

# HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

## Supplementary Environmental Statement and Additional Provision 2 Environmental Statement

Volume 2 | Community forum area report

CFA26 | Washwood Heath to Curzon Street

July 2015

SES and AP2 ES 3.2.1.26



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## Department for Transport

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# Structure of the HS2 Supplementary Environmental Statement and Additional Provision 2 Environmental Statement

The Supplementary Environmental Statement (SES) and Additional Provision 2 Environmental Statement (AP2 ES) comprises:

- non-technical summary (NTS). This provides a summary in non-technical language of the SES (Part 1) and AP2 ES (Part 2) and of any likely significant environmental effects, both beneficial and adverse, which are new or different to those reported in the High Speed T (HS2) Phase One Environmental Statement (ES) submitted to Parliament in November 2013 in support of the hybrid Bill ('the Bill') for Phase One of HS2 (hereafter referred to as 'the main ES') and, where relevant, the AP ES submitted in September 2014 (hereafter referred to as 'the AP1 ES');
- Volume 1: introduction to the SES and the AP2 ES. This introduces the supplementary environmental information and design changes included within the SES and amendments which have resulted in the need to amend the Bill within the AP2 ES. It also explains any changes to the scope, methodology, assumptions and limitations required for the environmental impact assessment;
- Volume 2: community forum area (CFA) reports and map books. These describe the supplementary environmental information and design changes included within the SES (Part 1), amendments within the AP2 ES (Part 2) and report any new or different likely significant environmental effects arising from these changes in each CFA compared to those reported in the main ES and, where relevant, the AP1 ES. The main local alternatives that have been considered are described, where relevant;
- Volume 3: route-wide effects. This reports new or different likely significant route-wide effects arising from the supplementary environmental information and design changes included within the SES (Part 1) and amendments within the AP2 ES (Part 2) compared to those reported in the main ES and, where relevant, the AP1 ES;
- Volume 4: off-route effects. This reports new or different likely significant off-route effects arising from the amendments within the AP2 ES compared to those reported in the main ES and, where relevant, the AP1 ES;
- Volume 5: appendices and map books. This contains supporting environmental information and associated maps; and

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- glossary of terms and list of abbreviations. This contains any new or different terms and abbreviations used throughout the SES and AP2 ES compared to those included in the main ES and AP1 ES.

# Structure of this report

This volume of the SES and AP2 ES is divided into CFA reports, which are in turn divided into two parts.

Part 1 provides supplementary environmental information relating to:

- new baseline information with respect to European Protected Species surveys;
- changes to the design or construction assumptions which do not require changes to the Bill; and
- corrections to the main ES.

Part 1 of each CFA report includes, where relevant:

- a description of the changes or updates within the CFA that have triggered the need for reassessment;
- an assessment of the environmental effects of the changes for relevant environmental topics considering the:
  - scope, assumptions and limitations of the SES assessment;
  - changes of relevance to the assessment;
  - environmental baseline;
  - effects arising during construction;
  - effects arising from operation; and
  - mitigation and residual effects; and
- a summary of any new or different likely residual significant effects as a result of the changes.

Part 2 provides environmental assessment information relating to proposed amendments to the design, which have resulted in the need to alter the powers conferred by the Bill. The following is included, where relevant:

- a summary of the proposed amendments within each CFA that have triggered the need for reassessment;
- a description of each amendment;
- an assessment of the environmental effects of each amendment for relevant environmental topics considering the:
  - scope, assumptions and limitations of the AP2 ES assessment;
  - environmental baseline;
  - effects arising during construction;
  - effects arising from operation; and



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- mitigation and residual effects; and
- a summary of any new or different likely residual significant effects as a result of each proposed amendment.

# 1 Introduction

- 1.1.1 The Bill for High Speed Rail between London and the West Midlands was submitted to Parliament together with the main ES in November 2013. The AP1 ES, which was submitted in September 2014, contained generally minor amendments to the design of the original scheme (i.e. the scheme submitted in November 2013). The Bill and associated Additional Provisions to the Bill, if enacted by Parliament, will provide the powers to construct, operate and maintain Phase One of HS2.
- 1.1.2 Since the submission of the main ES and AP1 ES, a number of changes or updates to environmental information and scheme design or assumptions have occurred, which may lead to new or different significant effects. These effects, depending on the type of change, are reported in the SES (Part 1) or AP2 ES (Part 2) of this document.
- 1.1.3 The SES contains updated environmental baseline information and scheme information relating to changes that have occurred within the current limits and powers of the Bill, and therefore do not require an Additional Provision to the Bill. This includes:
- additional environmental baseline information;
  - changes to the design or construction assumptions which do not require changes to the Bill; and
  - corrections to the main ES.
- 1.1.4 Design changes assessed within the SES include:
- localised widening of a road; and
  - corrections from the main ES.
- 1.1.5 The changes are described in Part 1 under a series of sub-headings and assessed on a topic by topic basis using the same approach adopted in the main ES.
- 1.1.6 The purpose of the SES is to provide an assessment of any new or different likely significant environmental effects arising from the changes described.
- 1.1.7 The AP2 ES reports the likely significant effects of amendments to the design of the scheme, which require the use of land outside the original limits of the Bill, additional access rights, or other extensions to the powers conferred by the Bill, making it necessary to submit an Additional Provision to the Bill.
- 1.1.8 The amendments assessed within AP2 ES include:
- additional access rights;
  - improvements to a road junction;
  - additional land for car parking; and
  - additional land for reconfiguration of an existing depot, and provision of rail sidings.

- 1.1.9 The AP2 ES assesses each amendment separately for all relevant topics. The purpose of the AP2 ES is to provide an assessment of any new or different likely significant environmental effects arising from the amendments.
- 1.1.10 The standard measures that will be used to mitigate likely significant adverse environmental effects during construction and operation of the scheme are described in the main ES, Volume 1, Section 9 and the draft Code of Construction Practice (CoCP) submitted in support of the Bill. Implementation of these measures has been assumed in this SES and AP2 ES.
- 1.1.11 It should be noted that, since submission of the Bill, the scheme design has been revised by SES design changes, amendments described in the AP1 ES (AP1 amendments) and amendments described in the AP2 ES (AP2 amendments).
- 1.1.12 In order to differentiate between the original proposals and subsequent changes, the following terms are used:
- 'the original scheme' - the Bill scheme submitted to Parliament in November 2013, which was assessed in the main ES;
  - 'the AP1 revised scheme' - the original scheme as amended by the AP submitted in September 2014;
  - 'the SES scheme' - the original scheme with the design changes described in the SES; and
  - 'the AP2 revised scheme' - the original scheme as amended by the SES scheme and AP2.

# Part 1: Supplementary Environmental Statement

## 2 Summary of changes

### 2.1 New environmental baseline information

#### Ecology

- 2.1.1 Extended Phase 1 habitat surveys have been undertaken in this area since the production of the main ES (September 2013).
- 2.1.2 Details of all survey work and desk-study information gathered since September 2013 which is relevant to this area is provided in SES and AP2 ES Volume 5: Appendix EC-001-004 (Baseline data appendix) and Volume 5 map series EC-02; EC-03; and EC-04.
- 2.1.3 The additional baseline data does not generate any new or different significant effects and therefore is not reported in Section 3.

### 2.2 Changes to the design or construction assumptions not requiring a change to the Bill

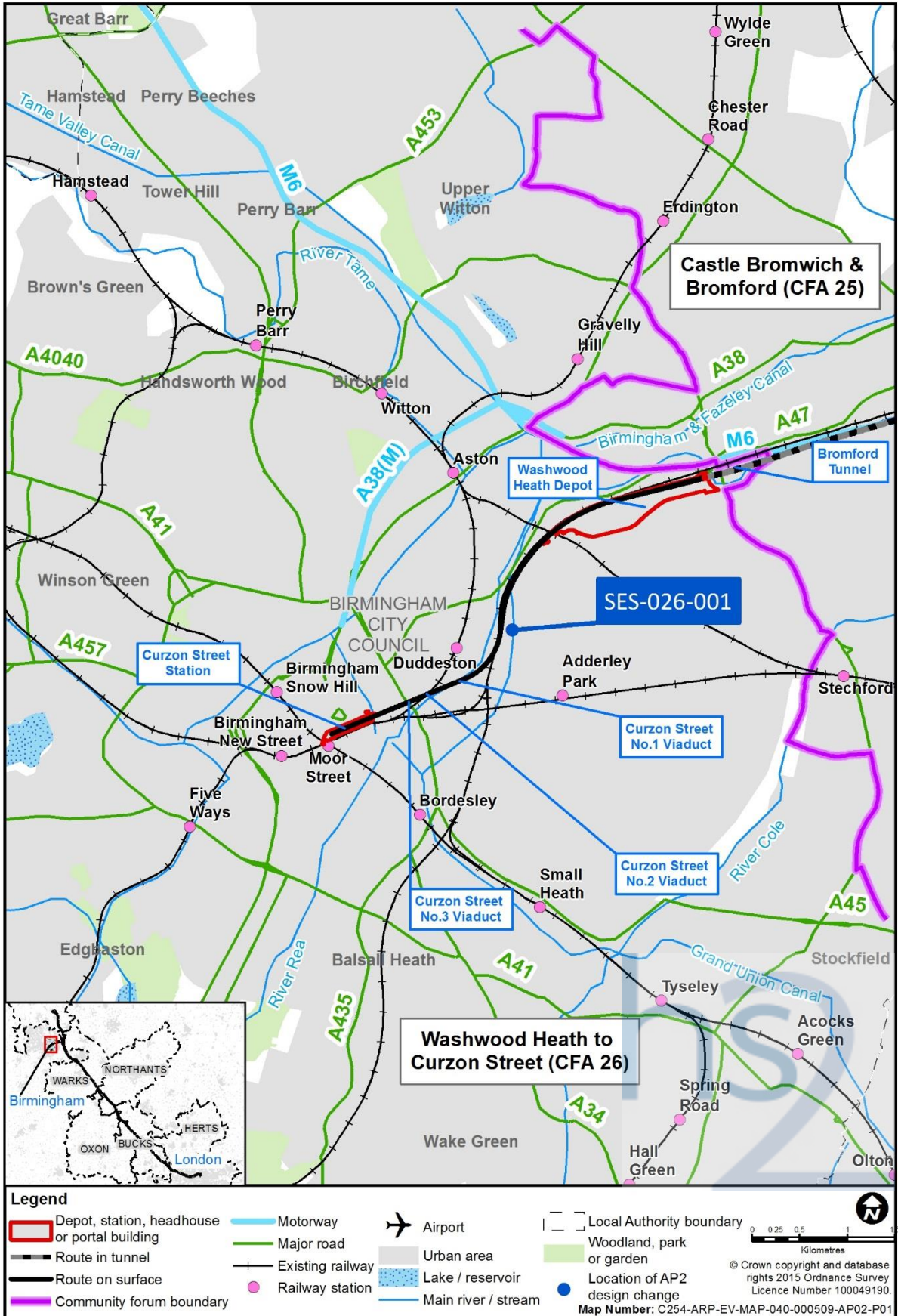
- 2.2.1 Table 1 provides a summary of the changes to the design or construction assumptions not requiring a change to the Bill which will result in new or different significant effects in the Washwood Heath to Curzon Street community forum area (CFA26). Figure 1 shows the locations.

Table 1: Summary of changes to the design or construction assumptions not requiring a change to the Bill in CFA 26

Name of design change or construction assumption	Description of the original scheme	Description of the SES scheme
Localised widening of the road network within Network Park Industrial Estate  (SES-026-001)	Temporary use of the road network within Network Park Industrial Estate as a construction traffic route to undertake utility works and construction of an embankment and a replacement bridge over Duddeston Mill Road.	Temporary localised widening of the road network within Network Park Industrial Estate and changing the circulation from a one-way to a two-way road, with associated signage. All works will be within the existing limits of the Bill.  New temporary rights of access are required under AP2-026-003 (reported in Part 2 of this CFA report).

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Figure 1: Location of changes to the design or construction assumptions not requiring a change to the Bill in CFA26



## Description of changes to the design or construction assumptions

### *Localised widening of the road network within Network Park Industrial Estate (SES-026-001)*

- 2.2.2 The Bill provides for construction traffic routes along the road network within Network Park Industrial Estate to undertake utility works and the construction of an embankment and a replacement bridge over Duddeston Mill Road (refer to map CT-05-141 in the main ES Volume 2, CFA26 Map Book). It was assumed that the road network within Network Park Industrial Estate was a public highway and therefore the land required for the construction route was not included within the original limits of the Bill. As a result of land required for the scheme, the western section of the internal circulation road within the industrial estate would be closed, disrupting the internal road network over approximately five years.
- 2.2.3 Since submission of the Bill it has been identified that the road network within Network Park Industrial Estate is privately owned and therefore rights of access are needed. Rights of access are to be included within the limits of the Bill and are detailed within AP2 change, AP2-026-003, reported in Part 2 of this CFA report.
- 2.2.4 To enable the temporary two way use of the road network within Network Park Industrial Estate during construction, some improvements are required including temporary localised widening and associated signage. All works will be within the existing limits of the Bill and the additional limits provided through AP2-026-003. Following completion of construction, the road network will be reverted back to a one-way system and the temporary widening removed.
- 2.2.5 The design change results in the removal of significant effects for socio-economics and these are reported in Section 3.

## 2.3 Corrections to the main ES

- 2.3.1 Since submission of the Bill, the need for a number of corrections in the contents of the main ES has been identified. Table 2 provides a list of those instances where there has been a need to correct the Volume 2 CFA report for Washwood Heath and Curzon Street because of the potential to alter the significant environmental effects reported in the main ES, or a factual inaccuracy relating to significant effects has been identified. The table gives the location of the correction in the main ES, the reason for the correction, replicates the text from the main ES, where applicable provides revised text, and identifies whether the correction changes a significant effect reported in the main ES. Where relevant, these corrections have been taken into account in the technical assessments contained within Section 3 of this SES.

Table 2: Summary of corrections to the main ES in CFA26

Reference in the main ES	Reason for correction	Text in the main ES	Revised text	Change to significant effects and mitigation
Community Paragraph 5.4.28, Volume 2, CFA 26 of the main ES	Incorrect amenity effect on properties on Bordesley Street reported. The assessment of amenity effect on properties on Bordesley Street included a significant effect from HGV traffic. This was incorrectly stated as there is no significant effect reported in the main ES due to HGV traffic in this location. A combination of noise and visual effects will remain and the significant effect will remain major adverse.	In addition, a construction traffic route is proposed on Bordesley Street, with a significant increase in HGVs passing the front of the properties. The combination of noise, visual and HGV traffic effects will result in a major adverse effect on the amenity of residents at these properties for approximately five years in total, and is therefore considered significant.	First sentence deleted.  Second sentence: The combination of noise and visual effects will result in a major adverse effect on the amenity of residents at these properties for approximately five years in total, and is therefore considered significant.	Yes  The significant HGV effect is removed, however two other significant residual effects (noise and visual) will remain, therefore resulting in a different effect. Residents of the properties have high sensitivity, therefore the effect will remain major adverse, and is therefore considered significant.
Community Paragraph 5.4.43 and 5.4.47, Volume 2, CFA 26 of the main ES <sup>1</sup>	Incorrect land requirement calculations at Eastside City Park.	Within Eastside City Park, a public square area and a grassed area south of the square will be required for the construction and operation of the Proposed Scheme. This includes approximately 11,500m <sup>2</sup> of the park (36% of the total park), which will be removed for an estimated five years during the construction period.  Part of this land (approximately 3,000m <sup>2</sup> ) will be required for the construction period only, following	Within Eastside City Park, a public square area and a grassed area south of the square will be required for the construction and operation of the Proposed Scheme. This includes approximately 13,300m <sup>2</sup> of the park (41% of the total park), which will be removed for an estimated five years during the construction period.  Part of this land (approximately 5,300m <sup>2</sup> ) will be required for the construction period only, following which it will be reinstated as Eastside City Park. The	No.  The area of land lost temporarily increases from 36% of the park to 41% of the park. As reported in the main ES, the public square area and a grassed area south of the square will be required for the construction and operation of the scheme. The effect on users of the park will remain major adverse, and therefore significant.  The permanent area lost will be reduced slightly, however this will

<sup>1</sup> The corresponding correction to the Volume 5 report is included with SES and AP2 ES Volume 5 CM-001-026.

		which it will be reinstated as Eastside City Park. The remaining 8,500m <sup>2</sup> required by the Proposed Scheme, will be removed permanently (see permanent effects).	remaining 8,000m <sup>2</sup> required by the Proposed Scheme, will be removed permanently (see permanent effects).	not change the level of significance of the effect.  No further mitigation is proposed.
Cultural heritage Paragraphs 6.3.6 and 6.4.17, Volume 2, CFA 26 of the main ES	Reference is made to a locally listed urinal on Banbury Street, which would be lost to the scheme, resulting in a major adverse and significant effect. While the urinal remains on the local list, it is no longer in existence, and was not present at the time of the submission of the main ES.	6.3.6 The following non-designated assets of moderate value lie wholly or partially within the land required temporarily or permanently for the construction of the Proposed Scheme:  - five locally listed buildings: Washwood Heath no 1 signal box (WCS009), the Midland Tavern public house (WCS065), the Ashted Canal Locks (WCS074), the Eagle and Tun public house (WCS034) and a public urinal on Banbury Street (WCS077);  6.4.17 A public urinal on Banbury Street (WCS077), an asset of moderate value, will be removed to construct the proposed Curzon Street station. This will be a high adverse impact and a major adverse effect.	6.3.6 The following non-designated assets of moderate value lie wholly or partially within the land required temporarily or permanently for the construction of the Proposed Scheme:  - four locally listed buildings: Washwood Heath no 1 signal box (WCS009), the Midland Tavern public house (WCS065), the Ashted Canal Locks (WCS074), and the Eagle and Tun public house (WCS034).  6.4.17 paragraph deleted	Yes  Removal of a significant effect.
Sound, noise and vibration Paragraph 11.3.22, Volume 2, CFA 26 of the main ES	Reference to three receptors (Carrs Lane Church Centre, St Michaels Church and Millennium Point) significantly affected by the original scheme is missing from the bullet point list.  Volume 5 correctly included these receptors as being significantly	Fifth bullet point:  Melvina Road between A47 Saltley Road and B4132 Great Francis Street, in Nechells; and Adderley Road between Crawford Street and Ash Road, in Saltley (CSV26-N16). Various receptors on these streets, mainly consisting of commercial	Fifth bullet point:  Melvina Road between A47 Saltley Road and B4132 Great Francis Street, in Nechells; Adderley Road between Crawford Street and Ash Road, in Saltley (CSV26-N16); B4100 Moor Street Queensway between Carrs Lane & Albert Street (CSV26-N10); and Curzon Street	No.  Although not reported in Volume 2, CFA 26 report, the three receptors were assessed for significant adverse noise effects from construction traffic and the outcome of the assessment reported in Volume 5, Appendix SV-003-026 in



	affected.	premises, but also including the Nechells Green Community Centre on Melvina Road and Adderley Children's Centre off Adderley Road are forecast to experience a minor increase in traffic noise levels of around 2dB due to localised rerouting of traffic (further information is provided in Section 12: Traffic and Transport).	east of New Canal Street, in Eastside (CSV26-No8). Various receptors on these streets, mainly consisting of commercial premises, but also including the Nechells Green Community Centre on Melvina Road, Adderley Children's Centre off Adderley Road, Carrs Lane Church Centre and St Michaels Church on B4100 Moor Street Queensway and Millennium Point on Curzon Street are forecast to experience a minor increase in traffic noise levels of around 2dB due to localised rerouting of traffic (further information is provided in Section 12: Traffic and Transport).	the main ES.
Traffic and transport Paragraph 12.4.28, Volume 2, CFA26 of the main ES	Paragraph 12.4.28 reported significant effects on severance <sup>2</sup> for non-motorised users as a result of the B4114 Saltley Viaduct closure. The list omitted a significant effect on Arley Road.  This was omitted from the final Volume 2 and Volume 5 reports in error.	The B4114 Saltley Viaduct closure, will lead to significant effects on severance for non-motorised users due to increases in overall daily traffic flows in months 22, 27 and 36, at the following locations: <ul style="list-style-type: none"> <li>• B4145 Adderley Road, between the B4132 Duddeston Mill Road and the B4114 High Street/Saltley Viaduct (moderate adverse effect); and</li> <li>• B4132 Melvina Road (moderate adverse effect).</li> </ul>	The B4114 Saltley Viaduct closure, will lead to significant effects on severance for non-motorised users due to increases in overall daily traffic flows in months 22, 27 and 36, at the following locations: <ul style="list-style-type: none"> <li>• B4145 Adderley Road, between the B4132 Duddeston Mill Road and the B4114 High Street/Saltley Viaduct (moderate adverse effect);</li> <li>• B4132 Melvina Road (moderate adverse effect); and</li> <li>• Arley Road (moderate adverse effect).</li> </ul>	Yes.  Additional moderate adverse effect on severance for non-motorised users on Arley Road.

<sup>2</sup> In the context of Traffic and Transport, severance is used to relate to a change in ease of access for non-motorised users due to, for example, a change in travel distance or travel time or a change in traffic levels on a route that makes it harder for non-motorised users to cross. A reference to severance does not imply a route is closed to access.

## **2.4 Topics included in the SES assessment**

- 2.4.1 The changes described above in Sections 2.1 to 2.2 result in new or different significant effects in respect of: community and socio-economics.

## 3 Assessment of changes

### 3.1 Community

#### Introduction

- 3.1.1 This section of the report describes the environmental baseline in relation to community that is relevant to the assessment. It then identifies any new or different likely significant environmental effects as a result of the changes introduced in Section 2, compared to the original scheme. There are no AP1 amendments relevant to this assessment.

#### Scope, assumptions and limitations

- 3.1.2 The assessment scope, key assumptions and limitations for community are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

#### Changes of relevance to this assessment

- 3.1.3 The assessment takes into account the incorrect reporting of a HGV effect on properties on Bordesley Street.

#### Environmental baseline

##### *Existing baseline*

- 3.1.4 The baseline community information for the area is as described in the main ES (Volume 2, CFA Report 26, Section 5). Residential properties are located to the north of Bordesley Street, to the south of the proposed Curzon Street station.

##### *Future baseline*

#### **Construction (2017)**

- 3.1.5 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 5.
- 3.1.6 None of the identified developments affect the assessment of the amendment's likely construction impacts on community.

#### **Operation (2026)**

- 3.1.7 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 5.

#### Effects arising during construction

##### *Avoidance and mitigation measures*

- 3.1.8 The avoidance and mitigation measures of relevance to community effects are as described in the main ES (Volume 2, CFA Report 26, Section 5).

### *Assessment of impacts and effects*

#### **Temporary effects**

- 3.1.9 The main ES reported an amenity effect on approximately 11 residential properties, which includes a supported accommodation for vulnerable adults, at the northern end of Bordesley Street. This was as a result of a combination of significant noise, visual and HGV effects, resulting in a major adverse effect on the amenity of residents at these properties for approximately five years in total. The main ES incorrectly reported a significant HGV effect at the same section of Bordesley Street as the noise and visual effects. Two significant residual effects will remain, and the sensitivity of residents will remain high. Therefore the major adverse amenity effect on residents of these properties will remain. This is a different significant effect, however this will not change the level of significance of the effects reported in the main ES. Further information is available in Volume 5: CM-01-026, SES and AP2 Appendix.

#### **Permanent effects**

- 3.1.10 The correction relating to HGV effects on Bordesley Street will not give rise to a new or different permanent significant effect and will not change the level of significance of the effects reported in the main ES.

### *Other mitigation measures*

- 3.1.11 No other mitigation measures are proposed, above those reported in the main ES.

### *Cumulative effects*

- 3.1.12 There are no new or different likely significant cumulative effects for community as a result of the SES changes acting in combination with the other SES changes, or as a result of any relevant committed development interacting with the AP2 revised scheme.

### *Summary of likely residual significant effects*

- 3.1.13 The correction relating to HGV effects on Bordesley Street does generate a different significant effect but this does not change the level of significance of the effect in the main ES.

#### **Effects arising from operation**

- 3.1.14 There are no new or different significant operational effects for community as a result of the SES changes, in comparison with the main ES.

## **3.2 Socio-economics**

### **Introduction**

- 3.2.1 This section of the report describes the environmental baseline in relation to socio-economics that is relevant to the assessment. It then identifies any new or different likely significant environmental effects as a result of the changes introduced in Section 2 compared to the original scheme. There are no AP1 amendments relevant to this assessment.

## Scope, assumptions and limitations

- 3.2.2 The assessment scope, key assumptions and limitations for socio-economics are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

## Changes of relevance to this assessment

- 3.2.3 The assessment includes consideration of the two-way use of the road network within Network Park Industrial Estate during construction, so maintaining access to the remaining businesses within the Network Park Industrial Estate.

## Environmental baseline

### *Existing baseline*

- 3.2.4 The baseline socio-economics information for the area is as described in the main ES (Volume 2, CFA Report 26, Section 10). The Network Park Industrial Estate includes approximately seven businesses occupying nine separate property units dependent upon the distribution of industrial products/services to other businesses including: water services; medical products; automotive parts; parcel distribution and pump supplies.

### *Future baseline*

#### **Construction (2017)**

- 3.2.5 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 10.
- 3.2.6 None of the identified developments affect the assessment of the SES scheme's likely construction impacts on socio-economics.

#### **Operation (2026)**

- 3.2.7 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 10.
- 3.2.8 None of the identified developments affect the assessment of the SES scheme's likely operational impacts on socio-economics.

## Effects arising during construction

### *Avoidance and mitigation measures*

- 3.2.9 The avoidance and mitigation measures of relevance to socio-economic effects are as described in the main ES (Volume 2, CFA Report 26, Section 10).

### *Assessment of impacts and effects*

#### **Temporary effects**

- 3.2.10 The main ES identified that land required for construction resulted in the loss of the western section of the road network within Network Park Industrial Estate. This was identified as being a significant factor in causing disruption, for approximately five

years of construction, to seven businesses. The disruption to these businesses, which were dependent on the distribution of industrial products/services to other businesses, was reported as a significant isolation effect in the main ES.

- 3.2.11 The works associated with the SES change will mean that the road network within Network Park Industrial Estate will become two-way so maintaining access to the remaining seven businesses throughout the construction period. The two-way road will allow continued use of these businesses for trade, which is a change from the main ES where loss of access to these premises resulted in a potential significant isolation effect. As such, it is considered that the potential significant isolation effect on this resource, as reported in the main ES, is removed. The removal of this significant residual effect is shown on SES and AP2 map SE-01-074, Volume 5 Map Book.

### **Permanent effects**

- 3.2.12 The proposed change to the road network within Network Park Industrial Estate will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Other mitigation measures*

- 3.2.13 Other mitigation measures remain as described in the main ES.

### *Cumulative effects*

- 3.2.14 There are no new or different likely significant cumulative effects for socio-economics as a result of the SES changes acting in combination with the other SES changes, or as a result of any relevant committed development interacting with the SES change.

### *Summary of likely residual significant effects*

- 3.2.15 The amendment of the road network within Network Park Industrial Estate to allow two-way access during construction will result in access being maintained to businesses to allow their continued operation. As such, the SES change will remove the residual significant isolation effect being experienced by businesses within the Network Park Industrial Estate. The removal of this significant residual effect is shown on SES and AP2 map SE-01-074, Volume 5 Map Book.

### **Effects arising from operation**

- 3.2.16 There are no new or different significant operational effects for socio-economics as a result of the SES change, in comparison with the main ES and the AP1 ES.

# Part 2: Additional Provision 2 Environmental Statement

## 4 Summary of amendments

Table 3 provides a summary of the amendments in the Washwood Heath to Curzon Street community forum area (CFA 26) and

### 4.1.1

Figure 2 shows the locations.

Table 3: Summary of amendments in CFA 26

Name of amendment	Description of the original scheme or AP1 revised scheme	Description of the AP2 revised scheme
Improvement of Aston Church Road/Arley Road junction (AP2-026-001)	Aston Church Road/Arley Road junction would be permanently realigned by approximately 3m to the north as part of construction of the Aston Church Road overbridge.  Aston Church Road and Arley Road would be used as construction traffic routes for works to be undertaken within Saltley Business Park, including demolition of commercial buildings, diversion of utilities and construction of the Aston Church Road overbridge.	Aston Church Road/Arley Road junction will be realigned 7m further north to allow for safe simultaneous HGV movements within lanes through the junction. All works will be within the existing limits of the Bill. However, the land will be required permanently rather than temporarily as specified in the Bill.
Additional access rights for maintenance and operational access on Cumbria Way (AP2-026-002)	Use of a section of Cumbria Way as a construction traffic route for demolition of commercial properties within Saltley Business Park and to provide operational access to the carriage wash.	Permanent access rights are required along the entire length of Cumbria Way, a privately owned road, for maintenance and operational access to the carriage wash.
Additional access rights for construction traffic routes within Network Park Industrial Estate (AP2-026-003)	Temporary use of the road network within Network Park Industrial Estate as a construction traffic route to undertake utility works and the construction of an embankment and a replacement bridge over Duddeston Mill Road.	The original scheme has not changed, however the road network within Network Park Industrial Estate is privately owned and temporary access rights are required.
Additional land required for car parking at Network Park Industrial Estate (AP2-026-004)	Land required permanently for construction of the HS2 route, which would pass through Network Park Industrial Estate, and the diversion of utilities resulting in a permanent and temporary loss of car parking spaces and the loss of a loading bay.	Provision of temporary and permanent car parking spaces to replace the losses under the original scheme. A small area of additional land is required for the provision of temporary car parking spaces and is outside of the original limits of the Bill.
Additional access rights for access to replacement car parking at Birmingham Museum Collections	Land required within Birmingham Museum Collections Centre for the construction of Curzon Street No. 1 viaduct, part of which	Provision of an alternative temporary access to Birmingham Museum Collections Centre rear delivery yard and loading bays

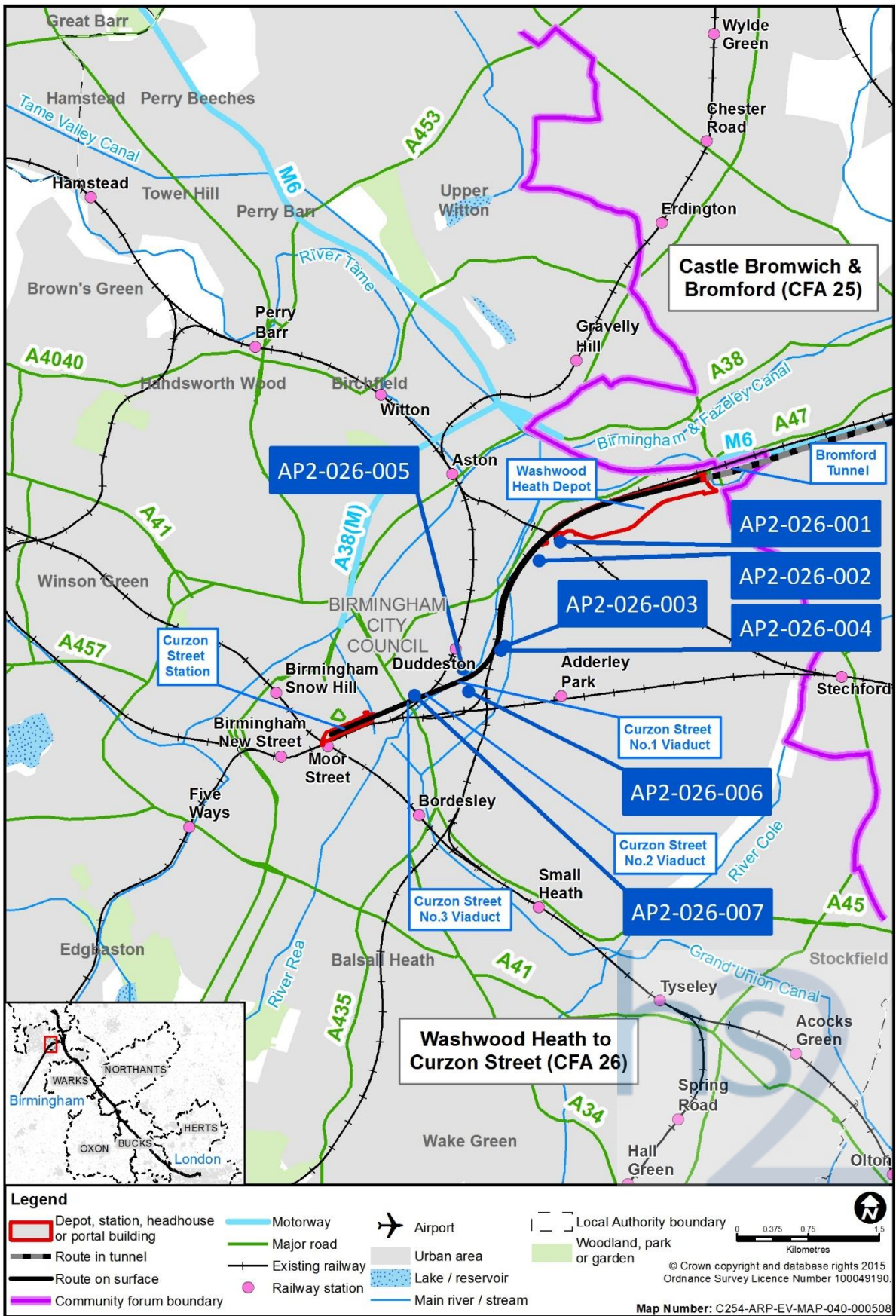
SES and AP2 ES Volume 2 – CFA26, Washwood Heath to Curzon Street

Name of amendment	Description of the original scheme or AP1 revised scheme	Description of the AP2 revised scheme
Centre (AP2-026-005)	would be within the Birmingham Museum Collections Centre, and provision of a construction haul route and diversion of a sewer. Works would restrict the use of the Birmingham Museum Collections Centre rear delivery yard and result in the temporary loss of three loading bays and informal car parking for visitors.	from a private access off Dolman Street to the north-east of Birmingham Museum Collections Centre. Land is required temporarily for the access.  Temporary replacement of informal car parking to the north of the Birmingham Museum Collections Centre rear delivery yard within the limits identified in the Bill.
Additional land for the reconfiguration of Freightliner Terminal Depot and the provision of rail sidings (AP2-026-006)	Curzon Street No.1 viaduct would pass through part of the Freightliner Terminal Depot resulting in the demolition of buildings and loss of 40 unmarked HGV spaces.	The remaining area of Freightliner Terminal Depot will be temporarily acquired to reconfigure the depot site (relocation of a trailer park and storage area and reconfiguring internal roads, buildings and utilities) and provision of rail sidings off the Birmingham to Derby line.  A new construction compound, Freightliner satellite construction compound, will be required to support the works which will be located within the depot site. Access to the compound will be via Landor Street.  An additional site haul route for Curzon Street No. 1 viaduct will be provided to the south of the River Rea off Erskine Street.
Additional land required for replacement car parking at West Midlands Fire Service headquarters (AP2-026-007)	Land required permanently for the construction of Curzon Street No.2 viaduct and Curzon Street No.3 viaduct would result in the loss of access to the service yard and four loading bays and the adjacent off-site two storey car park at the West Midlands Fire Service headquarters.  Construction works would also require the removal of the existing ambulance dispatch point, access to the viaduct arches and other existing infrastructure such as the water tanks.	A permanent replacement three storey car park will be provided on the site of the existing off-site two storey car park. An additional area of land will be required temporarily for demolition and construction working area and access.  During construction, works will be phased and there will be a number of car parking solutions implemented to reflect the phased works, within the limits defined in the Bill. The phased car parking solutions will be implemented to mitigate the temporary loss of car parking.



SES and AP2 ES Volume 2 – CFA26, Washwood Heath to Curzon Street

Figure 2: Locations of amendments in CFA26



## 5 Assessment of amendments

### 5.1 Improvement of Aston Church Road/Arley Road junction (AP2-026-001)

- 5.1.1 The Bill provides for the Aston Church Road/Arley Road junction to be realigned permanently by approximately 3m to the north as part of construction of the Aston Church Road overbridge. The overbridge takes Aston Church Road across the HS2 route and the Birmingham and Derby line. Aston Church Road and Arley Road would be used as construction traffic routes for works to be undertaken within Saltley Business Park, including demolition of commercial buildings, diversion of utilities and construction of the Aston Church Road overbridge (see grid references G6 and G7 on map CT-05-140 and map CT-06-140, in the main ES, Volume 2, CFA26 Map Book). Temporary traffic management would be in place on Aston Church Road and Arley Road during construction. The Aston Church Road/Arley Road junction currently provides a secondary access to Saltley Business Park.
- 5.1.2 Since submission of the Bill, it has been identified that the Aston Church Road/Arley Road junction does not allow for safe simultaneous HGV movements within lanes through the junction. In the original scheme the secondary access to Saltley Business Park from Arley Road would be subject to an increase in HGV movements during the temporary closure of the Saltley Viaduct access to Saltley Business Park. The amendment will realign the Aston Church Road/Arley Road junction 7m further north (10m north of the existing alignment) to allow for safe simultaneous HGV movements (see map CT-05-140 in SES and AP2 ES, Volume 2 Map Book). Additional temporary traffic management will be required. There will be a number of off-peak night closures for tie-ins. All works will be within the existing limits of the Bill. However, the land will be required permanently as opposed to temporarily as defined in the Bill, hence the need for this amendment.
- 5.1.3 The improvements to the Aston Church Road/Arley Road junction are not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; cultural heritage; ecology; land quality; landscape and visual assessment; socio-economics; and water resources and flood risk assessment. However, reassessment was considered to be required in respect of community, sound, noise and vibration and traffic and transport.

#### Community

##### *Scope, assumptions and limitations*

- 5.1.4 The assessment scope, key assumptions and limitations for community are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

##### *Existing baseline*

- 5.1.5 The baseline community information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 6 and Volume 5 Appendix CM-001-026).

- 5.1.6 The Masjid Ali Project Mosque is located on Aston Church Road on the corner with Arley Road. A residential community is also situated along Arley Road, Saltley.

#### *Future baseline*

##### **Construction (2017)**

- 5.1.7 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 5.
- 5.1.8 None of the identified developments affect the assessment of the amendment's likely construction impacts on community.

##### **Operation (2026)**

- 5.1.9 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 5.

#### *Effects arising during construction*

- 5.1.10 The main ES reported a major adverse effect on the amenity of users of the Masjid Ali Project Mosque for approximately five months in total due to a combination of significant noise and HGV traffic effects.
- 5.1.11 The proposed improvement of the Aston Church Road/Arley Road junction will result in the removal of the significant adverse noise effect from the construction of the new road. Subsequently this will mean that the community amenity effect on users of the mosque will be removed (refer to SES and AP2 ES map CM-01-161, Volume 5 Map Book). The proposed amendment will change the effect reported in the main ES from significant to not significant. Further information is available in Volume 5: CM-01-026, SES and AP2 Appendix.

#### *Effects arising during operation*

- 5.1.12 The proposed amendment will not give rise to a new or different significant operational community effect and will not change the level of significance of the effects reported in the main ES.

#### *Mitigation and residual effects*

- 5.1.13 No mitigation measures are applicable to this amendment. The proposed amendment will result in the removal of a significant residual community amenity effect on users of the Masjid Ali Project Mosque.

#### *Cumulative effects*

- 5.1.14 There are no new or different likely significant cumulative effects for community as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## Sound, noise and vibration

### *Scope, assumptions and limitations*

- 5.1.15 The assessment scope, key assumptions and limitations for sound, noise and vibration are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 5.1.16 Local assumptions and limitations for sound noise and vibration are set out in the main ES, Volume 2 CFA Report 26.

### *Existing baseline*

- 5.1.17 The baseline sound, noise and vibration information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 11 and Volume 5 Appendix SV-002-026).

### *Future baseline*

#### **Construction (2017)**

- 5.1.18 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 11.
- 5.1.19 None of the identified developments affect the assessment of the amendment's likely construction impacts on sound, noise and vibration.

#### **Operation (2026)**

- 5.1.20 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 11.
- 5.1.21 None of the identified developments affect the assessment of the amendment's likely operation impacts on sound, noise and vibration.

### *Effects arising during construction*

- 5.1.22 In the main ES a significant noise effect at the Masjid Ali Project Mosque was reported from construction activities. An exceedance of the relevant significance screening criterion was also reported at the adjacent commercial units, although a significant effect was not identified.
- 5.1.23 An assessment has been undertaken to determine whether construction noise from the AP2 revised scheme will result in any likely significant effects, using the significance criteria detailed in the main ES (Volume 5: Appendix SV-001-000).
- 5.1.24 SES and AP2 Volume 5: Appendix SV-003-026 details the relevant changes to the results reported in the main ES, Volume 5: Appendix SV-003-026, Sound, noise and vibration assessment.
- 5.1.25 The realignment of Aston Church Road/Arley Road junction will relocate the road construction and utility diversion construction activities further away from the Masjid Ali Project Mosque and adjacent commercial units. The highest monthly construction noise level at these receptors will be reduced by 2dB, and the relevant impact screening criteria will not be exceeded. The proposed improvement of the Aston

Church Road/Arley Road junction will result in the removal of the likely significant adverse noise effect at the Masjid Ali Project Mosque reported in the main ES (see SES and AP2 map SNV-003-069, Volume 5 Map Book.

### *Effects arising during operation*

- 5.1.26 The proposed amendment will not give rise to a new or different significant operational effect for sound, noise and vibration from those reported in the main ES and/or the AP1 ES.

### *Mitigation and residual effects*

- 5.1.27 No mitigation measures are applicable to this amendment. The amendment will result in the removal of a likely significant residual construction noise effect on users of the Masjid Ali Mosque.

### *Cumulative effects*

- 5.1.28 There are no new or different likely significant cumulative effects for sound, noise and vibration as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **Traffic and transport**

### *Scope, assumptions and limitations*

- 5.1.29 The assessment scope, key assumptions and limitations for traffic and transport are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. There is no change to the scope, assumptions and limitations as reported in the main ES.

### *Existing baseline*

- 5.1.30 The baseline traffic and transport information for the area is as described in Volume 2, CFA Report 26, Section 12 of the main ES.
- 5.1.31 The main route in the area is Aston Church Road which runs in an east-west direction and connects to the A47 Heartlands Parkway and the B4114 Washwood Heath Road. Arley Road is a local road which runs north-south from Aston Church Road and provides a secondary access to the Saltley Business Park. Arley Road has primarily industrial frontage on the western side of the road and the eastern side is abutted by the side faces to residential properties.

### *Future baseline*

#### **Construction**

- 5.1.32 The future baseline for traffic and transport is as described in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for construction as reported in the main ES.

### **Operation (2026 and 2041)**

- 5.1.33 The future baseline for traffic and transport is set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for operation as reported in the main ES.

#### *Effects arising during construction*

- 5.1.34 The proposed amendment to the Arley Road/Aston Church Road junction will be provided early in the construction programme and will improve the operation of the junction when compared to the original scheme, by allowing safe, simultaneous HGV movements. This will provide an improvement to the operation of the junction during construction particularly when the access to Saltley Business Park via Pennine Way is closed. This improvement is not considered to be significant.
- 5.1.35 The proposed amendment to the Arley Road/Aston Church Road junction will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES and/or the AP1 ES.

#### *Effects arising from operation*

- 5.1.36 The proposed amendment to the Arley Road/Aston Church Road junction will improve the operation of the junction by allowing safe simultaneous HGV movements, however the effect is not considered to be significant.
- 5.1.37 The proposed amendment to the Arley Road/Aston Church Road junction will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES and/or the AP1 ES.

#### *Mitigation and residual effects*

- 5.1.38 No additional mitigation measures are required. The proposed amendment will not result in any significant residual effects in construction or operation at this location, which is unchanged from the main ES.

#### *Cumulative effects*

- 5.1.39 Cumulative effects are reported in Volume 2, CFA26, Section 12 of the main ES. The assessment has taken into account these cumulative effects, including planned development by taking account of background traffic growth, as well as traffic and transport impacts of works being undertaken in neighbouring areas.

## **5.2 Summary of new or different likely residual significant effects as a result of the amendment**

- 5.2.1 The proposed amendment removes the significant adverse noise effect at the Masjid Ali Project Mosque, Aston Church Road. Consequently the community amenity effect on users of the mosque will be removed.

### **5.3 Additional rights for maintenance and operational access along Cumbria Way (AP2-026-002)**

- 5.3.1 The Bill provides for an access route along a section of Cumbria Way for demolition of commercial properties within Saltley Business Park and for operational access to the carriage wash (see grid references F6 & F7 on map CT-05-140 and map CT-06-140, in the main ES, Volume 2, CFA26 Map Book).
- 5.3.2 Since submission of the Bill, it has been identified that permanent access rights are required along an additional section of Cumbria Way in order to provide permanent access for the operation and maintenance of the carriage wash (see map CT-05-140 in the SES and AP2 ES, Volume 2 Map Book). Approximately one light goods vehicle (LGV) per day will use Cumbria Way for the operation and maintenance of the carriage wash. The sections of Cumbria Way identified within the Bill will also form part of the permanent access to the carriage wash. Cumbria Way is a privately owned road and therefore permanent rights of access are required (see map CT-06-140 in SES and AP2 ES, Volume 2 Map Book).
- 5.3.3 The permanent use of an additional section of Cumbria Way for access to the carriage wash is not considered to make changes that require a reassessment of the effects or proposed mitigation as set out in the main ES with respect to any environmental topics.

### **5.4 Additional access rights for construction traffic routes within Network Park Industrial Estate (AP2-026-003)**

- 5.4.1 The Bill provides for construction traffic routes along the road network within Network Park Industrial Estate to undertake utility works and the construction of an embankment and the replacement of a bridge over Duddeston Mill Road. It was assumed that the road network within Network Park Industrial Estate was a public highway and therefore the land required for the construction route was not included within the original limits of the Bill.
- 5.4.2 Since submission of the Bill, it has been identified that these roads are privately owned and therefore, rights of access are needed, hence the need for this amendment (see map CT-05-140 in SES and AP2 ES, Volume 2 Map Book). The access road between Duddeston Mill Road and the road network within Network Park Industrial Estate will remain open during construction with limited disruption. Improvements to the road network within Network Park Industrial Estate for use as a construction traffic route are required and detailed in Part 1, in relation to design change SES-026-001. The use of these construction traffic routes has been assessed within the main ES. There will be no increase in construction traffic using these routes from that assessed within the main ES.
- 5.4.3 The additional access rights are not considered to make changes that require a reassessment of the effects or proposed mitigation as set out in the main ES with respect to any environmental topics.

## 5.5 Additional land required for car parking at Network Park Industrial Estate (AP-026-004)

- 5.5.1 The Bill provides for land to be acquired on a permanent basis at Network Park Industrial Estate for the construction of the HS2 route, which would pass through the industrial estate (see map CT-05-140 in main ES, Volume 2, CFA26 Map Book). The Bill also provides for the diversion of utilities at this location. These works would result in the permanent loss of 20 car parking spaces (approximately 47% of the total spaces) at Cosway (UK) Ltd and 10 car parking spaces (100% of the total spaces) at Salts Medilink Distribution Centre. Additionally, there would be the permanent loss of one loading bay (out of a total of three) at Salts Medilink Distribution Centre.
- 5.5.2 Since submission of the Bill an area of land within Network Park Industrial Estate has been identified to provide a reconfiguration of the car parking that provides a total of 61 temporary and 32 permanent car parking spaces in the vicinity of Cosway (UK) Ltd and Salts Medilink Distribution Centre (see map CT-05-140 in SES and AP2 ES, Volume 2 Map Book). This includes additional spaces that were not required with the original scheme, but are temporarily lost to facilitate the reconfiguration of the car parking. The replacement car parking will fully mitigate the loss detailed in the main ES. The majority of land required for the replacement car parking is within the original limits of the Bill. Approximately 0.2ha of additional land is required temporarily and is outside the original limits of the Bill, hence the need for this amendment. The construction of the replacement car parking spaces will occur in advance of other works in Network Park, and is currently planned for 2017. Works will take approximately three months to complete. The construction of the replacement car parking spaces will extend the duration of the Saltley Viaduct (east) satellite construction compound by approximately three months.
- 5.5.3 The provision of temporary and permanent car parking is not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; community; cultural heritage; ecology; land quality; landscape and visual assessment; sound, noise and vibration; socio-economics and water resources and flood risk assessment. However, reassessment was considered to be required in respect of traffic and transport.

### Traffic and transport

#### *Scope, assumptions and limitations*

- 5.5.4 The assessment scope, key assumptions and limitations for traffic and transport are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. There is no change to the scope, assumptions and limitations as reported in the main ES.

#### *Existing baseline*

- 5.5.5 The baseline traffic and transport information for the area is as described in ES Volume 2, CFA26, Section 12 of the main ES.



- 5.5.6 Within Network Park Industrial Estate, in total there are 43 car parking spaces at Cosway (UK) Ltd, and at Salts Medilink Distribution Centre there are 10 car parking spaces and three loading bays on the west side.

### *Future baseline*

#### **Construction**

- 5.5.7 The future baseline for traffic and transport is as described in the main ES, Volume 2 CFA26, Section 12 of the main ES. There is no change to the future baseline for construction as reported in the main ES.

#### **Operation (2026 and 2041)**

- 5.5.8 The future baselines for traffic and transport are set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baselines for operation as reported in the main ES.

### *Effects arising during construction*

- 5.5.9 The main ES reported that there would be a temporary loss of parking at Cosway (UK) Ltd and Salts Medilink Distribution Centre that would become permanent. This included 20 car parking spaces at Cosway (UK) Ltd and 10 car parking spaces at the Salts Medilink Distribution Centre.
- 5.5.10 The provision of 61 temporary replacement car parking spaces will fully mitigate the loss of car parking spaces at Cosway (UK) Ltd and the Salts Medilink Distribution Centre within the Network Park Industrial Estate. As these spaces were a permanent loss in the original scheme, no associated temporary significant effect was reported.

### *Effects arising from operation*

- 5.5.11 The main ES reported that the permanent loss of 20 car parking spaces at Cosway (UK) and 10 car parking spaces at the Salts Medilink Distribution Centre would result in a major adverse effect. The provision of 32 permanent replacement car parking spaces will mitigate the loss of the car parking spaces during operation and the reported adverse significant effects in the main ES are removed (see SES and AP2 map TR-04-159, Volume 5 Map Book). Whilst the replacement car parking removes the significant effect with regard to parking, the loss of the loading bay at Salts Medilink Distribution Centre still results in a moderate adverse effect.

### *Mitigation and residual effects*

- 5.5.12 No additional mitigation measures are required for this amendment.
- 5.5.13 The proposed amendment will result in the removal of the major adverse significant residual effects in operation associated with the loss of car parking at Cosway (UK) Ltd and the Salts Medilink Distribution Centre on Network Park Industrial Estate. The moderate adverse significant residual effect due to the permanent loss of one loading bay at the Salts Medilink Distribution Centre reported in the main ES will remain.

### *Cumulative effects*

- 5.5.14 Cumulative effects are reported in Volume 2, CFA26, Section 12 of the main ES. The assessment has taken into account these cumulative effects, including planned

development by taking account of background traffic growth, as well as traffic and transport impacts of works being undertaken in neighbouring areas.

## **5.6 Summary of new or different likely residual significant effects as a result of the amendment**

- 5.6.1 The proposed amendment will result in the removal of the permanent adverse significant effects due to loss of car parking at Cosway (UK) Ltd and the Salts Medilink Distribution Centre on Network Park Industrial Estate.

## **5.7 Additional access rights for access to replacement car parking at Birmingham Museum Collections Centre (AP2-026-005)**

- 5.7.1 The Bill provides for land required for the construction of Curzon Street No. 1 viaduct, part of which would be within the footprint of the Birmingham Museum Collections Centre, and provision of a construction haul route and diversion of a sewer, both of which are within Birmingham Museum Collections Centre's rear delivery yard. Construction activities would restrict the use of the rear delivery yard and there would be a temporary loss of all three loading bays. It would also result in the temporary loss of informal car parking for visitors at the centre (see grid references F6 and F7, map CT-05-141 and CT-06-141 in the main ES, Volume 2 CFA26 Map Book). The centre could continue to operate the services it provides to visitors including organised tours and training.
- 5.7.2 Since submission of the Bill, an alternative temporary access to the Birmingham Museum Collections Centre rear delivery yard and loading bays has been identified from a private access off Dolman Street to the north-east of Birmingham Museum Collections Centre (see map CT-05-141 in SES and AP2 ES, Volume 2 Map Book). The use of this private access is outside of the original limits of the Bill, hence the need for this amendment. An area of land has been additionally identified within the original limits defined in the Bill, to the north of the delivery yard, to provide a turning area for HGVs, which will also act as informal car parking (see map CT-05-141 in SES and AP2 ES, Volume 2 Map Book). Construction of the haul route will be phased such that the rear delivery yard is accessible for the duration of construction.
- 5.7.3 The provision of temporary access to the Birmingham Museum Collections Centre rear delivery yard and loading bays and temporary replacement car parking are not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; community; cultural heritage; ecology; land quality; landscape and visual assessment; socio-economics; sound, noise and vibration; and water resources and flood risk assessment. However, reassessment was considered to be required in respect of traffic and transport.

### **Traffic and transport**

#### *Scope, assumptions and limitations*

- 5.7.4 The assessment scope, key assumptions and limitations for traffic and transport are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. There is no change to the scope, assumptions and limitations as reported in the main ES.

### *Existing baseline*

- 5.7.5 The baseline traffic and transport information for the area is as described in Volume 2, CFA Report 26, Section 12 of the main ES.
- 5.7.6 The Birmingham Museum Collections Centre has 48 marked car parking spaces and a rear service yard which provides loading/servicing for up to three HGV vehicles as well as informal car parking.

### *Future baseline*

#### **Construction**

- 5.7.7 The future baseline for traffic and transport is as described in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for construction as reported in the main ES.

#### **Operation (2026 and 2041)**

- 5.7.8 The future baselines for traffic and transport are set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baselines for operation as reported in the main ES.

### *Effects arising during construction*

- 5.7.9 The main ES reported that there would be a temporary loss of the informal parking and the loading area, which would result in a major significant parking effect.
- 5.7.10 The proposed amendment will maintain access to and use of the Birmingham Museum Collections Centre rear service yard and will remove the major significant parking effect reported in the main ES (see map TR-03-160, in the SES and AP2 ES, Volume 5 Map Book).

### *Effects arising from operation*

- 5.7.11 No changes are proposed in operation and consequently this amendment will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Mitigation and residual effects*

- 5.7.12 No additional mitigation measures are required. The proposed amendment will result in the removal of the temporary adverse significant residual effects associated with the loss of informal car parking.

### *Cumulative effects*

- 5.7.13 Cumulative effects are reported in Volume 2, CFA26, Section 12 of the main ES. The assessment has taken into account these cumulative effects, including planned development by taking account of background traffic growth, as well as traffic and transport impacts of works being undertaken in neighbouring areas.

## **5.8 Summary of new or different likely residual significant effects as a result of the amendment**

- 5.8.1 The proposed amendment will result in the removal of the temporary adverse significant residual traffic and transport effect due to the loss of informal car parking at Birmingham Museum Collections Centre.

## **5.9 Additional land for the reconfiguration of Freightliner Terminal Depot and provision of rail sidings (AP2-026-006)**

- 5.9.1 The Bill provides for the permanent acquisition of part of the Freightliner Terminal Depot for the Curzon Street No.1 viaduct which would pass through the Freightliner Terminal Depot before crossing the River Rea, an area of industrial land off Erskine Street and the Birmingham and Bushbury line on the approach to Curzon Street station (see grid reference G7, map CT-06-141 in the main ES Volume 2, CFA26 Map Book). Rail possessions associated with track realignment work and construction of Duddeston Mill junction would result in the need for trains at the Freightliner Terminal Depot to be marshalled and stabled on the Birmingham and Derby line, which would reduce the occupancy of the line and operational efficiency of the depot.
- 5.9.2 Construction of Curzon Street No.1 viaduct would require the demolition of buildings to the south of the Birmingham and Bushbury line within the Freightliner Terminal Depot and the permanent loss of storage space and approximately 40 HGV parking spaces (33% of the total spaces) some of which are unmarked.
- 5.9.3 Since submission of the Bill, a proposal has been developed to temporarily acquire the remainder of the Freightliner Terminal Depot in order to reconfigure the site and provide additional sidings off the Birmingham and Derby line. The additional area of land to be temporarily acquired is approximately 10.6ha (see map CT-06-141, in SES and AP2 ES, Volume 2 Map Book).
- 5.9.4 The reconfiguration of the Freightliner Terminal Depot is currently under discussion with Freightliner Limited. It is proposed that the reconfiguration will include: relocation of a HGV trailer park and storage area, both of which are affected by the original scheme, and reconfiguration of internal roads, buildings and utilities to accommodate the new HGV trailer park, storage area and the new rail sidings. It is estimated that the change in container storage capacity will be a reduction from 2897 to 2877. New buildings will be a maximum of two storeys high with pitched roof and a maximum height of 8m, the same as the existing buildings on site. As part of the reconfiguration, provision will be made to permanently relocate the 40 HGV parking spaces that would have been lost under the original scheme.
- 5.9.5 Preparatory works at the site will also include: local utility disconnections for buildings to be demolished, removal of demolished buildings and their foundations, break out and excavation of existing slabs in the locations of new storage areas and new railway sidings/tracks and the installation of temporary utility supplies for construction compounds and the installation of new site drainage.
- 5.9.6 The Freightliner Terminal Depot will remain operational during construction with no effect on existing employment or services. Access will be maintained 24 hours per day

7 days per week without restriction unless under exceptional circumstances or with prior agreement of Freightliner Limited.

- 5.9.7 Reconfiguration of the Freightliner Terminal Depot and construction of the rail sidings will take approximately one year and six months to complete. A new satellite construction compound, Freightliner satellite construction compound, will be required to support the works which will be located within the Freightliner Terminal Depot. Access to the satellite construction compound and the works will be via an existing entrance off Landor Street, approximately 300m to the east of the main Freightliner Terminal Depot entrance. The compound will support approximately 20 workers each day. The compound will be managed from the Curzon Street main construction compound.
- 5.9.8 The permanent land to be acquired for the Curzon Street No.1 viaduct will still be required and there is no change to the viaduct design as reported in the main ES.
- 5.9.9 An additional site construction haul route for Curzon Street No. 1 viaduct will be provided to the south of the River Rea, off Erskine Street.
- 5.9.10 The reconfiguration of the Freightliner Terminal Depot and the provision of new sidings, together with the provision of a new satellite construction compound and haul route are not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; cultural heritage; and landscape and visual assessment. However, there are changes where reassessment is considered to be required in respect of air quality; community; ecology; land quality; socio-economics; sound, noise and vibration; traffic and transport; and water resources and flood risk assessment.

## **Air quality**

### *Scope, assumptions and limitations*

- 5.9.11 The assessment scope, key assumptions and limitations for air quality are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1), the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES, and the SMR Addendum 2 (Volume 5 CT-001-000/3) of the SES and AP2 ES.

### *Existing baseline*

- 5.9.12 The baseline air quality information for the area is as described in the main ES, Volume 2 CFA Report 26, Section 4.
- 5.9.13 An Air Quality Management Area has been designated for the entire Birmingham City Council administrative area, as a result of NO<sub>2</sub> concentrations being in excess of the annual average air quality standard (40µg/m<sup>3</sup>).

### *Future baseline*

#### **Construction (2017)**

- 5.9.14 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 2.

- 5.9.15 None of the identified developments affect the assessment of the amendment's likely construction impacts on air quality.

### **Operation (2026)**

- 5.9.16 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 2.
- 5.9.17 None of the identified developments affect the assessment of the amendment's likely operation impacts on air quality.

### *Effects arising during construction*

- 5.9.18 The reconfiguration of the Freightliner Terminal Depot will result in new construction impacts that were not previously assessed as part of the original scheme. Such impacts will be associated with the earthworks, demolition, construction and the track-out of material on the local road network as a result of these additional works.
- 5.9.19 The additional land required will move works closer to sensitive receptors to the south and east of the construction works area, including residential properties located to the south of Garrison Street at a distance of approximately 150m from the proposed amendment. The mitigation measures in the draft CoCP (Volume 5: Appendix CT-003-000 of the main ES), will be sufficient to control impacts such that a significant effect will not occur. Therefore, no new or different significant effects are anticipated as a result of this amendment.

### *Effects arising from operation*

- 5.9.20 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES and/or the AP1 ES.

### *Mitigation and residual effects*

- 5.9.21 No additional mitigation measures are applicable to this amendment. The proposed amendment will not result in any significant residual effects in construction or operation at this location, which is unchanged from the main ES.

### *Cumulative effects*

- 5.9.22 There are no new or different likely significant cumulative effects for air quality as a result of the proposed amendment acting in combination with another amendment in combination with AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **Community**

### *Scope, assumptions and limitations*

- 5.9.23 The assessment scope, key assumptions and limitations for community are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.9.24 The baseline community information for the area is as described in the main ES, Volume 2 CFA Report 26, Section 5.
- 5.9.25 The Freightliner Terminal Depot is separated from most community facilities by infrastructure including the Birmingham and Derby line, the River Rea, the Grand Union Canal, and industrial units. Residential areas of Adderley, Bordesley and Nechells are located to the east, south and north-west of the Freightliner Terminal Depot. These are predominantly residential areas but include community facilities such as open spaces.

### *Future baseline*

#### **Construction (2017)**

- 5.9.26 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.9.27 None of the identified developments affect the assessment of the amendment's likely construction impacts on community.

#### **Operation (2026)**

- 5.9.28 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.9.29 None of the identified developments affect the assessment of the amendment's likely operation impacts on community.

### *Effects arising during construction*

- 5.9.30 A group of approximately 20 residential properties located at the southern end of Northumberland Street and Vauxhall Grove were reported in the main ES to be located in close proximity to construction of Curzon Street No. 2 viaduct. This resulted in a combination of significant noise and visual effects for approximately nine months during the daytime and five months at night. This was assessed as a major adverse effect on the amenity of residents and therefore considered significant (referred to on map CM-01-162 in the main ES Volume 5 Map Book).
- 5.9.31 Additional works at Freightliner Terminal Depot as a result of the proposed amendment will increase the duration of the significant noise effect on the properties from nine months to 13 months. The night time noise effect will not change. This therefore extends the major adverse amenity effect on residents of 20 properties to approximately one year and one month during the daytime and five months at night-time. This is a different effect for community, however the magnitude of the effect will not change.

### *Effects arising from operation*

- 5.9.32 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Mitigation and residual effects*

- 5.9.33 No additional mitigation measures are applicable to this amendment. The proposed amendment will result in a different effect on residents at 20 properties on Northumberland Street and Vauxhall Grove, but this does not change the level of significance of the effect in the main ES.

### *Cumulative effects*

- 5.9.34 There are no new or different likely significant cumulative effects for community as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **Ecology**

### *Scope, assumptions and limitations*

- 5.9.35 The assessment scope for ecology is as set out in Volume 1 of the SES and AP2 ES. The key assumptions and limitations, and the methodology for determining significance of effects are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/01) and the SMR Addendum (Volume 5: Appendix CT-001-000/02) of the main ES.
- 5.9.36 To address any limitations in data, a precautionary baseline has been considered according to the guidance reported in the main ES, Volume 5: Appendix CT-001-000/2. This constitutes a 'reasonable worst-case' basis for the subsequent assessment. The precautionary approach to the assessment that has been adopted identifies the likely significant ecological effects of the AP2 revised scheme.

### *Existing baseline*

- 5.9.37 The ecological baseline of the land required for the proposed amendment has been based on field data collated for the main ES, extended Phase 1 habitat survey data undertaken since submission of the main ES, and review of relevant information obtained from national organisations and from regional and local sources including: Environment Agency; Birmingham City Council; EcoRecord (the Biological Record Centre for Birmingham and the Black Country); Birmingham and the Black Country Wildlife Trust; and the West Midlands Bird Club.
- 5.9.38 A summary of the baseline information relevant to the assessment is provided below. This takes account of any relevant new or updated baseline information provided in SES and AP2 Volume 5 Appendix EC-001-004 (and map series EC-02, EC-03, and EC-04). For those receptors described in the main ES, further details are provided in Volume 2, CFA Report 26, Section 7 and in Volume 5, including maps EC-01 to EC-12.



## Designated sites

- 5.9.39 The River Rea and adjoining land Site of Local Importance for Nature Conservation (SLINC) is adjacent to the proposed amendment. The Grand Union Canal SLINC is located approximately 200m south of the proposed amendment. These sites are each of district/borough value. There are no other statutory or non-statutory designated nature conservation sites or ancient woodland relevant to the assessment.

## Habitats

- 5.9.40 Habitats reported in the main ES for the Washwood Heath to Curzon Street area which are of relevance to the assessment of the proposed amendment include the network of buildings and structures, the network of species-poor hedgerows, open mosaic habitats and scattered trees. Each of these habitats is identified in the main ES as being of local/parish value.
- 5.9.41 Habitat within the land required for the proposed amendment comprises 0.2ha of buildings, 9.1ha of hardstanding, 200m<sup>2</sup> of excavated material, 200m<sup>2</sup> of dense/continuous scrub, 22m of scattered scrub, 1.2ha of ephemeral/short perennial habitat, 300m<sup>2</sup> of introduced shrub, 200m<sup>2</sup> of secondary developed grassland and 46 scattered trees.
- 5.9.42 The buildings within the Freightliner Terminal Depot have been assessed as part of the network of buildings and structures within this area and are of local/parish value. The dense/continuous scrub and scattered scrub represents a common habitat type in the local and national context. For assessment purposes, the scrub habitats have been assessed as part of the species-poor hedgerow network within this area and are of local/parish value.
- 5.9.43 The secondary developed grassland, hard standing, spoil and ephemeral/short perennial habitats are assumed to qualify as open mosaic habitat on previously developed land, a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities Act (1996)<sup>3</sup>. The open mosaic habitats within the land required for the proposed amendment are part of the wider resource recorded as being of local/parish value in the main ES.
- 5.9.44 The areas of introduced shrub are considered to be of negligible ecological value. The scattered trees are also limited in extent and again represent a common habitat type in the local and national context. For assessment purposes, this receptor is valued at the same level as the scattered trees described in the main ES for the Washwood Heath to Curzon Street area and is of local/parish value.
- 5.9.45 Habitats and landuse surrounding the land required for the proposed amendment are described in the main ES, Volume 2, CFA Report 26, Section 7 and are shown on the main ES map EC-02-069, Volume 5 Map Book and SES and AP2 ES map EC-03-234, Volume 5 Map Book.

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<sup>3</sup> *Natural Environment and Rural Communities Act (2006)*, Chapter 16, Her Majesty's Stationery Office, London.

### **Protected and/or notable species**

- 5.9.46 Desk-study data revealed two species of notable plants, dittander and perennial wall-rocket, relating to a 100m<sup>2</sup> grid square within the land required for the proposed amendment. The extended Phase 1 habitat survey undertaken since submission of the main ES, confirmed the presence of dittander within the land required for the proposed amendment. Although not confirmed during the same survey, on a precautionary basis it is assumed that perennial wall-rocket is also present within the land required for the proposed amendment. The stands of dittander and perennial wall-rocket are of county/metropolitan value.
- 5.9.47 The main ES reported that an assemblage of common bird species was recorded during surveys of the Grand Union Canal and the River Rea in Saltley. This assemblage was assessed as being of local/parish value and potential exists for individuals and species of this assemblage to use the land required for the proposed amendment for foraging and shelter. The extended Phase 1 survey undertaken since submission of the main ES also confirmed the presence of buildings within the land required for the proposed amendment which have potential to be used as nest sites for black redstart. A precautionary assessment assumes that these buildings support a single breeding pair of black redstart which is of county/metropolitan value.
- 5.9.48 Potential also exists for a population of water vole to be associated with the River Rea in this area. The main ES reported, on a precautionary basis, the assumed presence of water vole which was reported as being of up to district/borough value. For the proposed amendment it is therefore assumed that a population of water vole is present within the riparian habitats of the River Rea where it flows adjacent to the land required for the proposed amendment.
- 5.9.49 The main ES reported a small population of common pipistrelle associated with Common Lane, approximately 2.8km from the land required for the proposed amendment, which is of district/borough value. This or other populations of common bat species may use the scrub, semi-improved grassland and scattered trees within the land required for the proposed amendment for foraging, with connectivity to the wider landscape afforded by the adjacent River Rea. The extended Phase 1 habitat survey undertaken since submission of the main ES confirmed the presence of buildings within the land required for the proposed amendment which have potential to be used as roost sites by bats. The main ES did not identify any bat roosts in this area. A precautionary assessment therefore assumes that these buildings support a small number of roosts of common bat species, and that the land required for the proposed amendment supports foraging by common bat species. An assemblage of common bat species which may be associated with the buildings and other habitats within the land required for the proposed amendment are assumed to be of up to district/borough value. The habitats within the land required for the proposed amendment may support a small population of foraging bats which is also likely to be of district/borough value.
- 5.9.50 The land required for the proposed amendment has potential to support reptiles, as suitable habitat exists and is connected with other habitats of potential suitability along the adjacent Birmingham to Derby line. The presence of reptile populations was assessed in the main ES as being of up to local/parish value and the potential

population of reptiles within the land required for the proposed amendment is considered as part of the same population assessed in the main ES.

- 5.9.51 The assemblage of terrestrial invertebrates associated with the network of urban habitats alongside the existing Birmingham and Derby line, the Grand Union Canal and the Digbeth Branch Canal was assessed in the main ES to be of local/parish value. The land required for the proposed amendment is assessed as having potential to support locally scarce species of terrestrial invertebrates, due to the mosaic of habitat types present and the more extensive area of such habitats which lie beyond the land required for the proposed amendment. A precautionary evaluation assumes that the assemblage of terrestrial invertebrates is of up to district/borough value.
- 5.9.52 Stands of Japanese knotweed, an invasive non-native shrub assessed as being of negligible value, were also recorded within the land required for the proposed amendment during the Phase 1 extended survey undertaken since the submission of the main ES.

### *Future baseline*

#### **Construction (2017)**

- 5.9.53 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 11.
- 5.9.54 None of the identified developments affect the assessment of the amendment's likely construction impacts on ecology.

#### **Operation (2026)**

- 5.9.55 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 11.
- 5.9.56 None of the identified developments affect the assessment of the amendment's likely operation impacts on ecology.

### *Effects arising during construction*

#### **Avoidance and mitigation measures**

- 5.9.57 There are no specific measures included as part of the proposed amendment to avoid or reduce impacts to features of ecological value on the land required for the proposed amendment. The assessment assumes implementation of the draft CoCP, which includes translocation of protected species where appropriate.

#### **Designated sites**

- 5.9.58 The main ES reported that there would be no impacts as a result of the original scheme on the River Rea and adjoining land SLINC and the Grand Union Canal SLINC. The proposed amendment will not give rise to new or different significant effects on these designated sites and will not change the level of significance of the effects reported in the main ES.

## Habitats

- 5.9.59 The main ES reported a precautionary assessment in which it is assumed that buildings and structures, scattered trees, scrub habitats, and open mosaic habitats would be lost within the Washwood Heath to Curzon Street area. The main ES reported effects on each of these habitats at no more than local/parish level. The same precautionary assessment is applied to the land required for the proposed amendment where there will be further loss of the same habitat types, (for the purpose of this assessment it is assumed that all habitats, including buildings, within the land required for the proposed amendment will be lost). These additional losses will not change the level of effect reported for each of these habitat types in the main ES.
- 5.9.60 It is unlikely that any other effects on habitats of relevance at more than the local/parish level will occur within the land required for the proposed amendment. Additional local/parish level effects arising from survey data collected since the main ES are listed in Volume 5: Appendix EC-002-004 of the SES and AP2 ES.

## Protected and/ or notable species

- 5.9.61 The main ES reported no significant adverse effects on the conservation status of bats. Site clearance works for the proposed amendment will involve the demolition of buildings with potential to support roosting bats as well as the loss of habitats of potential value to foraging bats. In addition, there will be a loss of foraging habitat for common bat species as a result of the proposed amendment. However alternative foraging habitats exist within the area, including alongside the River Rea which flows adjacent to the land required for the proposed amendment. Overall these impacts will result in an adverse effect on the assemblage of common bat species which will be significant at up to district/borough level. This is a new significant effect, not reported in the main ES.
- 5.9.62 Site clearance works will result in the loss of habitats supporting dittander and perennial wall-rocket. Loss of stands of these two notable plants from the land required from the proposed amendment will result in effects on their conservation status which are significant at county/metropolitan level. This is a new significant effect, not reported in the main ES.
- 5.9.63 Site clearance works will also involve the demolition of buildings with potential to support nesting black redstart. For the purpose of this assessment it is assumed that these buildings support a breeding pair of black redstart. However, given that other suitable nesting sites are present in the immediate vicinity of the land required and that implementation of the CoCP will ensure building demolition activities take place outside of the bird nesting season, the killing or injury of black redstart will be avoided. Consequently, it is not anticipated that the proposed amendment will result in any significant adverse effect on the conservation status of this species.
- 5.9.64 The main ES reported no significant adverse effects on common reptiles within this area. However, for the purpose of this assessment it is assumed that a small population of common reptiles is present within the land required for the proposed amendment. Site clearance and construction works will result in the loss of semi-improved neutral grassland and scrub habitat that may support a population of

reptiles. This may result in an adverse effect on the conservation status of these reptile species at that is of relevance at the local/parish level, and is not significant.

- 5.9.65 It is considered unlikely that any other effects on species of relevance at more than the local/parish level will occur. Additional local/parish level effects arising from survey data collected since the main ES are listed in Volume 5: Appendix EC-005-004 of the SES and AP2 ES.

### **Cumulative effects**

- 5.9.66 There are no new or different likely significant cumulative effects for ecology as a result of the proposed amendment acting in combination with another amendment in combination with AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

### **Mitigation and residual effects**

#### *Other mitigation measures*

- 5.9.67 The following mitigation measures will be provided to address adverse effects identified in this precautionary assessment of the AP2 revised scheme.
- 5.9.68 With regard to reptiles, mitigation will include habitat creation and enhancement, translocation activities, and the identification of suitable translocation receptor sites as required. These receptor sites will either be located within the land required for the proposed amendment, or within landscape mitigation areas, within the limits of the Bill, at Washwood Heath Depot or between Freightliner Terminal Depot and Washwood Heath Depot. Following implementation of these measures, there will be no adverse residual effect on reptiles.
- 5.9.69 There is a requirement for additional mitigation to address the loss of roost sites for bats within the land required for the proposed amendment. Appropriate measures will be brought forward, including the provision of alternative roost sites, within the limits of the Bill. After implementation of this mitigation in line with the Ecological Principles of Mitigation, there will be no residual adverse effect on the assemblage of common bat species.
- 5.9.70 Suitable receptor sites will be identified for the translocation of dittander and perennial wall-rocket within the limits of the Bill, in line with the Ecological Principles of Mitigation. After implementation of this mitigation, there will be no residual adverse effect on either of these species.

#### *Summary of likely residual effects*

- 5.9.71 With the implementation of the mitigation measures proposed the new or different ecological effects arising from the proposed amendment are reduced to a level where they are not significant.

#### *Effects arising from operation*

- 5.9.72 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant effect on ecological receptors during operation and will not change the level of significance of the effects reported in the main ES and/or the AP1 ES.

## Land quality

### *Scope, assumptions and limitations*

- 5.9.73 The assessment scope, key assumptions and limitations for land quality are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.9.74 The baseline land quality information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 8 and maps LQ-01-068b to LQ-01-070, Volume 5 Map Book).
- 5.9.75 The land required for the proposed amendment is within an area that is currently a freight terminal incorporating railway sidings and which has historically operated as a rail depot and coal yard with known bulk fuel storage (see Site 26-173 on map LQ-01-070, in the SES and AP2 ES, Volume 5 Map Book).
- 5.9.76 The stratigraphic sequence bedrock geology underlying the land required for the proposed amendment is consistent with the geology underlying much of the surrounding area which is described in the main ES. The sequence comprising superficial glaciofluvial deposits and alluvium overlying the Mercia Mudstone Group. Made ground is also indicated within the land required for the proposed amendment.
- 5.9.77 The aquifer designations for the glaciofluvial/alluvial deposits and Mercia Mudstone Group geological units are Secondary A and B respectively, as reported in the main ES.
- 5.9.78 There are no known additional groundwater or surface water abstractions over and above those described in the main ES.

### *Future baseline*

#### **Construction (2017)**

- 5.9.79 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 8.
- 5.9.80 The development of a vehicle workshop and siting of a fuel tank on land west of the Freightliner Terminal Depot (2014/00332/PA) is relevant to the land quality assessment for the proposed amendment and so has been considered in the assessment (refer to Volume 5: Appendix CT-004-000).

#### **Operation (2026)**

- 5.9.81 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 8.
- 5.9.82 None of the identified developments affect the assessment of the amendment's likely operational impacts on land quality.

### *Effects arising during construction*

- 5.9.83 The increased land required to construct the proposed amendment results in an increased study area when compared to the original scheme. The additional area is currently characterised by industrial and railway land use in the north and east, with residential land use occupying the remaining land use except for the Grand Union Canal that crosses in the south-east. Historically, the north and east of the land required for the proposed amendment has been characterised by industrial and railway use. There was a historical paint and varnish works at the end of Artillery Street, south of the canal in the south-east of the land required for the proposed amendment.
- 5.9.84 In accordance with the SMR, SMR Addendum and its appendices, an initial screening process was undertaken on the increased study area. The purpose of this was to identify any additional areas of current or historical contaminative use, and to consider which of these might pose contamination risks to the proposed amendment. In total, six additional sites were identified and considered during the screening process. However, during the screening stage none of these sites presented sufficient contamination risk to be taken forward to the more detailed risk assessments. The land required for the proposed amendment results in changes to the proximity zone of selected sites that were considered in the original scheme assessment. In total, the proposed amendment results in changes to the proximity zone of six sites from the original scheme assessment. However, as with the original scheme assessment, none of these sites were taken forward to more detailed risk assessments.
- 5.9.85 Prior to the proposed intrusive works for the reconfiguration, a ground contamination investigation will be completed and recommendations made for dealing with any potential contamination encountered, in accordance with the draft CoCP.
- 5.9.86 The proposed amendment will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Effects arising from operation*

- 5.9.87 The proposed amendment will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Mitigation and residual effects*

- 5.9.88 No additional mitigation measures are applicable to this amendment. The proposed amendment will not result in any significant residual effects in construction or operation at this location, which is unchanged from the main ES.

### *Cumulative effects*

- 5.9.89 There are no new or different likely significant cumulative effects for land quality as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## Socio-economics

### *Scope, assumptions and limitations*

- 5.9.90 The assessment scope, key assumptions and limitations for socio-economics are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.9.91 The baseline socio-economics information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 10).

### *Future baseline*

#### **Construction (2017)**

- 5.9.92 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES
- 5.9.93 None of the identified developments affect the assessment of the amendment's likely construction impacts on socio-economics.

#### **Operation (2026)**

- 5.9.94 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES
- 5.9.95 None of the identified developments affect the assessment of the amendment's likely operation impacts on socio-economics.

### *Effects arising during construction*

- 5.9.96 The Freightliner Terminal Depot was identified as being subject to limited land requirements in the original scheme and not due to be reconfigured. The original scheme would result in a possible loss or displacement of jobs in the Vauxhall Road, Erskine Street and Inkerman Street socio-economic resource<sup>4</sup>, which Freightliner Terminal Depot is part of. As a result of the amendment, the Freightliner Terminal Depot will be reconfigured and any employment activities identified in the main ES as being displaced by the original scheme in this location will be re-provided elsewhere onsite. This will result in the retention of approximately 45 jobs in comparison with the original scheme.
- 5.9.97 The proposed amendment will lead to the loss of six additional buildings (four offices, one industrial unit and one warehouse) within the Freightliner Terminal Depot to that identified in the main ES, although the facility will remain operational during the construction period with no effect on employment or services.
- 5.9.98 The Freightliner Terminal Depot forms part of the Vauxhall Road, Erskine Street and Inkerman Street socio-economic resource identified in the main ES. While the

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<sup>4</sup> A socio-economic resource comprises one or more receptors i.e. businesses which have similar characteristics in terms of activities that they undertake and similar requirements in terms of types of premises



proposed amendment will result in the retention of approximately 45 jobs, the impact and overall significance effect on the Vauxhall Road, Erskine Street and Inkerman Street socio-economic resource and its employees will remain as reported in the main ES. The proposed amendment on the Freightliner Terminal Depot will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Effects arising from operation*

- 5.9.99 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

### *Mitigation and residual effects*

- 5.9.100 No additional mitigation measures are applicable to this amendment. The proposed amendment will not result in any significant residual effects in construction or operation at this location, which is unchanged from the main ES.

### *Cumulative effects*

- 5.9.101 There are no new or different likely significant cumulative effects for socio economics as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **Sound, noise and vibration**

### *Scope, assumptions and limitations*

- 5.9.102 The assessment scope, key assumptions and limitations for sound, noise and vibration are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 5.9.103 Local assumptions and limitations for sound, noise and vibration are set out in the main ES Volume 2 CFA26 Report.

### *Existing baseline*

- 5.9.104 The baseline sound, noise and vibration information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 11 and Volume 5: Appendix SV-002-026).

### *Future baseline*

#### **Construction (2017)**

- 5.9.105 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES, Section 11.
- 5.9.106 None of the identified developments affect the assessment of the amendment's likely construction impacts on sound, noise and vibration.

### **Operation (2026)**

- 5.9.107 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2026, additional to those identified in the main ES, Section 11.
- 5.9.108 None of the identified developments affect the assessment of the amendment's likely operation impacts on sound, noise and vibration.

### *Effects arising during construction*

- 5.9.109 The proposed amendment introduces an area of new construction activity not considered in the original scheme.
- 5.9.110 The closest non-residential receptors include Nechells Business Centre, the Birmingham City Council Museum Collection Centre, industrial units on Erskine Street, St Vincent's School, Safeside educational facility (incorporating a 999 call centre) and commercial units on Garrison Street. The closest residential receptors to the south are located to the south of Garrison Street (Mill Burn Way), beyond the intervening commercial units. The closest residential receptors to the north are on Northumberland Street.
- 5.9.111 The main ES reported significant construction noise effects at the Birmingham City Council Museum Collection Centre, industrial units on Erskine Street, Safeside and residential properties on Northumberland Street. The residential properties on Northumberland Street were forecast to experience night-time noise levels higher than the noise insulation trigger levels as defined in the draft CoCP. Adverse noise effects during the day in the vicinity of these residential properties were considered significant. The significant construction effect at the Birmingham City Council Museum Collection Centre was a combined noise and vibration effect. At St Vincent's School an exceedance of the impact screening criterion was predicted of 1dB for 1 month. Based on the magnitude and duration of the impact a significant effect was not identified in the main ES. No significant construction noise or vibration effects were identified at Nechells Business Centre, commercial units on Garrison Street and residential properties south of Garrison Street (Mill Burn Way).
- 5.9.112 An assessment has been undertaken to determine whether construction noise from the AP2 revised scheme will result in any likely significant effects, using the significance criteria detailed in the main ES (Volume 5: Appendix SV-001-000).
- 5.9.113 SES and AP2 Volume 5: Appendix SV-003-026 details the relevant changes to the results reported in the main ES, Volume 5: Appendix SV-003-026, Sound, noise and vibration assessment.
- 5.9.114 At Nechells Business Centre, typical monthly construction noise levels are predicted to be increased by 1dB to 66dB, and the highest monthly level by 2dB to 75dB. As in the main ES, the impact screening criterion is not exceeded and a significant effect is not identified. At the industrial units on Erskine Street, typical and highest monthly daytime levels are predicted to be increased by 2dB and 1 dB respectively (to 67dB and 80dB). The significant effect reported in the main ES remains. Larger increases in both the typical (by 5dB to 60dB) and highest (by 7dB to 69dB) monthly construction noise levels are predicted at the commercial units at Garrison Street. Under the original

scheme these units were remote from any construction works, but with the proposed amendment works will be in close proximity to the units, resulting in the increased predicted construction noise levels. The impact screening criterion is not exceeded and a significant effect is not anticipated at these units.

- 5.9.115 At St Vincent's School the typical monthly construction noise levels are predicted to increase by 2dB to 55dB and the highest monthly level by 1dB to 64dB, an increase in the impact duration of one month to two months is also predicted. The increases are due to the addition of the Freightliner works in this area. However, as reported in the main ES, based on the magnitude and duration of the impact a significant effect is not identified at the school.
- 5.9.116 At the Birmingham City Council Museum Collection Centre, the typical daytime monthly construction noise level will increase slightly by 2dB to 65dB due to construction activities associated with the proposed amendment; an increase of 4dB to 74dB is predicted in the highest monthly construction noise level. Demolition works will be the source of the highest monthly construction noise level. The duration of the impact will also increase from 30 to 36 months. This will give rise to a different significant effect, however the significant effect reported in the main ES remains.
- 5.9.117 Vibration adverse effects were reported in the main ES at the Birmingham City Council Museum Collection Centre for short periods of time when vibro-compaction of structural earthworks, associated with the Curzon Street no. 1 viaduct, are at their closest approach. No change to this effect from that reported in the main ES is anticipated due to the proposed amendment.
- 5.9.118 At Safeside the reconfiguration of the Freightliner Terminal Depot increases the typical daytime monthly construction noise levels by 1 dB to 62 dB, no change to the highest monthly construction noise levels is anticipated. The duration of the impact will increase from four months to 10 months. This will give rise to a different significant effect, however the significant effect reported in the main ES remains.
- 5.9.119 At the residential properties to the south of Garrison Street (Mill Burn Way), construction works associated with the proposed amendment will result in a minimal change to the predicted construction noise levels as these properties are shielded from the works by intervening commercial units. The typical daytime monthly construction noise level is predicted to increase by 1dB to 51dB, and the highest monthly levels by 2dB to 56dB. Such levels are below the impact screening criterion and a significant effect is not identified.
- 5.9.120 At the residential properties on Northumberland Street the typical and highest daytime monthly construction noise levels will be comparable to the original scheme, as reported in the main ES. Typical and highest monthly daytime levels are predicted to increase by 1 dB (to 62 dB and 72 dB respectively). An increase in the daytime impact duration of four months to 13 months is also predicted. The increases are due to the reconfiguration of the Freightliner Terminal Depot. No change to the night time construction noise levels, and the exceedance of the noise insulation trigger level, is anticipated as no night time works are proposed as part of the reconfiguration of the Freightliner Terminal Depot. This will give rise to a different significant effect, however the significant effect reported in the main ES remains.

- 5.9.121 The proposed amendment will give rise to different significant effects at Birmingham City Council Museum Collection Centre, industrial units on Erskine Street, Safeside and residential properties on Northumberland Street.

#### *Effects arising from operation*

- 5.9.122 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant operational effect in comparison with the effects reported in the main ES.

#### *Mitigation and residual effects*

- 5.9.123 No additional mitigation measures are applicable to this amendment. The proposed amendment will give rise to different significant effects at Birmingham City Council Museum Collection Centre, industrial units on Erskine Street, Safeside and residential properties on Northumberland Street.

#### *Cumulative effects*

- 5.9.124 There are no other new or different likely significant cumulative effects for sound, noise and vibration as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

### **Traffic and transport**

#### *Scope, assumptions and limitations*

- 5.9.125 The assessment scope, key assumptions and limitations for traffic and transport are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

#### *Existing baseline*

- 5.9.126 The baseline traffic and transport information for the area is as described in Volume 2, CFA26, Section 12 of the main ES.
- 5.9.127 The main local road in the area is Landor Street, which runs in an east to west direction along the southern boundary of the Freightliner Terminal Depot connecting with the A4540 Lawley Middleway to the west. Erskine Street and Northumberland Street/Viaduct Street are located to the north and north-west. Access to the Freightliner Terminal Depot is off Landor Street.

- 5.9.128 The Freightliner Terminal Depot has approximately 120 HGV parking spaces.

#### *Future baseline*

### **Construction**

- 5.9.129 The future baseline for traffic and transport is as described in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for construction as reported in the main ES.

## **Operation (2026 and 2041)**

- 5.9.130 The future baseline for traffic and transport is set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for operation as reported in the main ES.

### *Effects arising during construction*

- 5.9.131 The proposed amendment will result in an increase in construction traffic of approximately 30 HGV two-way movements per day and 60 car/LGV two-way movements per day. The HGV traffic will be routed along Landor Street to the A4540 Lawley Middleway. The construction traffic associated with the works to the Freightliner Terminal Depot does not change the assessment of traffic flow or create any new or different significant traffic effects on Landor Street. There are no new effects for the wider area as the works will occur outside the peak construction months.
- 5.9.132 The original scheme resulted in the temporary loss of approximately 40 HGV parking bays, some of which are unmarked, at the Freightliner Terminal Depot that would become permanent and which were reported in the main ES as a permanent major adverse effect in operation. Construction will be phased so that there will be no significant temporary loss of HGV parking during construction. The permanent effect on HGV parking is considered under operation.

### *Effects arising from operation*

- 5.9.133 The permanent loss of 40 HGV parking bays in the original scheme represented a major adverse significant effect as reported in the main ES.
- 5.9.134 The reconfiguration of the Freightliner Terminal Depot will remove the permanent major adverse significant effect associated with the loss of HGV parking.

### *Mitigation and residual effects*

- 5.9.135 No additional mitigation measures are required for this amendment. The reconfiguration will remove the permanent major adverse significant residual effect on HGV parking reported in the main ES.

### *Cumulative effects*

- 5.9.136 Cumulative effects are reported in Volume 2, CFA26, Section 12 of the main ES. The assessment has taken into account these cumulative effects, including planned development, by taking account of background traffic growth, as well as traffic and transport impacts of works being undertaken in neighbouring areas.

## **Water resources and flood risk assessment**

### *Scope, assumptions and limitations*

- 5.9.137 The assessment scope, key assumptions and limitations for water resources and flood risk assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 - 000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. The assessment includes the potential impacts of the proposed amendment to surface water, groundwater and flood risk.

### *Existing baseline*

- 5.9.138 The baseline water and flood risk assessment information for the area is as described in the main ES (Volume 2 CFA Report 26, Section 13).
- 5.9.139 The River Rea, classed as a main river, is a heavily modified urban watercourse and flows to the north-west of the Freightliner Terminal Depot. The Grand Union Canal is an artificial water body and flows to the east of the Freightliner Terminal Depot.
- 5.9.140 The current (2009) overall Water Framework Directive (WFD) status for the River Rea is bad, while the objective for 2027 is to achieve good potential. The current overall WFD status for the Grand Union Canal is moderate, while the objective for 2027 is to achieve good potential.
- 5.9.141 The superficial deposits, consisting of glaciofluvial deposits and alluvium, including in the area of the proposed amendment form a discontinuous layer across the upper parts of the River Rea Valley sides. These deposits are classified as a Secondary A aquifer. This aquifer does not have any WFD classification.
- 5.9.142 The underlying bedrock geology comprises Mercia Mudstone Group as far west as the Birmingham Fault, which approximately follows the line of the River Rea Valley. The Mercia Mudstone Group is classified as a Secondary B aquifer with a current overall WFD status of poor, while the objective for 2027 is to achieve good status. Within the Mercia Mudstone Group, the Arden Sandstone Formation is classified as a Secondary A aquifer.
- 5.9.143 The Environment Agency flood zone mapping and results from the hydraulic modelling reported in the main ES shown on map WR-01-043 and WR-05-159, of the main ES, Volume 5 Map Book indicates that a localised area of land is within Flood Zone 3 located immediately south and adjacent to the alignment of the River Rea and the area of the proposed amendment. This indicates that the area would be inundated during a river flood event with a 1 in 100 annual probability (1% AEP), including an allowance for climate change. The area of Flood Zone 3 is adjacent to the southern limb of Erskine Street but does not extend into the area of the proposed amendment.

### *Future baseline*

#### **Construction (2017)**

- 5.9.144 All committed developments are required to comply with the National Planning Policy Framework (NPPF) development plans and other legislation and guidance. As such, committed developments are not expected to have a material effect on the water resources and flood risk baseline. The potential change in WFD status objectives is not considered to result in the effects from the original scheme changing in significance.

#### **Operation (2026)**

- 5.9.145 For the reasons stated above for construction, the committed developments will not result in a change in significance of the effects from operation.

### *Effects arising during construction*

- 5.9.146 The reconfiguration of the Freightliner Terminal Depot will result in new construction impacts that were not previously assessed as part of the original scheme. These

impacts will be associated with earthworks, demolition, groundwater dewatering and construction works.

- 5.9.147 During construction phase activities, greater occupation of the land adjacent to the River Rea has the potential for an increased risk of pollutants entering the Rea from construction related activities within the construction area. The adoption of measures within the CoCP will reduce the increased risk of pollutants entering the River Rea. The proposed amendment will not give rise to a new or different significant effect with respect to pollution from construction activities and will not change the level of significance of the effects reported in the main ES.
- 5.9.148 The location of the proposed amendment is a brownfield site with an industrial legacy. Therefore, there is the potential for encountering existing subsurface contamination during construction. The exposure of existing subsurface contamination to rainfall recharge could result in its mobilisation in the subsurface within the superficial deposits aquifer and the River Rea.
- 5.9.149 The superficial deposits aquifer is of moderate value. For the proposed amendment the impact on groundwater quality from the potential mobilisation of contamination in the superficial deposits aquifer is anticipated to be minor adverse. Therefore the effect is anticipated to be slight and not significant.
- 5.9.150 The River Rea is within a lined channel in this area and is unlikely to receive contributions from groundwater in the superficial deposits aquifer. Therefore there is no impact pathway from contamination mobilisation and no effect. Therefore the effect is not significant.
- 5.9.151 The Mercia Mudstone Group/Arden Sandstone Formation aquifers are at depth in this area (approximately 13m below ground level) and the mudstones are low permeability. Higher permeability sandstone layers are interbedded within the mudstones, but the sandstone layers are generally quite thin. Therefore, there is considered to be no impact pathway from contamination mobilisation to the Mercia Mudstone Group/Arden Sandstone Formation aquifers and no effects are anticipated.
- 5.9.152 The extended area under consideration for the Freightliner Terminal Depot does not encroach into Flood Zone 3. Therefore, the proposed amendment will not give rise to a new or different significant effect with respect to flood risk during construction and will not change the level of significance of the effects reported in the main ES.

#### *Effects arising during operation*

- 5.9.153 The proposed reconfiguration of the Freightliner Terminal Depot will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

#### *Mitigation and residual effects*

- 5.9.154 No additional mitigation measures are applicable to this amendment. The proposed amendment will not result in any significant residual effects in construction or operation at this location, which is unchanged from the main ES.

### *Cumulative effects*

- 5.9.155 There are no new or different likely significant cumulative effects for water resources and flood risk assessment as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **5.10 Summary of new or different likely residual significant effects as a result of the amendment**

- 5.10.1 Additional works at Freightliner Terminal Depot as a result of the proposed amendment will increase the duration of the significant noise effect on the properties from nine months to 13 months. The night time noise effect will not change. This therefore extends the major adverse amenity effect on residents of 20 properties to approximately one year and one month during the daytime and five months at night-time. This is a different effect for community, however the magnitude of the effect will not change.
- 5.10.2 The proposed reconfiguration of the Freightliner Terminal Depot will give rise to different significant noise effects at Birmingham City Council Museum Collection Centre, industrial units on Erskine Street, Safeside and residential properties on Northumberland Street relating to increased typical daytime noise levels and increased durations of effects.
- 5.10.3 The proposed amendment will also remove the permanent major adverse significant residual transport effect on HGV parking at the Freightliner Terminal Depot reported in the main ES.

## **5.11 Additional land required for replacement car parking at West Midlands Fire Service headquarters (AP2-026-007)**

- 5.11.1 The Bill provides for the temporary acquisition of approximately 0.1ha of the service yard at the rear of the West Midlands Fire Service headquarters and the two storey off-site parking at St James' Place for the construction of Curzon Street No.2 viaduct and Curzon Street No.3 viaduct. This would result in the temporary loss of 146 car parking spaces (approximately 58% of the total spaces) and all four loading bays (100%), and the permanent loss of up to 30 car parking spaces (approximately 12% of the total spaces) (see grid references C6 and D6 on the main ES map CT-05-141 and CT-06-141 in the main ES Volume 2, CFA26 Map Book). The temporary loss of car parking would be for approximately one year and nine months. Construction works would also require the removal of the existing ambulance dispatch point, access to four Network Rail owned arches leased by the West Midlands Fire Service, and other existing infrastructure such as the water tanks. This would impair the function of the West Midland Fire Service headquarters.
- 5.11.2 Since submission of the Bill, the original scheme has been amended to include a new three storey car park that will fully mitigate the permanent loss of car parking that was detailed in the main ES (see map CT-05-141 in SES and AP2 ES, Volume 2 Map Book). The car park will be within the original limits of the Bill, on the site of the existing two storey car park. However an additional area of land, approximately 260m<sup>2</sup>, outside of the original Bill limits will be required temporarily for demolition and access, hence



the need for this amendment. The construction of the replacement car park is currently planned for 2020 and will take approximately six months to complete.

- 5.11.3 During construction, works will be phased and a number of car parking solutions, within the limits defined in the Bill, will be implemented to fully mitigate the temporary loss of car parking. These are as follows:
- phase 1: Provision of surface parking to the south-west of West Midlands Fire Service headquarters;
  - phase 2: Provision of a temporary two storey car park in close proximity to Lawford Close and use of part of the existing multi-storey car park;
  - phase 3: Provision of surface parking to the west of the existing West Midlands Fire Service car park; and
  - phase 4: Provision of a three storey permanent car park off St James' Place.
- 5.11.4 Construction works relating to the removal of the existing ambulance dispatch point, access to four Network Rail owned arches leased by the West Midlands Fire Service, and other existing infrastructure such as the water tanks, will remain as the original scheme. The loss of four loading bays will additionally remain as the original scheme.
- 5.11.5 The provision of a new three storey car park and provision for temporary car parking is not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: agriculture, forestry and soils; air quality; cultural heritage; ecology; land quality; socio-economics and water resources and flood risk assessment. However, there are changes where reassessment is considered to be required in respect of community; landscape and visual assessment; sound, noise and vibration and traffic and transport.

## Community

### *Scope, assumptions and limitations*

- 5.11.6 The assessment scope, key assumptions and limitations for community are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.11.7 The baseline community information for the area is as described in the main ES (Volume 2, CFA Report 26, Section 5).

### *Future baseline*

#### **Construction (2017)**

- 5.11.8 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.9 None of the identified developments affect the assessment of the amendment's likely construction impacts on community.

## **Operation (2026)**

- 5.11.10 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.11 None of the identified developments affect the assessment of the amendment's likely operation impacts on community.

### *Effects arising during construction*

- 5.11.12 The loss of access to the service yard, including undercroft parking area and the adjacent offsite car park for approximately five years during construction was reported in the main ES as a major temporary adverse effect on the functioning of the West Midlands Fire Service headquarters. This is because parking is required for staff working shifts across 24 hours, and there are no nearby alternatives. The phased replacement of car parking as proposed in the amendment will ensure that there is the same number of car parking spaces available as at present during each Phase of construction. The proposed amendment will therefore remove the significant effect reported in the main ES (see SES and AP2 ES map CM-01-162, Volume 5 Map Book). The loss of access to four Network Rail owned arches and other existing infrastructure such as water tanks will remain. The loss of four loading bays will additionally remain as the original scheme. This loss will continue to impact on the functioning of the West Midlands Fire Service headquarters, however this effect is minor and not significant. Further information is available in Volume 5: CM-01-026, SES and AP2 Appendix.

### *Effects arising from operation*

- 5.11.13 The proposed replacement car parking at the West Midlands Fire Service headquarters will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES

### *Mitigation and residual effects*

- 5.11.14 There are no mitigation measures required. The proposed amendment will remove the significant effect during construction at West Midlands Fire Service due to the loss of access and car parking.

### *Cumulative effects*

- 5.11.15 There are no new or different likely residual significant effects for community as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## **Landscape and visual assessment**

### *Scope, assumptions and limitations*

- 5.11.16 The assessment scope, key assumptions and limitations for the landscape and visual assessment are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. An

update to the methodology for the landscape and visual assessment is also described in Volume 1 of the AP1 ES.

### *Existing baseline*

- 5.11.17 The area of land required for the amendment is located within Nechells Industrial and Commercial Landscape Character Area (LCA) as described in the main ES (Volume 5: Appendix LV-001-026, Part 2).
- 5.11.18 Views north-east along Viaduct Street (Viewpoint 388.4.005), south-west from residences on Northumberland Street (Viewpoint 389.2.004) and south from residences at the junction of Barrack Street and Vauxhall Road (Viewpoint 389.2.006), are located in close proximity to the area of the proposed amendment and are described in the main ES (Volume 5, Appendix LV-001-026).

### *Future baseline*

#### **Construction (2017)**

- 5.11.19 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.20 None of the identified developments affect the assessment of the amendment's likely construction impacts on landscape and visual assessment.

#### **Operation (2026)**

- 5.11.21 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.22 None of the identified developments affect the assessment of the amendment's likely operation impacts on landscape and visual assessment.

### *Effects arising during construction*

#### **Landscape assessment**

- 5.11.23 Nechells Industrial and Commercial Landscape Character Area LCA was assessed as being affected by the original scheme and will be further affected by this amendment. Nechells Industrial and Commercial LCA is in poor condition, of limited value and low tranquillity, therefore it is considered to be of low sensitivity to change. The main ES reported a non-significant effect during construction. The construction of the proposed replacement car parking at West Midlands Fire Service headquarters will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

#### **Visual assessment**

- 5.11.24 Viewpoint 389.2.006 was assessed as being affected by the original scheme and will be further affected by this amendment. The main ES reported a moderate adverse effect during construction due to construction activities associated with the elevated section of the route including the proposed Curzon Street No.2 and Curzon Street No.3 viaducts visible in the middle ground of the view.

- 5.11.25 The proposed replacement car parking at West Midlands Fire Service headquarters will give rise to a different significant effect. There will be additional views of the demolition and construction activities associated with the new three storey car park at St James' Place in front of the Curzon Street No. 2 and Curzon Street No. 3 viaducts. Intervening buildings and structures will provide some screening of low level activities, but views of the construction compound and ground level activities will be possible along St James' Place. There will also be restricted views of construction traffic activity on the additional construction route on Lawford Close. However, this amendment will not change the level of significance of the effects reported in the main ES

### *Effects arising from operation*

#### **Landscape assessment**

- 5.11.26 Nechells Industrial and Commercial Landscape Character Area LCA was assessed as being affected by the original scheme and will be further affected by this amendment. Nechells Industrial and Commercial LCA is in poor condition, of limited value and low tranquillity, therefore it is considered to be of low sensitivity to change. The main ES reported a non-significant effect during operation. The proposed replacement car parking at West Midlands Fire Service headquarters will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

#### **Visual assessment**

- 11.26.1 Viewpoint 389.2.006 was assessed as being affected by the original scheme and will be further affected by this amendment. The main ES reported a moderate adverse effect in the winter of year 1 of operation due to views of the elevated section of the route of the original scheme, including the Curzon Street No.2 and Curzon Street No.3 viaducts and the associated overhead line equipment and trains in the middle ground. The proposed three storey car park and associated upper deck lighting proposed in this amendment will give rise to a different significant effect. It will be visible in the middle ground but the elevated section of the route of the original scheme, including the Curzon Street No. 2 and Curzon Street No. 3 viaducts and the associated overhead line equipment and trains, will remain the dominant features within the view. However, this amendment will not change the level of significance of the effects reported in the main ES.

### *Mitigation and residual effects*

- 5.11.27 No additional mitigation measures are applicable to this amendment. The proposed amendment will give rise to a different significant visual effect during construction and operation for viewpoint 389.2.006. However, this amendment will not change the level of significance of the effects reported in the main ES.

### *Cumulative effects*

- 5.11.28 There are no new or different likely residual significant effects for landscape and visual as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed developments interacting with the AP2 revised scheme.

## Sound, noise and vibration

### *Scope, assumptions and limitations*

- 5.11.29 The assessment scope, key assumptions and limitations for sound, noise and vibration are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.11.30 The baseline sound, noise and vibration information for the area is as described in the main ES (Volume 2, CFA Report 26, Section 11 and Volume 5: Appendix SV-002-026).

### *Future baseline*

#### **Construction (2017)**

- 5.11.31 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.32 None of the identified developments affect the assessment of the amendment's likely construction impacts on sound, noise and vibration.

#### **Operation (2026)**

- 5.11.33 Volume 5: Appendix CT-004-000 provides details of the developments which are assumed to have been implemented by 2017, additional to those identified in the main ES (Volume 5, Appendix: CT-004-000).
- 5.11.34 None of the identified developments affect the assessment of the amendment's likely construction impacts on sound, noise and vibration.

### *Effects arising during construction*

- 5.11.35 The replacement car parking at West Midlands Fire Service headquarters affects the programming of construction activities in this area. The timing of the demolition works in this area will be changed slightly from the original scheme and the demolition of the existing car park will be carried out in two separate stages. A small number of additional construction activities will be introduced, including the construction of the various phases of temporary car parking and the final permanent car park.
- 5.11.36 The closest receptors to the proposed amendment include the West Midlands Fire Service headquarters to the east, and Gordon Franks Training and residential properties on Vauxhall Road to the north. A combined construction noise and vibration significant effect was reported in the main ES at the West Midlands Fire Service headquarters. A significant effect was not identified at Gordon Franks Training in the main ES. A significant night-time construction noise effect was reported in the main ES, at the residential properties on Vauxhall Road, due to night-time construction works at Curzon Street No 3 viaduct. These properties would qualify for noise insulation.

- 5.11.37 An assessment has been undertaken to determine whether construction noise from the AP2 revised scheme will result in any likely significant effects, using the significance criteria detailed in the main ES (Volume 5: Appendix SV-001-000).
- 5.11.38 SES and AP2 Volume 5: Appendix SV-003-026 details the relevant changes to the results reported in the main ES, Volume 5: Appendix SV-003-026, Sound, noise and vibration assessment.
- 5.11.39 The proposed amendment has no effect on the typical and highest monthly construction noise and vibration levels reported in the main ES for the West Midlands Fire Service headquarters. The significant construction noise and vibration effect identified in the main ES remains and is unchanged by the proposed amendment.
- 5.11.40 At Gordon Franks Training, the typical and highest daytime monthly construction noise levels are predicted to increase by 1 dB (to 63 dB and 69 dB respectively), compared to the original scheme. An exceedance of the impact screening criterion for educational buildings of 1 dB is predicted for two months. This is due to a combination of factors including, the change in the programming of demolition activities at the Curzon Street No 2 viaduct satellite compound, combined with a slight contribution from the temporary car parking works. Based on the limited magnitude and duration of the exceedance a significant effect on occupants at Gordon Franks Training has not been identified. This is unchanged from the main ES.
- 5.11.41 A corresponding slight increase in the typical and highest daytime monthly construction noise levels of 1 dB (to 63 dB and 69 dB respectively), is predicted at the residential properties on Vauxhall Road, however, the daytime noise impact screening criteria is not exceeded. No change to the night-time construction noise levels is anticipated. Therefore, there will be no change to the significant effect identified in the main ES at these properties.
- 5.11.42 The proposed car parking at West Midlands Fire Service headquarters will not give rise to a new or different significant effect and will not change the effects reported in the main ES.

#### *Effects arising from operation*

- 5.11.43 The proposed car parking at West Midlands Fire Service headquarters will not give rise to a new or different significant effect and will not change the effects reported in the main ES.

#### *Mitigation and residual effects*

- 5.11.44 No mitigation measures are applicable to this amendment. The proposed amendment will not give rise to a new or different significant effect and will not change the level of significance of the effects reported in the main ES.

#### *Cumulative effects*

- 5.11.45 There are no new or different likely significant cumulative effects for sound, noise and vibration as a result of the proposed amendment acting in combination with another amendment in AP2, or as a result of any relevant committed development interacting with the AP2 revised scheme.

## Traffic and transport

### *Scope, assumptions and limitations*

- 5.11.46 The assessment scope, key assumptions and limitations for traffic and transport are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001 -000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

### *Existing baseline*

- 5.11.47 The environmental baseline for traffic and transport is set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the existing baseline as reported in the main ES.
- 5.11.48 The main local roads in the area are the B4132 Vauxhall Road, Northumberland Street, St James' Place and Lawford Close. The West Midlands Fire Service headquarters has approximately 250 car parking spaces, which are accessed off the B4132 Vauxhall Road and St James' Place.

### *Future baseline*

#### **Construction**

- 5.11.49 The future baseline for traffic and transport is as described in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baseline for construction as reported in the main ES.

#### **Operation (2026 and 2041)**

- 5.11.50 The future baselines for traffic and transport are set out in Volume 2, CFA26, Section 12 of the main ES. There is no change to the future baselines for operation as reported in the main ES.

### *Effects arising during construction*

- 5.11.51 The original scheme resulted in the temporary loss of 146 car parking spaces and four loading bays at the West Midlands Fire Service headquarters. The temporary loss of car parking and loading bays would each have a major adverse significant effect.
- 5.11.52 The demolition of existing buildings and construction of the temporary and permanent car parks as part of this amendment scheme will result in a minimal increase in construction traffic, which does not coincide with the peak construction months, and will not therefore result in new or different significant adverse effects.
- 5.11.53 The provision of temporary car parks on land immediately to the west of the West Midlands Fire Service will result in some localised reassignment of trips from St James' Place to Lawford Close from which temporary access to the temporary car parking will be provided. This reassignment of traffic will not result in any new or different significant adverse effects.
- 5.11.54 The phasing and provision of temporary car parking will replace the car parking spaces that were lost in the original scheme and will remove the major adverse significant effect identified in the main ES. The major adverse significant effect in respect of loading bays as reported in the main ES will remain.

### *Effects arising from operation*

- 5.11.55 The original scheme resulted in the permanent loss of 30 car parking spaces, which was reported in the main ES as a major adverse significant effect. The three storey car park proposed in the amendment will remove the major adverse significant effect on car parking as reported in the main ES.

### *Mitigation and residual effects*

- 5.11.56 No additional mitigation measures are required for this amendment. The proposed amendment will result in the removal of the temporary and permanent adverse significant residual effects associated with the loss of car parking at the West Midlands Fire Service headquarters.
- 5.11.57 The major adverse significant residual effect during construction in respect of loading bays as reported in the main ES will remain.

### *Cumulative effects*

- 5.11.58 Cumulative effects are reported in Volume 2, CFA26, Section 12 of the main ES. The assessment has taken into account these cumulative effects, including planned development by taking account of background traffic growth, as well as traffic and transport impacts of works being undertaken in neighbouring areas.

## **5.12 Summary of new or different likely residual significant effects as a result of the amendment**

- 5.12.1 The proposed amendment will result in the removal of the major adverse significant transport and community effects due to the loss of car parking at the West Midlands Fire Services headquarters that were reported in the main ES. The proposed amendment will also give rise to a different significant visual effect during construction and operation but will not change the level of significance reported in the main ES.



## **6 Combined effects of amendments in this CFA due to changes in traffic flows**

- 6.1.1 All of the effects of the changes proposed in this CFA have been described above and there are no further combined effects to report.

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