

A38 Derby Junctions

TR010022

Volume 6

6.1 Environmental Statement
Chapter 16 – Summary of Residual
Effects

Regulation 5(2)(a)

Planning Act 2008

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

April 2019

Infrastructure Planning

Planning Act 2008

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

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6.1 Environmental Statement Chapter 16 Summary of Residual Effects

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16. Summary of Significant Environmental Effects

16.1 Summary

- 16.1.1 Chapters 5 to 15 of this Environmental Statement (ES) have considered the potential environmental impacts and effects during Scheme construction and operation. Table 16.1 provides a high-level summary of the likely significant environmental effects of the Scheme that have been identified, following the implementation of the mitigation or impact avoidance measures that have been included in the Scheme design, as well as measures to be taken to manage potential environmental effects during Scheme construction and operation (as detailed in Chapters 5 to 15, where relevant).
- 16.1.2 As outlined in Chapter 4: Environmental Impact Assessment Methodology, for the purposes of this ES, an environmental effect is considered to be 'significant' if it is assessed to be moderate, large or very large (adverse or beneficial).

Table 16.1: Summary of significant effects associated with Scheme construction and operation

Topic	Assessment of significant environmental effects*	
	Construction stage	Operational stage
Air quality	<ul style="list-style-type: none"> No significant effects. 	<ul style="list-style-type: none"> No significant effects.
Cultural heritage	<ul style="list-style-type: none"> No significant effects. 	<ul style="list-style-type: none"> No significant effects.
Landscape and visual	<ul style="list-style-type: none"> Temporary moderate adverse effects within the Mackworth Public Open Space Local Character Area (LCA). Temporary moderate adverse effects within the Mackworth and Derby Fringes Residential Areas LCA. Temporary large adverse effects within Markeaton Park and Surrounds LCA. Temporary large adverse effects within the Darley Residential Surrounds LCA. Temporary large adverse effects within the Darley Abbey and Derwent Valley Flood Plain LCA. Temporary large adverse effects within Little Eaton and Breadsall Greenbelt LCA. Temporary large adverse visual effects upon Representative Viewpoints 1, 7, 16, 17. Temporary moderate adverse visual effects upon Representative Viewpoints 2, 4, 5, 10, 12, 14, 23, 24. 	<ul style="list-style-type: none"> Moderate adverse effects within Markeaton Park and Surrounds LCA (Year 1) (reducing to slight adverse by Year 15). Moderate adverse effects within the Darley Residential Surrounds LCA (Year 1) (reducing to neutral effects by Year 15). Moderate adverse effects within the Darley Abbey and Derwent Valley Flood Plain LCA (Year 1) (reducing to slight adverse by Year 15). Moderate adverse effects within Little Eaton and Breadsall Greenbelt LCA (Year 1) (reducing to slight adverse by Year 15). Moderate adverse visual effects upon Representative Viewpoints 2, 7, 10, 16, 17 (Year 1) (reducing to slight adverse or neutral by Year 15).
Biodiversity	<ul style="list-style-type: none"> Moderate adverse effect upon the A38 Roundabout Local Wildlife Site (LWS) (at Kingsway junction). Moderate adverse effect in the short to medium term on semi-natural broadleaved woodland (across the whole Scheme). 	<ul style="list-style-type: none"> Moderate beneficial effect in the medium to long term on Dam Brook (running water). Moderate beneficial effect in the long term for otter. Moderate beneficial effect in the long term for aquatic macro-invertebrates. Moderate beneficial effect in the long term for protected/notable fish species in Dam Brook (brook lamprey <i>Lampetra planeri</i>, bullhead <i>Cottus gobio</i> and brown trout <i>Salmo trutta</i>).

Topic	Assessment of significant environmental effects*	
	Construction stage	Operational stage
Noise and vibration	<ul style="list-style-type: none"> Significant adverse construction noise effects: At closest receptors to construction works between Kingsway junction and Kedleston Road junction, Ford Farm Mobile Home Park, the northern edge of Breadsall and works at the floodplain compensation area. Significant adverse construction vibration effects (human annoyance): Approximately 150 receptors within 50m of earthworks using large vibratory rollers (Ford Farm Mobile Home Park, south end of Ford Lane, properties between Kingsway junction and Markeaton junction and closest buildings at Royal School for the Deaf). Significant adverse noise effects due to construction traffic: At closest receptors within the Royal School for the Deaf, the western end of the A52 Ashbourne Road and traffic re-routing on minor roads within Mackworth and New Zealand. 	<ul style="list-style-type: none"> Significant adverse operational traffic noise effects: At Lydia House (used by boarding pupils during the week) and the Karten building within the Royal School for the Deaf. Significant beneficial operational traffic noise effects: At three residential buildings in the vicinity of Raleigh Street, New Zealand.
Geology and soils	<ul style="list-style-type: none"> No significant effects. 	<ul style="list-style-type: none"> No significant effects.
Material assets and waste	<ul style="list-style-type: none"> No significant effects. 	<ul style="list-style-type: none"> No significant effects.
People and communities	<ul style="list-style-type: none"> Temporary moderate adverse effect on pedestrians and cyclists using the shared footway and cycleway east of Kingsway junction (due to disruption and diversions during the construction phase). Temporary moderate adverse effect on pedestrians and cyclists using Markeaton footbridge (due to temporary loss of footbridge during the construction phase). Temporary moderate adverse effect on pedestrians and cyclists using the River Derwent bridge on Ford Lane (due to temporary bridge closure (worst-case three months)). Large adverse effect due to the permanent loss of 17 residential properties and permanent loss of land occupied by residential properties. 	<ul style="list-style-type: none"> Permanent moderate beneficial effect for walkers and cyclists due to a new shared footpath and cycleway across Kingsway junction. Permanent moderate beneficial effect for users of the Regional Cycle Route (RR) 66 between Brackensdale Avenue and Kedleston Road (due to improved amenity and perceived safety for pedestrians and cyclists). Permanent moderate beneficial effect on motorised users using the A38 (due to reduction in journey length, congestion and improved perception of safety).

Topic	Assessment of significant environmental effects*	
	Construction stage	Operational stage
Road drainage and the water environment	<ul style="list-style-type: none"> No significant effects. 	<ul style="list-style-type: none"> No significant effects.
Climate	<ul style="list-style-type: none"> No significant effects 	<ul style="list-style-type: none"> No significant effects
Cumulative effects	<ul style="list-style-type: none"> Temporary moderate adverse combined visual, noise, air quality and severance effects on representative properties at Greenwich Drive South, Kingsway Park Close, Kingsway/ Raleigh Street, Greenwich Drive North, Windmill Hill Lane, the Royal School for the Deaf, south-east Allestree, Ford Farm Mobile Home Park, Breadsall village. Temporary moderate adverse combined visual, noise, air quality and severance effects on recreational users of Greenwich Drive South public open space, NR54 and NR68 and RR66, Markeaton Park and the Derwent Valley Heritage Way. 	<ul style="list-style-type: none"> Temporary moderate adverse (Year 1) combined visual, noise, air quality and severance effects on representative properties at Greenwich Drive South and Greenwich Drive North, reducing to slight adverse following maturation of landscape planting. Permanent moderate adverse combined visual, noise, air quality effects at Lydia House (used by boarding pupils) and the Karten building (offices and meeting rooms) at the Royal School for the Deaf (other buildings within the school would experience no more than a slight adverse effect). Temporary moderate adverse (Year 1) combined visual, noise, air quality and severance effects on recreational users of the Derwent Valley Heritage Way, reducing to slight adverse following maturation of landscape planting.

*Note - after inclusion of defined mitigation measures