

# Proposed M3 Junction 9 Improvements Response to Consultation - EIA Scoping Report

---

## 1. Project Details

<b>Project name:</b>	<b>M3 Junction 9 Improvement Scheme</b>
Task name:	Consultation on EIA Scoping Report
Applicant	Highways England
PINS Reference	TR010055
Date:	22/02/2019
HCC Dept:	Environment
EIA team project manager:	Holly Wood <a href="mailto:holly.wood@hants.gov.uk">holly.wood@hants.gov.uk</a>

## 2. Objectives

This memo provides a response by Hampshire County Council’s Environmental Teams to the formal consultation by the Planning Inspectorate (PINS) on the ‘*M3 Junction 9 Improvements Project, Environmental Impact Assessment Report, Highways England (Jacobs, January 2019-HE551511-JAC-EGN-0\_00\_00-RP-LE-001/PO3)*. The formal date for commenting on the Scoping Report to PINS is 25<sup>th</sup> February 2019.

This response covers the general scoping report and the technical review of the following environmental topics:

- Air Quality
- Cultural Heritage
- Landscape & Visual
- Biodiversity;
- Soils and geology
- Material Assets and Waste
- Noise and Vibration
- Population and Health
- Road Drainage and the Water Environment
- Climate
- Cumulative Effects

### 3. HCC Review Comments

<p>2. The Project</p>	<p>This section of the ES should also include further details on the following:</p> <ul style="list-style-type: none"> <li>- proposed construction phasing and methodology;</li> <li>- any new significant structures, e.g. embankments, retaining walls, culverts etc</li> <li>- proposed mitigation measures such as noise barriers, enhancements of NMU provision, ecological enhancements or compensatory measures, lighting, and drainage;</li> <li>- construction access and compounds; and</li> <li>- construction traffic management</li> </ul> <p>The nature and extent of works required to other junctions and approach roads required to deliver this scheme which are within the jurisdiction of HCC and other authorities e.g. A272 Spitfire Link and Easton Lane should also be defined. The relative impacts of each option on these connecting roads need to be evaluated in this assessment.</p> <p>The next phase of the assessment should address the potential impacts of construction works on traffic flows and operation of these other strategic routes and the longer-term impact on traffic flows of any permanent changes to layout, capacity etc.</p>
<p>3. Alternatives</p>	<p>Table 3-1 provides a list of options considered and states whether they were rejected or carried forward. It is noted that it starts at option 11. Further details need to be provided on options 1-10 and why these were discounted.</p> <p>Table 3-2 provides a brief discussion of the reason various options were not carried forward. Further discussion should be provided in the ES to justify why option 14 was taken forward and the potential effects of this option.</p> <p>The EIA process should be an iterative process throughout the development of the preferred option. With respect to the preferred option the ES should provide a section which discusses the evolution of the preferred option (which tells the story of how the design has developed and been amended as result of consultations, investigations and assessment of impacts). This should include a timeline depicting how and when the design has evolved.</p>
<p>4. Consultation</p>	<p>Section 4.1 states that public consultation on the preferred route option took place in early 2018. The ES should include full details of what consultations have been undertaken and the results (statutory and non-statutory) with all stakeholders. This section of the ES should be clearly signposted to explain how and where the consultation responses particularly from statutory bodies have been addressed within the design and the EIA.</p>
<p>5. Assessment Methodology</p>	<p>The EIA should include a full description of the assessment methodologies and the criteria used to define significance of effects. It is important that the process followed for each topic is fully documented to assist the reader in understanding how judgements have been made rather than just quoting relevant guidance documents.</p> <p>A description of the value (or sensitivity) of receptor, the magnitude of impact and the matrix for determining the significance of effects should be provided for each topic area, thereby ensuring all topics are assessed consistently.</p>

	<p>It is important that the chapter for the ES is consistently structured and potential impacts identified are considered within the design, mitigation and enhancements. Particularly with respect to community impacts and the effects of construction – length of time, dust, noise etc.</p>
<p>6. Air Quality</p>	<p><u>Construction impacts</u></p> <p>An assessment of construction dust emissions should be undertaken in accordance with the methodology in the <i>Guidance on the assessment of dust from demolition and construction. London: Institute of Air Quality Management 2014</i>. This should consider the impact on both human and ecological receptors, including any internationally and nationally designated sites within 350 metres of the Proposed Scheme.</p> <p>Parts of these designated sites will be directly adjacent to working areas, therefore the potential effects of different construction activities need to be fully understood and appropriate mitigation measures developed where appropriate.</p> <p>The assessment should consider the potential impacts on air quality on nearby receptors of traffic management measures during construction, particularly those on diversion routes during full closures of the M3 to allow for night time working. Specific scenarios modelled should include potential impacts of diverting traffic through the centre of Winchester (AQMA).</p> <p>Depending on the volume of traffic generated during the construction phase, consideration of impacts on human health receptors associated with construction vehicle emissions may also be required. The changes in traffic as a result of construction vehicles and any traffic management measure should be screened against criteria given in DMRB 11.3.1 and a quantitative assessment of changes in concentrations undertaken if required.</p> <p><u>Operational impacts</u></p> <p>Further consultation is requested on the proposed study area (ARN) for the air quality assessment determined by the screening assessment, once the traffic data has been analysed.</p> <p><i>NMUs</i></p> <p>The assessment should consider impacts on air quality for existing PROWs, other NMU routes and recreational receptors and also the potential air quality for users of any potential new NMU routes proposed as part of the scheme. Consideration should be given to alternative routing for any new NMU pathways away from highways where NO<sub>2</sub> and particulate concentrations are predicted to exceed AQOs.</p> <p><i>Ecology</i></p> <p>Background nitrogen deposition currently exceeds the critical load within the River Itchen SSSI and SAC. There also exceedances of the NO<sub>2</sub> AQO at St Catherine’s Hill SSSI, indicating that these sites are already particularly vulnerable to any changes in traffic, and subsequently air quality arising from the scheme which could potentially affect habitats and/or species within these designated sites.</p> <p>Concentrations of NO<sub>x</sub> using the dispersion modelling approach described in the report should be determined at the points closest to the roads in each of the nationally and internationally designated sites using the methodology contained within Volume 11, Section 3 of the Design Manual for Roads and Bridges (DMRB)</p>

	<p>In addition, nitrogen deposition rates for the opening year scenarios should also be calculated following DMRB Annex F for different receptor points.</p>
<p>7.Cultural Heritage</p>	<p>The scoping report scopes in the cultural heritage under three headings, archaeology, historic buildings and historic landscape character. This is considered appropriate.</p> <p>A desk-based assessment has already been produced (7.6.4) and a detailed assessment is proposed (7.6.5) and the report confirms that the impacts of the development on the cultural heritage will be subject to a detailed study (17.2).</p> <p>The archaeological context is described, and the assessment and mitigation principles are largely to be endorsed.</p> <p>Concerns over the use of the word ‘viable’ in 7.4.3 in relation to the extent to which trial trenching would be implemented. Viable is not the correct reference, it should refer to what is appropriate and achievable rather than the economic implication inherent in the use of the word viable (not that economic considerations should be excluded but the use of the word viable may imply it has a principal role).</p> <p>The mitigation will be agreed with Winchester City Council and Historic England (7.4.3). At present that excludes HCC’s archaeologist, however HCC should be given the opportunity to comment.</p>
<p>8. Landscape</p>	<p><u>HCC Landscape Team</u></p> <p>No further comments. HCC’s Landscape Team has been consulted previously and comments on the proposed LVIA and viewpoints have been addressed in the Scoping Report.</p> <p><u>HCC Countryside Service</u></p> <p>We are happy with the landscape and visual methodology outlined in the report. It will take in a significant area around the junction; a 6 X 4km grid and will also consider longer distance views e.g. from St Catherine’s Hill.</p> <p>The scope takes into account promoted routes such as St. Swithun’s Way as well as the wider rights of way (RoW) network and the assessment criteria proposed in Table 8-3 will identify users of the RoW as high sensitivity, which is all encouraging.</p>
<p>9. Biodiversity</p>	<p>Scoping of potential impacts will need to include potential interruption of the hydrological connection to adjacent wet meadows not just fully aquatic habitats (for both construction and operational impacts.) Therefore, potential impacts to SINC habitats may need to be reviewed based on this assessment</p> <p><u>Mitigation</u></p> <p>Up to date water vole surveys will need to be undertaken to be certain of delivering the 10m avoidance distance from the construction footprint.</p> <p>Further to sensitive lighting design for adjacent habitats, the new elements of the road will need to be constructed to ensure that fragmentation of bat foraging corridors does not occur, utilising dark corridors, and bat hop overs.</p> <p>Mitigation/enhancement for dormice should include provision of dormouse bridges (see new research for design NOT the versions within the DMRB) to reconnect potential habitats. This could include spanning of the whole motorway on the</p>

	<p>existing bridge structures. Suitable landscaping features to allow these structures to function should be incorporated into the landscaping and habitat creation proposals.</p> <p>Habitat creation should include creation of chalk grassland verges. Bare chalk and retained soils should be used without topsoil or soil improvers in all areas of verge creation.</p> <p>HRA assessment will need to take into consideration recent legal judgements, including Sweetman and Holohan (which requires assessment of all previous options).</p> <p><u>Further assessment</u></p> <p>Unsure as to the robustness of relying on desk assessment for understanding impacts to foraging/commuting bats.</p> <p>Limitations: The EIA will need to robustly defend the lack of data from missing equipment with respect to bats and otter surveys, and the general access issues.</p>
<p>10. Geology &amp; Soil</p>	<p>Further review for the EIA should include consultations with local authority Contaminated Land Officer, Environment Agency &amp; HCC Minerals and Waste.</p> <p>The baseline should also include other potential sources of contamination i.e. Radon, unexploded ordnance etc.</p> <p>Figure 10.1 is not clear and should be provided as a separate figure at a larger scale.</p> <p>Table 10.3 provides inconsistencies in sources within the 250m buffer distance, this needs to be addressed to ensure correct identification of potential sources.</p> <p>There are a number of landfills which are within close proximity of the scheme and should be included within the document, <i>land between old Newbury railway and A33</i> is within the scheme boundary but not identified.</p> <p>Table 10.6 identifies receptor sensitivity; the EIA should list criteria used to assign sensitivity to receptor to ensure consistencies.</p> <p>Table 10.7 needs to be consistent with identified receptors in Table 10.6 and potential contaminants in table 10.5. Landfill gas for example is identified as a potential risk but not included in the conceptual model.</p> <p>I would expect to see a full detailed consistent conceptual model in the EIA which includes the further reviews identified in the scoping report.</p>
<p>11. Material and Waste</p>	<p>The assessment defines two geographically different study areas, used to examine the use of primary/secondary/recycled/manufactured materials and the generation and management of waste.</p> <p>The scoping report identifies potential impacts for study area 2 and considers direct/indirect effects, assessment methodology and significance criteria clearly. However, this approach should be extended to cover study area 1 within the EIA (this has been missed in the scoping report) to examine whether it is a sensitive receptor or identify any key impacts. I.e. during construction release of contaminants etc as a result of inappropriate storage or movement of material.</p> <p>The ES should also make reference to other relevant chapters i.e. Geology and soils.</p>

	<p>Mitigation measures should also reference the Construction Environmental Management Plan (CEMP) to document use, storage and transportation of materials and waste.</p> <p>It would be useful to include an ‘example’ of the quantity of materials required for a project of this size to enable an understanding of the statement in 11.2.4 that there is ‘plenty of material resources available’ for the project.</p> <p>Further reference to consultations which have taken place or will take place with regards to materials and waste i.e. environment agency should be included within the ES.</p>
<p>12. Noise &amp; Vibration</p>	<p>Reference is made to consultations with the EHO at Hampshire Council on monitoring etc. These discussions should be with the EHO at <u>Winchester City Council</u> who are the statutory authority responsible for this function.</p> <p>Further clarification should be provided on how the existing noise climate has been determined and commentary provided on existing noise levels and the main sources of noise. Consideration should also be given in the assessment to noise nuisance, compliance with WHO guideline limits and night time noise in addition to SOAELs</p> <p><i>Noise Important Areas:</i> The assessment should consider the ‘specific improvements’ within the action plan for each NIA within the calculation area, how the scheme will impact on these areas. Also, the contribution of this scheme to achieving these objectives also needs to be clarified.</p> <p><i>Ecology:</i> The assessment predicts that a number of residential receptors and designated ecological areas within the calculation area will be adversely impacted by changes in noise both in the short and long term but that these can be effectively reduced with mitigation. Potential impacts on these receptors should also be considered in detail within the noise assessment and potential requirements for mitigation considered, and residual effects assessed.</p> <p><i>SDNP:</i> Effects within the SDNP are predicted to be more significant with a number of receptors points predicted to have minor, moderate or even major magnitude changes. Further details should be included on where within the SDNP the effects are greatest, and consideration given to other options for mitigation including design changes that could be considered to reduce these impacts.</p> <p><i>Mitigation:</i> The criteria used to determine eligibility for mitigation needs to be clearly defined in the assessment and reasons for the mitigation options selected. Where mitigation for particular receptors has been discounted, the reasons for this need to be clarified.</p>
<p>13. Population &amp; Health</p>	<p>This chapter covers a really broad range of topics and it isn’t clear whether all the issues required by DMRB Vol 11 part 6 – Land Use, Part 8 – peds, cyclists and community, and part 9 Vehicle Travellers are to be incorporated into one chapter along with the health and population assessments or covered elsewhere? Could the effects on vehicle travellers and NMUs be in a separate chapter as this is a significant topic area in its own right?</p> <p>Further data on the local health profile and public health policies for Hampshire can be obtained from HCC’s Public Health Team – email <a href="mailto:public.health@hants.gov.uk">public.health@hants.gov.uk</a> and via HCCs website at <a href="https://www.hants.gov.uk/socialcareandhealth/publichealth">https://www.hants.gov.uk/socialcareandhealth/publichealth</a>.</p>

*Public transport:* The EIA should also consider current public transport resources for the local population and assess the effects of the scheme on accessibility to public transport and operation of services both during construction and once the scheme is operational.

When describing the significance of effects, the length of time of construction should also be a consideration.

*Effects on all Travellers:* In addition to the information provided in the Transport Assessment, the EIA should also define baseline traffic conditions for opening and future years and include an assessment of the impacts of changes in traffic flows resulting from the scheme for both vehicle users and NMUs during both the construction and operational phases.

This should include all relevant issues in “Guidelines for the Environmental Assessment of Road Traffic” (IEMA, 1993) as well as those in Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Parts 8 and 9 including.

- Driver delay (IEMA);
- Pedestrian delay and amenity (IEMA);
- Fear and intimidation (IEMA);
- Accidents and Safety (IEMA);
- Changes in amenity (DMRB);
- Views from the road (DMRB); and
- Driver stress (DMRB).

*Construction Traffic Management:* The EIA should also identify measures to be implemented during construction to manage works traffic and minimise impacts on other road users and local communities e.g. vehicle routing, avoiding peak periods.

*NMUs:* It is noted there will be enhancement of pedestrian and cycle route connectivity incorporated into the design. HCC would strongly support any such initiatives, particularly opportunities for increasing the number of crossing points over the M3 and A34, improving existing PROWs and developing new links between them.

The assessment should also consider potential impacts on residential properties, development land, community land and assets/facilities and agricultural land and holdings in accordance with the guidance in Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3 Part 6 (Land use), Highways Agency June 1993 (Ref 12.8).

Rights of Way (comments from HCC Countryside Service)

Table 13-4 in ‘other recreation/tourist Assets’ has omitted the rights of way network and promoted/ long distant routes. I think these are a legitimate asset and should be included in this review, as not only providing a link for the population of Winchester to the Wider National Park, but also as a draw for visitors in their own right and as an important link to access the other assets included, such as Winnall Moors NR.

Where rights of way are considered in section 13 they have acknowledged the impact the construction will cause and have intimated potential improvements that could be made to the existing RoWs within the footprint of the road scheme. It is perhaps to be expected that they are taking a somewhat narrower focus than we have when looking at impacts and this I suspect will be the crux of our negotiations.

	<p>I note that the assessment scheme has no precedent for judging the effects on the RoW, but the suggested scheme appears reasonable.</p>
<p>14. Road Drainage &amp; Water</p>	<p>Overall, the scope of Water and Drainage is acceptable and includes key impacts for further investigation. A list of discharge consents should be included within the baseline.</p> <p>14.2.12 states ‘The risk posed by these existing drainage assets will be considered within the overall assessment. The assets that have been assessed in detail are concluded to pose an overall low to no risk status.’ Please clarify this in the ES, it is not clear what is has already been assessed and what is going to be assessed.</p> <p>A separate constraints map for water and drainage should be included, it is difficult to ascertain water constraints and boundaries in the current figure 1.1</p> <p>It is noted that in this location a significant volume of litter (from the road) enters the River Itchen (SAC) particularly from the A34. Consideration should be given in the scheme design to screening or fencing the highways verges where the scheme passes directly over or adjacent to waterways within these areas to prevent litter and particularly plastics from entering the water environment.</p> <p>It is imperative that the potential effects around pollution incidents and major accidents with respect to effects on water quality are adequately addressed given the sites proximity to the River Itchen SAC/SSSI.</p> <p><u>HCCs Flood &amp; Water Management Team</u></p> <p>Pre-application discussions should be undertaken with HCCs FWM team regarding the proposed drainage strategy for the scheme and to identify any requirements for Ordinary Watercourse consents for any works or new structures near to ordinary watercourses. Contact: <a href="mailto:owc@hants.gov.uk">owc@hants.gov.uk</a></p> <p>HCC FWM would support the use of multi-stage proposals that maximise passive treatment through the use of SuDS.</p>
<p>15. Climate</p>	<p>No comment, the elements scoped in and out appear reasonable.</p>
<p>16. Cumulative Effects</p>	<p>It is important that the ES includes a clear definition of cumulative effects to clearly differentiate between combined and cumulative effects. Guidance in DMRB Volume 11, Section 2, Part 5, includes a definition:</p> <p>There are two principal types of cumulative impact in environmental impact assessment of road schemes. These are:</p> <ol style="list-style-type: none"> <li>i. Combined or ‘synergistic effects’ caused by the combination of a number of impacts from a single project which when combined may give specific impacts upon a single receptor/resource;</li> <li>ii. cumulative impacts from other allocated/committed development projects in combination with the project being assessed which collectively cause a more significant effect than individually. This can include multiple impacts of the same or similar type from a number of projects upon the same receptor/resource. For example, the combination of traffic, air quality or noise impacts form the combined construction activities on a sensitive receptor e.g. ecological habitat, associated with several developments in that locality.</li> </ol>

	<p>The methodologies proposed for the combined and cumulative effects assessments appear reasonable and in line with best practice (zone of influence, long list, short list etc). We note that discussion has been provided regarding the limitations of the cumulative effects assessment, for example with respect to whether adequate information / evidence would be available for many of the short listed developments to allow for a meaningful cumulative assessment to be undertaken.</p> <p>It is noted that the cumulative effects of the proposed scheme with the M3 smart motorway will be an integral part of the cumulative assessment.</p> <p>Given that the proposed development is located close to sensitive receptors including the River Itchen SAC/SSSI and Winnall Moor Nature Reserve consideration should be given to both the combined and cumulative effects on these receptors with particular regard to water quality, flooding, dust and noise which cumulatively or in combination may pose a more of a risk and result in a degradation of the receptors than in isolation.</p>
Other	<p><u>Socio-economic effects</u></p> <p>The EIA should also include a socio-economic assessment for the M3 J9 scheme which considers the likely significant effects during both the construction and operational phases.</p> <p>This should include temporary and permanent employment creation, contribution to local and sub-regional economic objectives and temporary disruption to local residents and businesses during the construction phase of the Proposed Scheme. Key areas are transport and connectivity, local and wider regional labour markets and employment, land, and meeting socio-economic policy objectives.</p> <p>It should consider the local economic baseline (headline macroeconomic indicators, labour force, businesses, transport and accessibility, housing, travel to work) and local and sub-regional economic objectives, and economic trends and constraints and identify the potential temporary and longer-term effects on the local and wider economy arising from the Proposed Scheme.</p>