RECORD OF DETERMINATION

Annex II relevant projects

<table>
<thead>
<tr>
<th>Name of project:</th>
<th>Location (including national grid reference):</th>
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<tbody>
<tr>
<td>M1 J28 to 35a (J28 to 35a) Smart Motorway (SM) Updated Operating Regime</td>
<td>M1 J28 to 35a (SK45517 56054 to SK35889 98257)</td>
</tr>
</tbody>
</table>

Qualifying criteria for Annex II relevant project: (tick as appropriate)

<table>
<thead>
<tr>
<th>Improvement element of project is &gt;1ha</th>
<th>Project is located within 'sensitive' area</th>
<th>Other with potential for significant effect (e.g. adjacent to sensitive area)</th>
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<tbody>
<tr>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
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</table>

A. Description of project:
The proposed scheme involves changing the operating regime of the Smart Motorway (SM) scheme currently being built along an 33.8 miles (54.4 kilometres) stretch of the M1 between J28 and 35a (Marker Post 214/7+053 to 268/9+50) covering approximately 31.5 hectares of land. See attached Figure 1 for the location of the scheme. Standard SM schemes operate at the national speed limit (70mph), however the environmental assessment of this standard operation, completed in 2014, concluded that it would result in significant adverse effects leading to the adoption of a mitigated operating regime with a speed restriction of 60mph from 7am to 7pm for both schemes that now constitute the M1 J28-35a corridor. The Secretary of State for Transport subsequently tasked Highways England with investigating alternatives to this mitigated regime to reduce or minimise the requirement for speed restriction whilst construction of the scheme progressed. This investigation re-confirmed that standard ALR on the M1 J28-35a corridor opening in 2017 would still give rise to significant adverse air quality effects. Alternative mitigation has now been investigated and subject to an environmental assessment to support the Determination process. This project therefore focuses on changing the operational regime and potential implications on air quality and noise.

B. Description of sensitivity or value of local environment, including statutory and non-statutory designations:
This section of the M1 provides a link between the Midlands and the North of England and serves inter-city journeys in South Yorkshire. The existing motorway cuts through a largely rural landscape, comprising a mixture of pasture and arable farm land, interspersed with former mine working operations and settlements. Urban areas within the study area include settlements such as Bala, north east of J35, Tilleshull, Wales, Brinsworth and Whiston to the north of the motorway east of J33; Tinsley to the north of J34(S) and Wincobank to the south of J34(N). Environmental designations in proximity to the scheme and relevant to this assessment include nine Air Quality Management Areas (AQMAs) located adjacent to the existing motorway and declared for exceedence of the annual mean Nitrogen dioxide (NO2) air quality objective. Of these AQMAs, the Sheffield Citywide AQMA has also been declared for exceedence of the 24-hour PM10 objective. In the wider air quality study area, five other AQMAs have been declared for NO2. There are also 34 DEFRA Noise Important Areas within 600m of the scheme. There are no other statutory and no non-statutory designations relating to air quality and noise within the study area.

C. Details of environmental impact assessment work undertaken including a summary of the results of any internal and external consultation undertaken:
The environmental assessment was undertaken following guidance contained with the Design Manual for Roads and Bridges, Volume 11 and specifically IAN 161/13: MM-ALR Guidance. Detailed level assessments were undertaken for Air Quality and Noise.

- Environment Agency – No objections to updated mitigating operating regime. Made some observations on surface water management, compensatory habitat creation and river restoration.
- Historic England – No comments on updated mitigating operating regime. Some comments on physical design changes and asked to be consulted on any further scheme changes.
- National Trust – No objections to the updated mitigating operating regime. Requested to be consulted on any further scheme changes
- Rotherham MBC – Happy with the conclusion of the noise assessment. Questioned the air quality assessment conclusion on Compliance stating that the updated mitigating operating regime would delay Rotherham MBC’s ability to comply with the EU Directive on ambient quality within its M1 AQMA. Noted the importance of effective monitoring of speed to comply with the speed restriction. A response was sent reiterating that the Compliance Risk Assessment for the scheme was undertaken in accordance methodology in Interim Advice Note 175/13.
- Sheffield City Council – Accept that the updated mitigating operating regime would result in better AQ compared to do nothing. Offered broad support/future co-operation if number provisions were met.
- Nottingham County Council – Accepts the temporary speed control and endorses the desire to revert to 70mph at the earliest opportunity.
- Derbyshire District Council, Chesterfield BC, Nottingham CC, Bolsover DC, North East Derbyshire DC – No response received.

D. Summary of likely main environmental effects of the project:
Operational phase effects are summarised for relevant topics below.

Air Quality: Implementation of 70mph SM-ALR was predicted to result in significant adverse air quality impacts. A mitigated SM-ALR operating regime of 60mph weekday AM and PM peak, 70mph inter-peak, 70mph overnight and 70mph weekend is therefore required. The environmental assessment of this mitigated operating regime concluded it would not result in significant adverse air quality effects. It is projected that in 3 to 5 years from opening in 2017, mitigation would no longer be required and a standard SM-ALR operation can be implemented. Continuous Air Quality Monitors located along the route will support the timing of the switch to standard ALR operation. The mitigated operating regime is considered to have a low risk of delaying compliance with the EU Air Quality Directive.

Noise and Vibration: Beneficial impacts (negligible, minor and moderate) are predicted to 88% of dwellings in the short term, 11% are subject to either negligible noise increases or no change in noise levels. These beneficial decreases are attributable to the application of a Low Noise Surfacing on all lanes of the motorway in the Opening Year of the scheme. The remaining properties (five) are expected to receive a minor increase in noise. In the long term, 55% of dwellings are predicted to experience a negligible and minor decreases in noise, 45% are predicted to be subject to either negligible increases or no change in noise levels. The remaining properties (14) are predicted to receive minor to moderate increases in noise levels attributable to cumulative effect with third party developments at J28a.

E. I hereby request a determination for the above named relevant project as required by Highways Act 1980 (as amended) Section 105A (3b)

Signature Project Manager

Dated: 25 November 2015

F. File Reference for Supporting Assessment records for future reference.
M1 J28 to 35a Smart Motorway Scheme, Environmental Assessment Report (SGAR5), August, 2015
Produced by Mouchel. Report Ref: 1043319/ENV/PCF/2/001

G. In accordance with the requirements of the Highways Act 1980 (as amended) Section 105A (3b) I have determined that a statutory Environmental Impact Assessment is not required for this project due to the following: The environmental assessment demonstrates that the SM operating at 60mph weekday AM and PM peak, 70mph inter-peak, 70mph overnight and 70mph weekend by virtue of its characteristics, its location and potential environmental impacts is not predicted to cause any significant effects.

Signature Strategic Highways Company Nominee

Dated: 12/15

H. Garland