



M42 Junction 6 Improvement Scheme Number TR010027

Volume 6

6.3 Environmental Statement

**Appendix 16.1 Cumulative effects:
screening methodology**

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2019

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M42 Junction 6 Improvement Development Consent Order 202[-]

6.3 Environmental Statement

Appendix 16.1 Cumulative effects: screening methodology

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Background

- 16.1.1 This appendix provides details of how guidance contained within the Inspectorate's Advice note seventeen [REF 1] has been applied to the cumulative effects assessment of the Scheme.
- 16.1.2 The search methodology used to populate the long list of 'other developments' presented in Appendix 16.2 Long List of Developments [TR010027/APP/6.3] and the inclusion/exclusion criteria that have applied in the shortlisting process, resulting in the short list presented in Appendix 16.3 Short List of Other Developments [TR010027/APP/6.3], are also described.

Stage 1: Establish the NSIP Zol and identify long list of 'other development'

Zone of Influence

- 16.1.3 The search area for developments to be included in the long list of 'other development' was based upon the maximum (Zone of Influence) Zol for the Scheme (2km) plus a 1km buffer zone, creating a 3km radius around the Scheme's Order Limits. This area was extended outward to 5km specifically in relation to Nationally Significant Infrastructure Projects and major highway schemes. The Zol for each of the assessment topics is presented in Table 1 below.
- 16.1.4 The 2km maximum Zol reflected the study areas used in the biodiversity assessment of statutory nature conservation designations (Chapter 9. Biodiversity).
- 16.1.5 One Zol larger than 2km is considered in the biodiversity assessment. This is 30km for international statutory nature conservation designations for sites containing bats. For the purposes of this assessment, a 30km search area for other developments was deemed to be disproportionately large, due to the improbability of cumulative effects occurring at this distance. Additionally, the Habitats Regulations Assessment screening process [TR010027/APP/6.8] concluded that no likely significant effects would occur on sites including bats as an interest feature at this distance.

Table 1: Zol summary

Environmental Topic	Zone of Influence (Zol)
Air Quality	<p>Construction: 200m Zol from construction activities for construction dust and emissions.</p> <p>Operation: The 'affected roads' define the Zol (as described in Chapter 5 EIA Methodology and Consultation [TR010027/APP/6.1]). As the operational phase traffic data includes traffic associated with other developments, the air impact assessment to be included in the ES will partially be a cumulative impact assessment. As such developments already</p>

	<p>incorporated into the Air Quality assessment have not been considered in the cumulative assessment.</p> <p>See Chapter 6 Air Quality [TR010027/APP/6.1] for further information.</p>
Cultural Heritage	<p>Construction and Operation: A 1km Zol, which is the maximum extent used within the cultural heritage assessment. This Zol is divided into the following:</p> <p>1km Zol for designated assets; and,</p> <p>500m Zol for non-designated assets.</p> <p>The 1km Zol is in accordance with the guidance on the Zone of Theoretical Visibility (ZTV) in Design Manual for Roads and Bridges Volume 11 Section 3 Part 5 (Annex III) [REF 2]. See Chapter 7 Cultural Heritage [TR010027/APP/6.1] for more details.</p>
Landscape and Visual Effects	<p>Construction and Operation: 500m Zol for landscape and visual impacts.</p> <p>Based upon preliminary assessments, it was determined that the Scheme would not influence landscape character or emerge as a prominent new feature in existing views beyond 500m of the Scheme.</p> <p>Accordingly, the study area extents were narrowed to an area extending to 500m (from the original 2km) around the Scheme's Order Limits, on the basis that the Scheme would not give rise to significant environmental effects beyond this distance.</p> <p>See Chapter 8 Landscape [TR010027/APP/6.1] for more details.</p>
Biodiversity	<p>Construction and Operation: A 2km Zol in-line with the desktop study which has been conducted for national statutory and non-statutory nature conservation designations. A 30km study area is included for Special Areas of Conservation where bats are an interest feature.</p> <p>The defined Zol is consistent with the study areas as defined for the biodiversity impact assessment - see Chapter 9 Biodiversity [TR010027/APP/6.1].</p>
Geology and Soils	<p>Construction and Operation: Zol covers all locations where physical works and ground disturbance would take place, plus a 250m buffer.</p> <p>The defined Zol is consistent with the study areas as detailed in Chapter 10 Geology and Soils</p>

	[TR010027/APP/6.1].
Materials	<p>Construction: The Zol comprises the Order Limits and the region within which waste management facilities are located and from where construction materials may be sourced.</p> <p>Operation: Operational phase waste management issues have been scoped out of the assessment.</p> <p>The defined Zol is consistent with the study areas as detailed in Chapter 11 Materials [TR010027/APP/6.1].</p>
Noise and Vibration	<p>Construction: 1km Zol around construction activities.</p> <p>Operation: 1km Zol for operational impacts (extends 1km from existing routes that would be improved or bypassed, and any proposed new routes, between the start and end points of the physical works associated with the Scheme). As the operational phase traffic data includes traffic associated with other developments, the noise and vibration impact assessment to be included in the ES will partially be a cumulative impact assessment. As such developments already incorporated into the Air Quality assessment have not been considered in the cumulative assessment.</p> <p>The defined Zols are consistent with the study areas as defined for the noise impact assessment – see Chapter 12 Noise and Vibration [TR010027/APP/6.1].</p>
Road Drainage and the Water Environment	<p>Construction and Operation: 1km Zol for waterbodies (water bodies located outside the Zol, but immediately within its surrounds, have been included where it appears that there is hydraulic connectivity to features within the Zol and the possibility that they could be significantly affected.) and flood risk. For groundwater bodies, the Zol is the potential zone of impact.</p> <p>The defined Zols are consistent with the study areas as defined for the water environment impact assessment – see Chapter 14 Road Drainage and the Water Environment [TR010027/APP/6.1].</p>

Application Search

- 16.1.6 A search of planning applications and relevant development plan documents was conducted, and developments which met the criteria below were included on a long list of ‘other development’. Developments incorporated into the Scheme’s traffic model were also taken into consideration.
- 16.1.7 The selection criteria for inclusion in the long list were as follows:

- a. all transport infrastructure and developments included in the traffic uncertainty log, which were considered sufficiently certain to be included in the traffic model ‘core scenario’¹, were included in the long list; and
 - b. planning applications considered to be ‘major developments’² which included:
 - i. employment proposals of 1000m² or more;
 - ii. residential proposals with 10 or more houses or, where the number of houses is not known, a site area of 0.5ha or more;
 - iii. minerals or waste sites with an area of 1ha or more; or
 - iv. transport infrastructure proposals with an area of 1ha or more.
- 16.1.8 A search was conducted for all major development applications submitted between 1st January 2013 and 26th November 2018, using the planning application search functions on Solihull Metropolitan District Council (SMBC) [REF 4] and North Warwickshire Borough Council (NWBC) [REF 5] websites. A search conducted using the Planning Inspectorate’s website [REF 6] and the Highways England Improvements and Major Road Projects website [REF 7] revealed that there are no NSIPs or major road projects within 5km of the Scheme.
- 16.1.9 High Speed 2 (HS2), which consists of the main railway line and the Birmingham Interchange Station, has been consented through a Hybrid Bill and would be located to the east of the Scheme. The Birmingham Interchange Station would be constructed on the land to the north east of Junction 6, and the main railway line would cross the A45 approximately 800m east of the Junction. Due to the proximity of the Scheme to HS2, and the likelihood of overlapping construction programmes, HS2 has been included in the short list of developments.
- 16.1.10 The search revealed no major developments within the administrative boundary of NWBC falling within 3km of the Scheme.
- 16.1.11 Each identified planning application was reviewed to determine the current status of each major development, to identify whether the development had been implemented (completed), was under construction, or if the consent had expired.
- 16.1.12 Major developments which met the inclusion criteria detailed in section 1.2.3 above, where consent had not expired, and the development had not been completed, were added to the long list. Where developments have been completed, they are considered within the baseline against which the effects of the Scheme have been assessed.
- 16.1.13 All transport infrastructure schemes and developments from the core scenario of the traffic model were included in the long list of ‘other development’. The core scenario included major road schemes and developments within the regions of: Solihull, Birmingham, Warwickshire, Nuneaton and Bedford, and Coventry.

¹ The ‘core scenario’, as defined within the Transport Assessment Report [TR010027/APP/7.3] includes developments which are considered to be ‘reasonably foreseeable’ or ‘near certain’.

² as defined in the in the Town and Country Planning (Development Management Procedure) (England) Order 2010 (TCPO) [REF 3]

- 16.1.14 Only the administrative areas of Solihull and Warwickshire fell within the Zol for the Scheme. Accordingly, developments which were included in the traffic model, within the administrative boundaries of Birmingham, Coventry, and Nuneaton and Bedford were deemed to be located at too great a distance from the Scheme to interact with it cumulatively.

Stage 2: Identify shortlist of ‘other development’ for Cumulative Effects Assessment (CEA)

- 16.1.15 The Planning Inspectorate’s Advice note seventeen [REF 1] states:

“In order to ensure the CEA is proportionate, it may be appropriate for applicants to apply threshold criteria to assist in deciding whether to include or exclude ‘other development’ that falls within the proposed NSIP’s Zol from further assessment”

- 16.1.16 In determining which of the developments should be shortlisted for consideration in the cumulative effects assessment, the following threshold criteria were applied.

Availability of environmental information

- 16.1.17 In order to allow a meaningful cumulative assessment to be conducted, a minimum level of information was considered necessary; this was taken to be an environmental scoping report or similar environmental report. Developments without this minimum level of information were not included in the short list of other development.

- 16.1.18 Where available, information on construction schedules, Zol and other environmental information was collated, and each item was assigned to a tier of certainty in accordance with the Planning Inspectorate’s Advice note seventeen [REF 1] (Chapter 16 Assessment of Cumulative Effects [TR010027/APP/6.1]).

- 16.1.19 Where a sufficient amount of environmental information was available to allow a meaningful CEA to be conducted, and the development was considered to have enough certainty to justify its inclusion in the assessment, then the development was added to the short list.

Stage 3: Information gathering

- 16.1.20 To inform the cumulative effects assessment, the following environmental information was obtained (where available) for each of the shortlisted developments:
- the location and boundary for the development;
 - design information and elevation drawings;
 - the possibility of temporal overlap between different phases of the development and the Scheme;
 - the construction, development and/or decommissioning programme;
 - the environmental baseline and details of any potential or likely environmental effects; and;

f. the Zol for each environmental topic.

- 16.1.21 This information was compiled from the SMBC Planning Portal website [REF 2] (as the only local planning authority area within which long list developments were located).

Stage 4: Assessment

- 16.1.22 Developments which met the inclusion criteria set out in the steps above were included in the cumulative effects assessment.

- 16.1.23 The cumulative assessment has been completed in general accordance with the guidance in advice note seventeen [REF 1]. See Chapter 16 Assessment of Cumulative Effects [TR010027/APP/6.1] for full details.

16.2 References

REF 1	Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects. The Planning Inspectorate (2015). https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf
REF 2	Design Manual for Roads and Bridges, Volume 11. Highways England (1993 to date). http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/index.htm
REF 3	Town and Country Planning (Development Management Procedure) (England) Order 2010. HMSO (2010). http://www.legislation.gov.uk/uksi/2010/2184/contents/made
REF 4	Search for Planning and Building Control applications. Solihull Metropolitan Borough Council (2018). http://www.solihull.gov.uk/Resident/Planning/searchplanningapplications .
REF 5	Planning application search, objections and comments. North Warwickshire Borough Council (2018). https://www.northwarks.gov.uk/planning
REF 6	National Infrastructure Planning, project application search. Planning Inspectorate (2018). https://infrastructure.planninginspectorate.gov.uk/
REF 7	Improvements and major road projects, find a project. Highways England (2018). https://highwaysengland.co.uk/roads/