains belonging to a road also vest in the highways authority together with the right to continue to use any drain or sewer which has been used in the past in connection with the drainage of the road. Case law (*Burnside v Emerson*<sup>1</sup> and *Tarrant v Rowlands*<sup>2</sup>) indicates that the highway authority's duty to maintain includes a duty to prevent water gathering on the surface of the highway. Section 100 of the Act gives the highways authority powers to drain roads and prevent surface water flowing onto them. Drainage is accepted as one part of the normal maintenance responsibilities of the highway authority, and would therefore fall under s.41 of the Act.
19. Under section 56 of the Act (Proceedings for an order to repair highway) a person (“the complainant”) who alleges that a way or bridge is a highway maintainable at public expense and is out of repair, may serve a notice on the highway authority (or other person alleged to be liable to maintain the way or bridge) (“the respondent”) requiring them to state whether they admit that the way or bridge is a highway and that they are liable to maintain it.
20. If within one month the respondent has made no such admission, the complainant may apply to the Crown Court for an order requiring the respondent to put it proper repair within such reasonable period as may be specified in the order.

---

<sup>1</sup> [1968] 1 W.L.R. 1490

<sup>2</sup> [1979] R.T.R 144

21. On the other hand, if the respondent does admit that the way or bridge is a highway which they are liable to maintain, the complainant may, within 6 months, apply to the magistrates' court for an order requiring the respondent to repair the highway.
22. If at the expiration of the period specified for repairing the highway, the court is not satisfied that the highway has been put in proper repair then the court can either extend the period or authorise the complainant to carry out such works as may be necessary to put the highway in proper repair. Any expenses incurred by the complainant in repairing the highway are recoverable from the respondent as a civil debt.
23. Finally, the duties referred to above are supplemented by the provisions of Requirement 14 in the DCO, which requires Highways England carry out a survey of the existing drainage system to confirm the areas affected by the works where repairs or replacement of existing drainage infrastructure is required. The repairs and replacements identified by that survey must be reflected in the details of the surface and foul water drainage system to be approved under sub-paragraph (2) and implemented in accordance with sub-paragraph (3) of requirement 14.
24. In relation to the concerns raised by Mr Long at the ISH regarding the potential contamination of his well, Highways England explained that such concerns were addressed by the terms of requirement 12 of the DCO, which relate to the identification and remediation of contaminated land and groundwater.

**South East Water stated that it would provide comment whether they are satisfied that the scheme had considered potential risks to groundwater and mitigation on receipt of the Hydrological Risk Assessment (HRA).**

- v. **As this has now been issued to SEW can it confirm if it is now satisfied with the position in the HRA? If not, please identify outstanding issues. Can the applicant and SEW give an update on their SoCG?**

#### Highways England Comment

25. Highways England received a letter from South East Water ("SEW") on 28 January 2016. This letter contained a number of comments regarding the Hydrological Risk Assessment carried out by Highways England. A meeting has been arranged for 23 February 2016, the outcome of which will be reported to the Examining Authority in advance of the close of Examination. Further, an email was submitted to the Examining Authority by SEW on 9 February 2016, which explained that SEW did not believe that a SOCG was required between the parties. Highways England confirmed that it agreed that the parties' efforts were best placed in trying to resolve SEW's outstanding concerns and that the matters between the parties had been sufficiently aired before the Examination. It is Highways England's intention that any work that Highways England agrees to undertake to address SEW's concerns, following the meeting on 23 February 2016, will be secured via a SOCG at that stage, or via the provisions of the CEMP.
26. Highways England was pleased to hear the Environment Agency confirm that it is of the view that those matters addressed in the HRA are adequately covered by requirement 12 in the DCO, and that it does not believe that a more specific model would change the outcome as assessed. Further, Highways England understands from the Environment Agency's representations at the ISH, that whilst it believes South East Water's request in relation to the

area at Bray to have a ground water contour map is reasonable, it is satisfied that piles won't penetrate the aquifer.