

## About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivalled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at [aecom.com](https://aecom.com) and [@AECOM](https://twitter.com/AECOM).

**APPENDIX 7: EMFM Base Year Model Review Addendum (document reference East  
Midlands Gateway Phase 2: Base Year Model Review Addendum, update to May 2024  
TAG data book, v1.0)**



# **EMFM 2019**

East Midlands Gateway Phase 2:  
Base Year Model Review Addendum  
(update to May 2024 TAG data book)

Quality Information

Prepared by	Checked by	Approved by
Kit Tang	Jonathan Morrow	Aled Davies
Associate Director	Associate Director	Associate Director

Revision History

Revision	Revision date	Details	Authorised	Name	Position
v1.0	19/08/24	For Issue	Yes	Aled Davies	Associate Director

Prepared by:

AECOM Limited  
Marlborough Court  
10 Bricket Road  
St Albans  
Hertfordshire  
AL1 3JX

[aecom.com](https://www.aecom.com)

© 2024 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited (“AECOM”) for sole use of our client (the “Client”) in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Google Earth Pro™ imagery in the form of Google Map™ and Google Street View™ have been used, unmodified, within this document. This imagery has been used within the extents of the AECOM license agreement with Google Inc.

## Table of Contents

Section 1 – Overview .....	4
1.1 Introduction .....	4
1.2 Report Structure .....	5
Section 2 – Modelled Flow Difference .....	6
2.1 Introduction .....	6
2.2 2019 Base Year Modelled Flow Difference .....	6
Section 3 – Base Year Model Performance .....	8
3.1 Introduction .....	8
3.2 EMFM Highway Base Year Model Screenline / Cordon Performance .....	8
3.3 EMFM Highway Base Year Model Link Flow Performance .....	11
3.4 EMFM Highway Base Year Model Journey Time Performance .....	16
Section 4 – Summary .....	20

## List of Tables

Table 3.1: Revised Screenline Flow Acceptability Criteria .....	8
Table 3.2: Screenline and Cordon Performance in the Vicinity of the Proposed Development (May 2024 TAG data book) .....	10
Table 3.3: Link Flow Performance – A453 and East Midlands Airport (May 2024 TAG data book) .....	12
Table 3.4: Link Flow Performance – Strategic Road Network (May 2024 TAG data book) .....	14
Table 3.5: Journey Time Performance in the Vicinity of the Proposed Development (May 2024 TAG data book) .....	17

## List of Figures

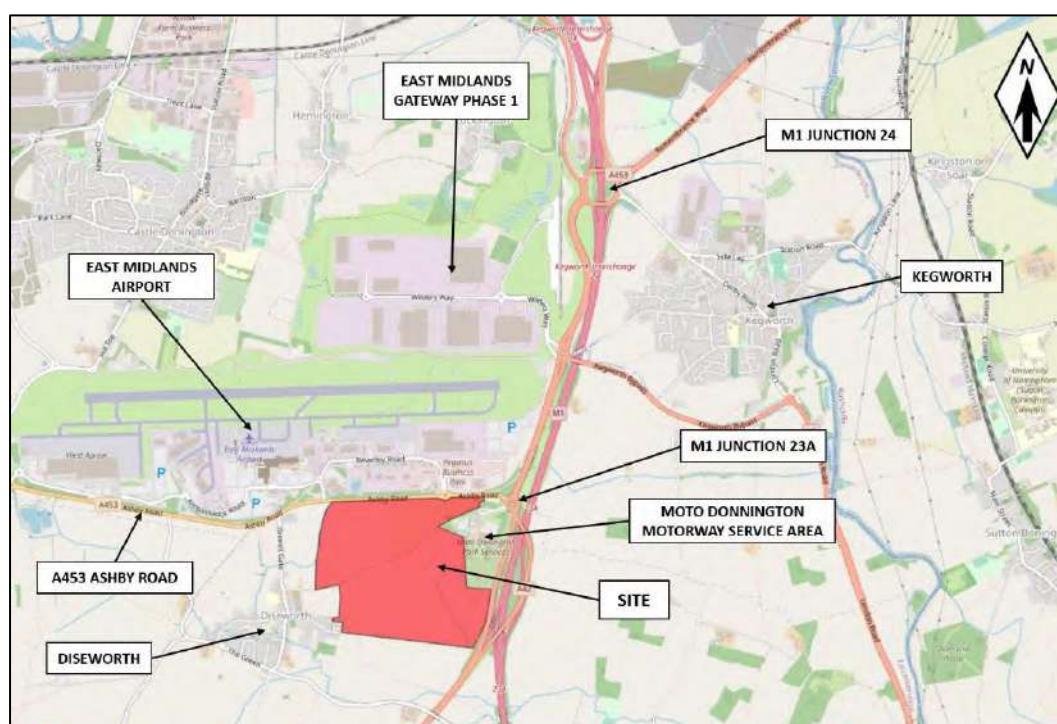
Figure 1.1: Location of Proposed Development .....	4
Figure 2.1: Base Year Modelled Flow Difference – EMFM2019 with May 2024 TAG data book minus EMFM2019 with draft November 2022 TAG data book (AM Peak hour) .....	6
Figure 2.2: Base Year Modelled Flow Difference – EMFM2019 with May 2024 TAG data book minus EMFM2019 with draft November 2022 TAG data book (PM Peak hour) .....	7
Figure 3.1: Screenlines and Cordons in the Vicinity of the Proposed Development .....	9
Figure 3.2: Observed Count Locations – A453 and East Midlands Airport .....	13
Figure 3.3: Observed Count Locations – Strategic Road Network .....	15
Figure 3.4: Journey Time Routes in the Vicinity of the Proposed Development .....	16
Figure 3.5: M1 (Junction 22 to Junction 27) Journey Time Validation Graphs (May 2024 TAG data book) .....	18
Figure 3.6: A42 (Junction 11 to M1) Journey Time Validation Graphs (May 2024 TAG data book) .....	18
Figure 3.7: A50 (A515 to B6540) Journey Time Validation Graphs (May 2024 TAG data book) .....	19
Figure 3.8: A453 (M1 Junction 23a to A52) Journey Time Validation Graphs (May 2024 TAG data book) .....	19

## Section 1 – Overview

### 1.1 Introduction

- 1.1.1 The East Midlands Gateway (EMG) Phase 2 development is a proposed employment development of mixed B2 (general industrial) and B8 (storage or distribution) use, with capacity for 400,000sqm gross floorspace (300,000sqm ground floorspace and 100,000sqm mezzanine floorspace) of industrial use, comprising 340,000sqm B8 and 60,000sqm B2.
- 1.1.2 The development site is located to the south of East Midlands Airport and west of the A42 in Leicestershire and is expected to build out by 2031.
- 1.1.3 Figure 1.1 shows an indication of the location of the proposed development, denoted by the area shaded in red. The proposed development has a total area of circa 250 acres located to the south of the A453 and East Midlands Airport itself, to the east of Diseworth village. The M1 Junction 23a lies to the east of the site with the Moto Donington Motorway Service Area (MSA) directly abutting to the north-east.

**Figure 1.1: Location of Proposed Development<sup>1</sup>**



© OpenStreetMap Contributors

- 1.1.4 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the East Midlands Freeport Model (EMFM).
- 1.1.5 The base year of the EMFM is 2019, and it is a highway assignment model (for the AM Peak and PM Peak hours), with its demand derived from the more extensive Pan-Regional Transport Model (PRTM 2019), though the EMFM has greater network and zonal density in the vicinity of the Freeport sites.
- 1.1.6 A base year model review for the EMFM<sub>2019</sub> was undertaken in 2022 / 2023 for this application. However, this previous version of the EMFM<sub>2019</sub> used the draft November 2022 TAG data book.
- 1.1.7 It is proposed that the EMFM<sub>2019</sub> is updated to use the latest May 2024 TAG data book for this application. The impact on the 2019 base year modelled flows due to the update of the TAG data book version is expected to be small (i.e. within  $\pm 25$  PCUs) and is not expected to materially affect the

<sup>1</sup> Indicative site boundary from 19232\_F0037[M]\_Illustrative Masterplan.pdf, provided by BWB (23/05/2024)



overall base year model performance results. As such, a full update of the base year model review is not considered necessary.

- 1.1.8 This addendum provides modelled flow difference plots between the 2019 base year model with the draft November 2022 TAG data book and May 2024 TAG data book to demonstrate that for most links, the modelled flow differences are small, and the screenline, link flow and journey time performance in the vicinity of the proposed EMG Phase 2 development is not materially affected. This addendum should be read alongside the East Midlands Gateway Phase 2 Base Year Model Review Report<sup>2</sup>, which also provides the zone and network review for the EMFM<sub>2019</sub>.

## 1.2 Report Structure

- 1.2.1 Following this overview, this report contains the following sections:

- Section 2 provides the modelled flow difference plots between the 2019 base year model with the draft November 2022 TAG data book and May 2024 TAG data book;
- Section 3 summarises the base year model performance in the vicinity of the proposed development for the updated base year model (with May 2024 TAG data book); and
- Section 4 provides a summary.

---

<sup>2</sup> EMFM2019 – East Midlands Gateway Phase 2: Base Year Model Review v1.1 (dated 2022-11-11)

## Section 2 – Modelled Flow Difference

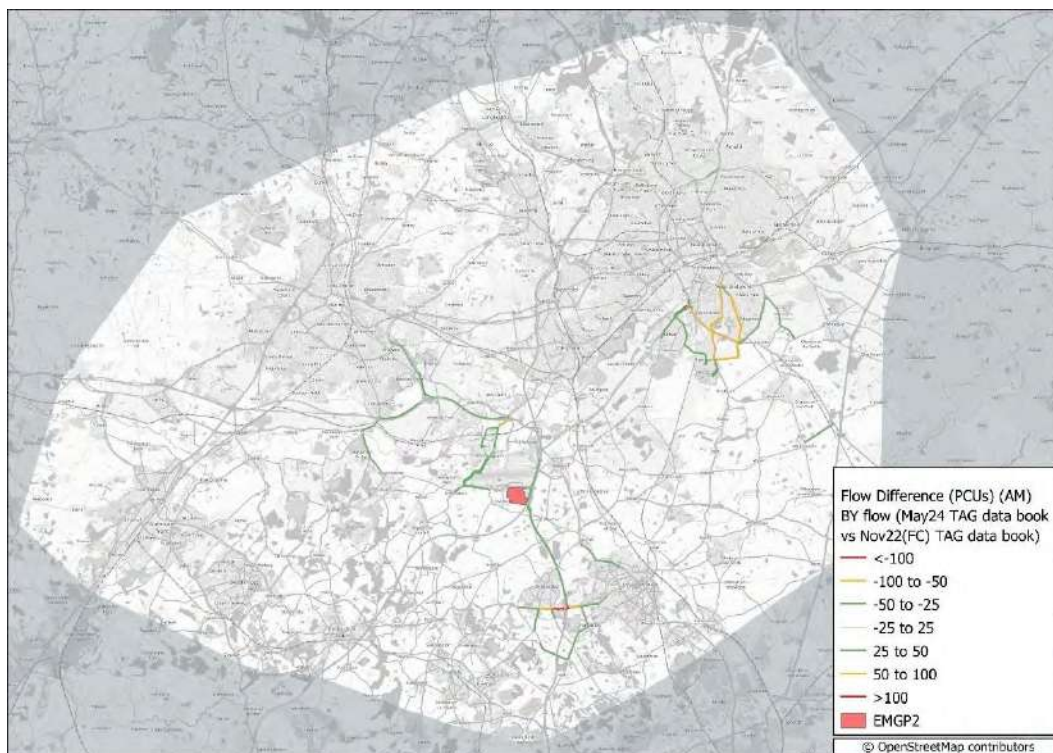
### 2.1 Introduction

- 2.1.1 This section presents the 2019 base year modelled flow difference plots between the EMFM<sub>2019</sub> with the draft November 2022 TAG data book and the latest May 2024 TAG data book for the AM Peak and PM Peak hours.

### 2.2 2019 Base Year Modelled Flow Difference

- 2.2.1 Figure 2.1 and Figure 2.2 show the 2019 base year modelled flow differences due to the update of the TAG data book version.
- 2.2.2 As shown in Figure 2.1 and Figure 2.2, most links show an absolute modelled flow difference of fewer than 25 PCUs<sup>3</sup>, and as such do not materially affect the overall base year model performance results. Section 3 provides additional checks on the screenline, link flow and journey time performance in the vicinity of the proposed development for the EMFM<sub>2019</sub> with May 2024 TAG data book.

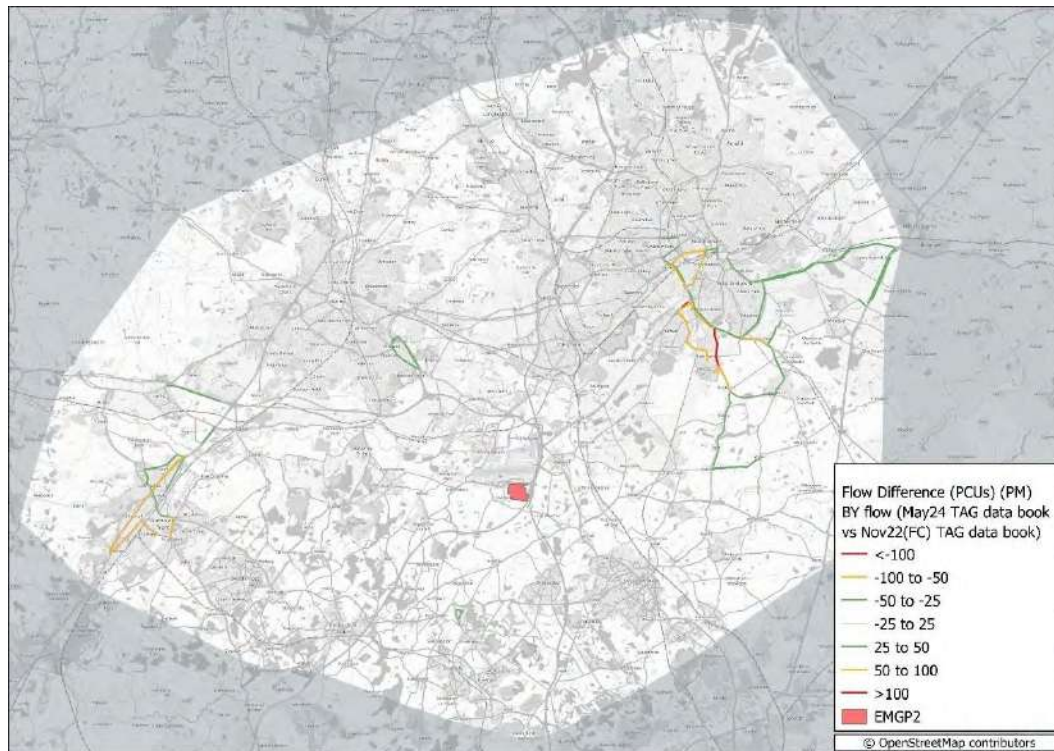
**Figure 2.1: Base Year Modelled Flow Difference – EMFM<sub>2019</sub> with May 2024 TAG data book minus EMFM<sub>2019</sub> with draft November 2022 TAG data book (AM Peak hour)**



© OpenStreetMap contributors

<sup>3</sup> Passenger Car Units (for the EMFM<sub>2019</sub>, one car / LGV is equivalent to one PCU, and one HGV is equivalent to two PCUs)

**Figure 2.2: Base Year Modelled Flow Difference – EMFM2019 with May 2024 TAG data book minus EMFM2019 with draft November 2022 TAG data book (PM Peak hour)**



© OpenStreetMap contributors

## Section 3 – Base Year Model Performance

### 3.1 Introduction

- 3.1.1 This section presents the base year model performance results for the screenlines / cordons, link flows and journey time routes in the vicinity of the proposed EMG Phase 2 development for the EMFM<sub>2019</sub> with the latest May 2024 TAG data book.

### 3.2 EMFM Highway Base Year Model Screenline / Cordon Performance

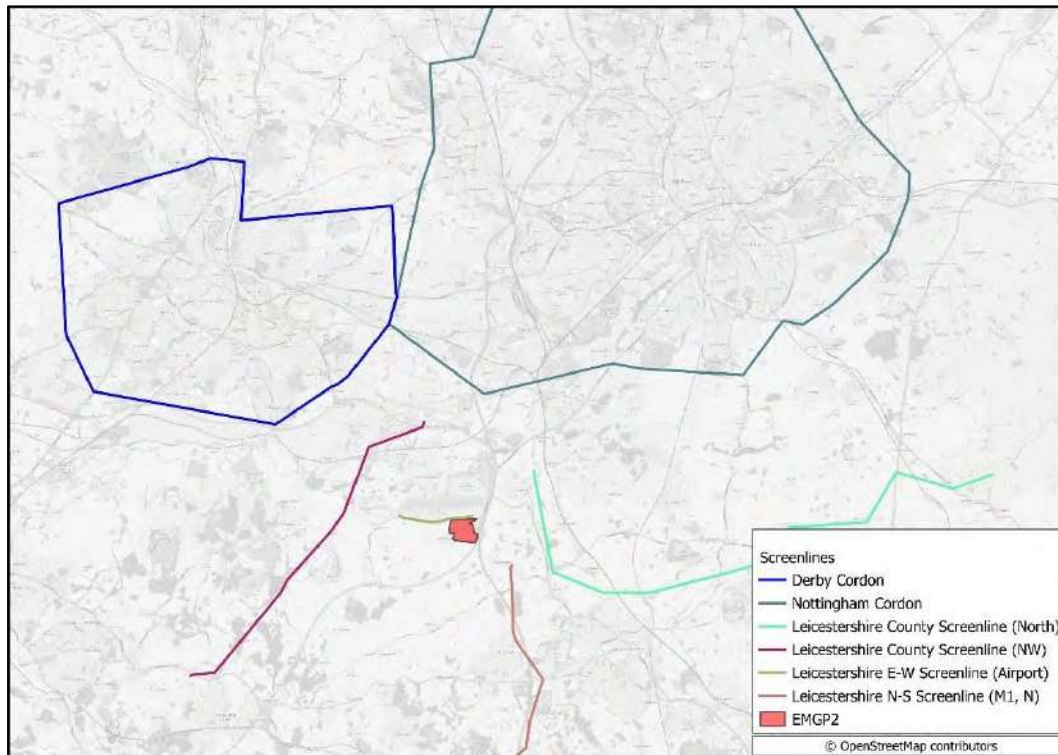
- 3.2.1 Guidelines set out in Table 1 of TAG Unit M3.1 on highway assignment modelling state that a modelled screenline meets TAG criteria if the differences between modelled flows and observed counts are less than 5% of the counts and that this should be true for 'all or nearly all screenlines'.
- 3.2.2 Screenlines are normally made up of 5 links or more. Within the EMFM, there are several screenlines / cordons with fewer than five count locations and / or with a relatively low observed flow for the screenline. It has been noted that such screenline / cordons tend to fail the 5% TAG criterion for screenline / cordon flows even when all individual links are within the TAG criteria. For this reason, the flow criterion has been adjusted for screenlines / cordons with fewer than five counts and / or low observed flows.
- 3.2.3 This revised criterion has been based on the individual link flow acceptability criteria and is given in Table 3.1. This uses the individual link flow TAG criteria for screenlines with one count, and the standard screenline criterion for screenlines with five or more counts, and interpolates between these two points for screenlines with between two and four counts. These revised criteria have been used in the assessment of the modelled screenline flows against observed data.

**Table 3.1: Revised Screenline Flow Acceptability Criteria**

Number of Counts on Screenline	Acceptability Guidelines
5 of more counts	Within $\pm 5\%$ or $\pm 100$ vehicles of observed count
4 counts	Within $\pm 7.5\%$ or $\pm 100$ vehicles of observed count
3 counts	Within $\pm 10\%$ or $\pm 100$ vehicles of observed count
2 counts	Within $\pm 12.5\%$ or $\pm 100$ vehicles of observed count
1 count	Within $\pm 15\%$ or $\pm 100$ vehicles of observed count

- 3.2.4 Figure 3.1 shows the screenlines and cordons in the vicinity of the proposed development and Table 3.2 provides a summary of the base year model performance. For the AM Peak hour, all screenlines and cordons considered meet the acceptability criteria in both directions except the Leicestershire County Screenline (North) which marginally fails for southbound (i.e. inbound to Leicestershire). For the PM Peak hour, all screenlines and cordons considered meet the acceptability criteria in both directions except the Nottingham Cordon which marginally fails for the outbound direction.
- 3.2.5 The reader may note that the Nottingham Cordon (outbound) marginally passes for the model with the draft November 2022 TAG data book (i.e. difference of -4.9%) but marginally fails for the model with the latest May 2024 TAG data book (i.e. difference of -5.1%).
- 3.2.6 Overall, the screenline and cordon performance for the EMFM base year model (with May 2024 TAG data book) is good and meets the TAG threshold that 'all or nearly all screenlines' pass the acceptability criteria.



**Figure 3.1: Screenlines and Cordons in the Vicinity of the Proposed Development**

© OpenStreetMap contributors

**Table 3.2: Screenline and Cordon Performance in the Vicinity of the Proposed Development (May 2024 TAG data book)**

Screenline / Cordon	# Counts	AM Peak					PM Peak				
		Observed (veh)	Modelled (veh)	Abs Diff (veh)	% Diff	Pass?	Observed (veh)	Modelled (veh)	Abs Diff (veh)	% Diff	Pass?
Leicestershire E-W Screenline (Airport) Northbound	3	1,301	1,291	-10	-0.8%	✓	424	378	-46	-10.9%	✓
Leicestershire E-W Screenline (Airport) Southbound	3	415	397	-17	-4.2%	✓	1,150	1,089	-61	-5.3%	✓
Leicestershire County Screenline (North-West) Inbound	7	4,279	4,244	-35	-0.8%	✓	5,134	5,020	-114	-2.2%	✓
Leicestershire County Screenline (North-West) Outbound	7	4,843	4,648	-194	-4.0%	✓	4,946	4,926	-19	-0.4%	✓
Leicestershire County Screenline (North) Inbound	9	3,788	4,010	222	5.9%	✗	3,988	3,990	2	0.0%	✓
Leicestershire County Screenline (North) Outbound	9	3,821	3,808	-13	-0.3%	✓	4,095	4,174	79	1.9%	✓
Leicestershire N-S Screenline (M1, North) Eastbound	9	5,604	5,631	27	0.5%	✓	4,721	4,665	-56	-1.2%	✓
Leicestershire N-S Screenline (M1, North) Westbound	9	3,945	4,000	55	1.4%	✓	5,275	5,372	96	1.8%	✓
Nottingham Cordon Inbound	25	23,816	23,104	-712	-3.0%	✓	24,787	24,153	-633	-2.6%	✓
Nottingham Cordon Outbound	25	22,567	21,737	-830	-3.7%	✓	24,524	23,279	-1,245	-5.1%	✗
Derby Cordon Inbound	13	12,975	12,440	-534	-4.1%	✓	12,760	12,637	-122	-1.0%	✓
Derby Cordon Outbound	13	11,285	11,258	-27	-0.2%	✓	13,448	13,067	-382	-2.8%	✓

### 3.3 EMFM Highway Base Year Model Link Flow Performance

3.3.1 Guidelines set out in Table 2 of TAG Unit 3.1 on highway assignment modelling state that a modelled link flow meets TAG criteria if at least one of the two following conditions is met:

- Flow criteria:
  - modelled flow is within 100 vehicles for counts with an observed flow of less than 700 vehicles;
  - modelled flow is within 15% for counts with an observed flow between 700 and 2,700 vehicles; or
  - modelled flow is within 400 vehicles for counts with an observed flow greater than 2,700 vehicles.
- GEH criteria:
  - a GEH<sup>4</sup> value of less than 5.

3.3.2 The link flow performance for the A453, East Midlands Airport links and the Strategic Road Network (SRN) in the vicinity of the proposed development has been checked. Table 3.3 shows that all counts on the A453 and East Midlands Airport links pass the acceptability criteria in both directions for the AM Peak and PM Peak hours. For the 14 counts considered for the SRN, Table 3.4 shows that all pass in the AM Peak hour, and all but one (M1 northbound between Junction 23a and Junction 24) pass in the PM Peak hour. Figure 3.2 and Figure 3.3 show the observed count locations.

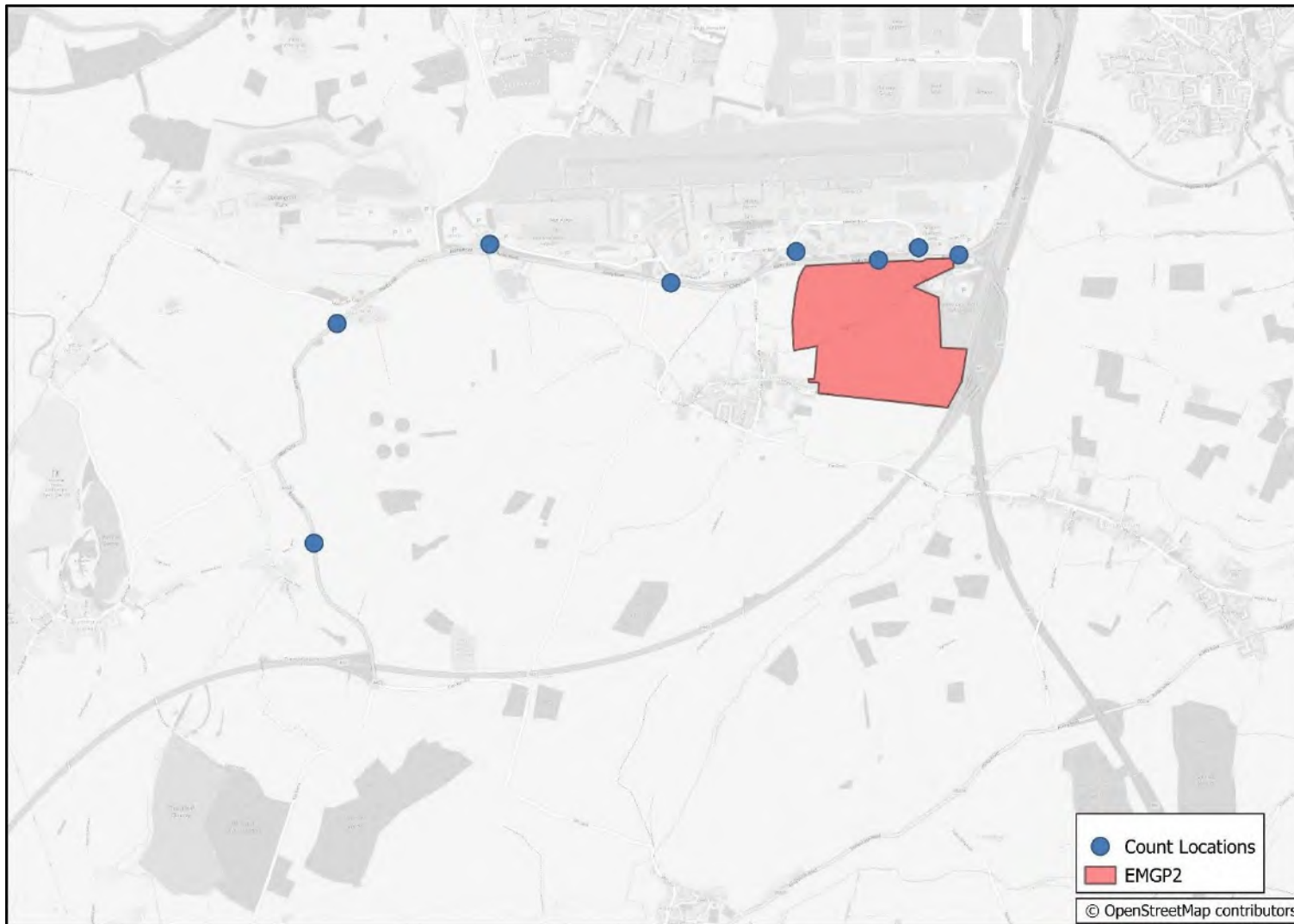
3.3.3 The pass rates for the link flow performance for both AM Peak and PM Peak hours have not changed following the update of the TAG data book from draft November 2022 version to May 2024 version.

---

<sup>4</sup>  $GEH = \sqrt{\frac{(M-O)^2}{(M+O)/2}}$ , where  $M$  is the modelled flow and  $O$  is the observed flow

**Table 3.3: Link Flow Performance – A453 and East Midlands Airport (May 2024 TAG data book)**

Location	AM Peak						PM Peak					
	Observed (veh)	Modelled (veh)	Abs Diff (veh)	% Diff	GEH	Pass?	Observed (veh)	Modelled (veh)	Observed (veh)	% Diff	GEH	Pass?
Ashby Road E of EMA Eastbound	567	532	-36	-6.3%	1.5	✓	649	587	-61	-9.5%	2.5	✓
Ashby Road E of EMA Westbound	619	528	-91	-14.7%	3.8	✓	520	486	-34	-6.6%	1.5	✓
Ashby Road West of A453 Junction Eastbound	582	671	89	15.3%	3.6	✓	1,024	1,008	-16	-1.6%	0.5	✓
Ashby Road West of A453 Junction Westbound	1,084	1,102	18	1.7%	0.5	✓	589	606	17	2.9%	0.7	✓
Moor Lane Northbound	293	295	2	0.6%	0.1	✓	240	240	0	0.1%	0.0	✓
Moor Lane Southbound	224	220	-4	-1.7%	0.3	✓	289	289	-1	-0.2%	0.0	✓
A453 Walton Hill Eastbound	440	442	1	0.3%	0.1	✓	324	322	-1	-0.4%	0.1	✓
A453 Walton Hill Westbound	307	314	7	2.1%	0.4	✓	451	439	-12	-2.7%	0.6	✓
Ashby Road West of Grimes Gate Northbound	641	606	-34	-5.4%	1.4	✓	321	319	-2	-0.5%	0.1	✓
Ashby Road West of Grimes Gate Southbound	331	355	24	7.3%	1.3	✓	444	402	-42	-9.4%	2.0	✓
EMA Western Access Northbound	300	301	1	0.2%	0.0	✓	78	78	-0	-0.6%	0.1	✓
EMA Central Access Northbound	389	416	27	7.0%	1.3	✓	177	180	3	1.6%	0.2	✓
Hunter Road (Pegasus Park) Northbound	612	574	-38	-6.2%	1.6	✓	169	120	-49	-28.8%	4.0	✓
EMA Western Access Southbound	65	71	6	9.0%	0.7	✓	299	310	11	3.7%	0.6	✓
EMA Central Access Southbound	189	186	-2	-1.2%	0.2	✓	356	359	3	0.9%	0.2	✓
Hunter Road (Pegasus Park) Southbound	161	140	-21	-13.1%	1.7	✓	496	421	-75	-15.2%	3.5	✓

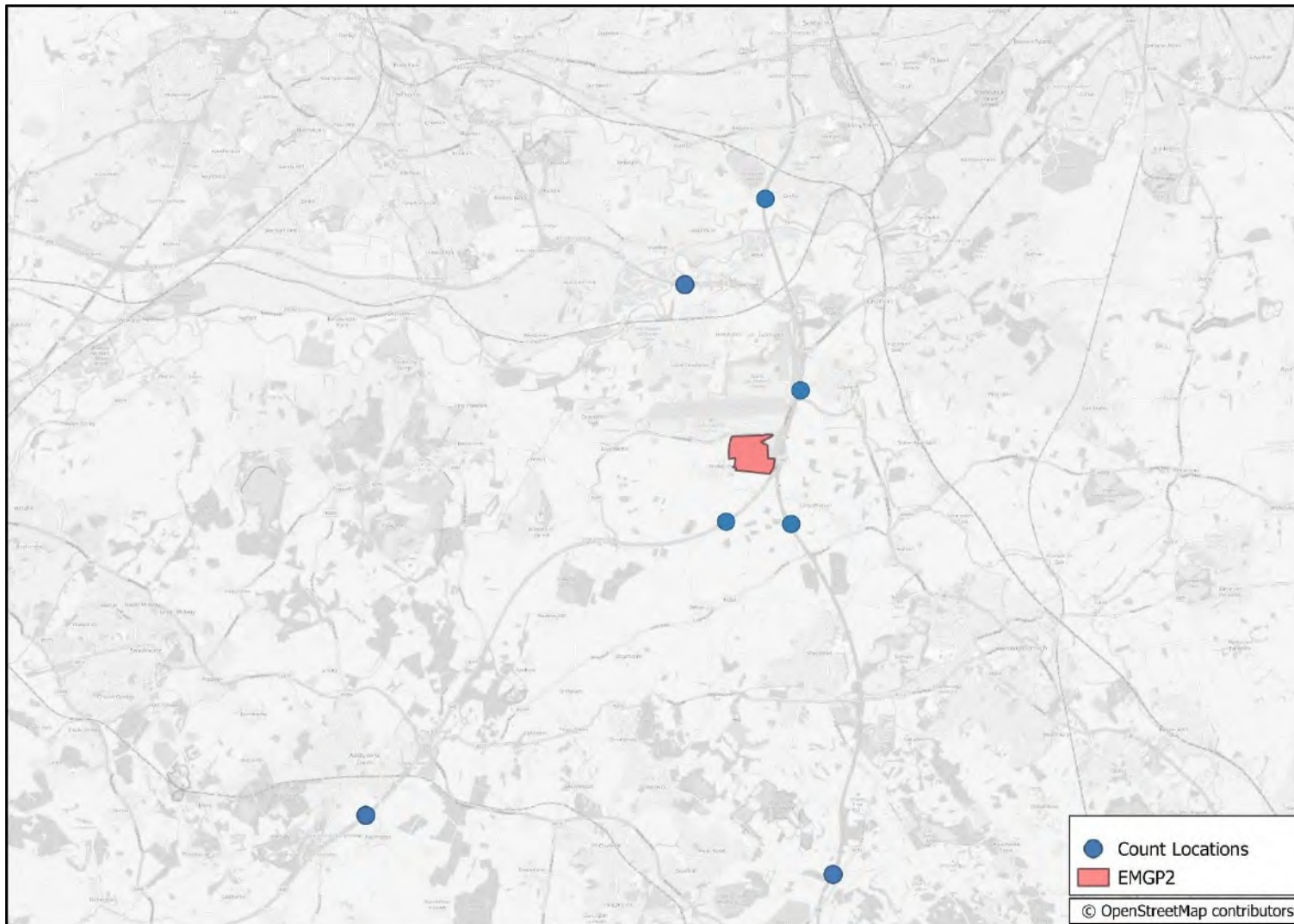
**Figure 3.2: Observed Count Locations – A453 and East Midlands Airport**

© OpenStreetMap contributors

Table 3.4: Link Flow Performance – Strategic Road Network (May 2024 TAG data book)

Location	AM Peak						PM Peak					
	Observed (veh)	Modelled (veh)	Abs Diff (veh)	% Diff	GEH	Pass?	Observed (veh)	Modelled (veh)	Observed (veh)	% Diff	GEH	Pass?
A50 between Junction 1 and Junction 2 Eastbound	3,018	2,946	-72	-2.4%	1.3	✓	3,173	3,131	-42	-1.3%	0.8	✓
A50 between Junction 1 and Junction 2 Westbound	3,039	3,033	-5	-0.2%	0.1	✓	3,590	3,561	-29	-0.8%	0.5	✓
A42 between Junction 12 and Junction 13 Northbound	2,700	2,697	-3	-0.1%	0.1	✓	2,542	2,541	-1	-0.0%	0.0	✓
A42 between Junction 12 and Junction 13 Southbound	2,395	2,401	6	0.2%	0.1	✓	2,466	2,465	-1	-0.0%	0.0	✓
A42 between Junction 14 and M1 Northbound	2,175	2,070	-105	-4.8%	2.3	✓	2,027	2,032	5	0.2%	0.1	✓
A42 between Junction 14 and M1 Southbound	2,019	2,016	-3	-0.1%	0.1	✓	1,976	1,878	-99	-5.0%	2.2	✓
M1 between Junction 22 and Junction 23 Northbound	3,983	3,971	-12	-0.3%	0.2	✓	4,282	4,303	21	0.5%	0.3	✓
M1 between Junction 22 and Junction 23 Southbound	3,731	3,728	-4	-0.1%	0.1	✓	4,104	4,101	-3	-0.1%	0.0	✓
M1 between Junction 23 and 23a Northbound	3,974	3,982	8	0.2%	0.1	✓	4,521	4,501	-19	-0.4%	0.3	✓
M1 between Junction 23 and 23a Southbound	4,002	3,935	-67	-1.7%	1.1	✓	4,214	4,205	-8	-0.2%	0.1	✓
M1 between Junction 23a and 24 Northbound	3,658	3,952	294	8.0%	4.8	✓	4,301	4,833	532	12.4%	7.9	✗
M1 between Junction 23a and 24 Southbound	5,153	5,302	150	2.9%	2.1	✓	5,255	5,240	-15	-0.3%	0.2	✓
M1 between Junction 24 and Junction 25 Northbound	3,461	3,442	-19	-0.6%	0.3	✓	5,119	5,072	-47	-0.9%	0.7	✓
M1 between Junction 24 and Junction 25 Southbound	4,501	4,520	19	0.4%	0.3	✓	3,887	3,811	-76	-2.0%	1.2	✓



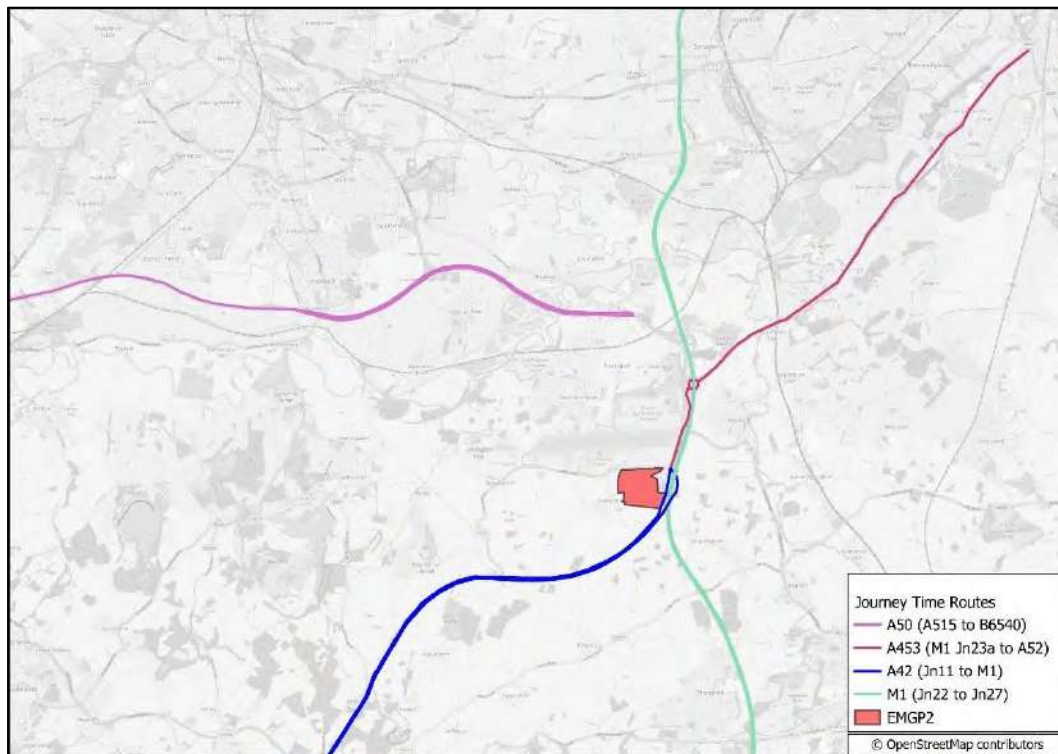
**Figure 3.3: Observed Count Locations – Strategic Road Network**

© OpenStreetMap contributors

### 3.4 EMFM Highway Base Year Model Journey Time Performance

- 3.4.1 Of the four journey time routes in the vicinity of the proposed development as shown in Figure 3.4, Table 3.5 shows that all routes pass in the AM Peak hour and all but one route (A453 northbound from M1 Junction 23a to A52) pass in the PM Peak hour.
- 3.4.2 Figure 3.5 to Figure 3.8 shows the comparison of modelled and observed journey times in distance-time graph format. Figure 3.8 shows that the section of the A453 near the proposed development between M1 Junction 23a and M1 Junction 24 performs well, with the model overestimating journey time on the A453 approach to the A52 in Nottingham.
- 3.4.3 The pass rates for the journey time performance for both AM Peak and PM Peak hours have not changed following the update of the TAG data book from draft November 2022 version to May 2024 version.

**Figure 3.4: Journey Time Routes in the Vicinity of the Proposed Development**



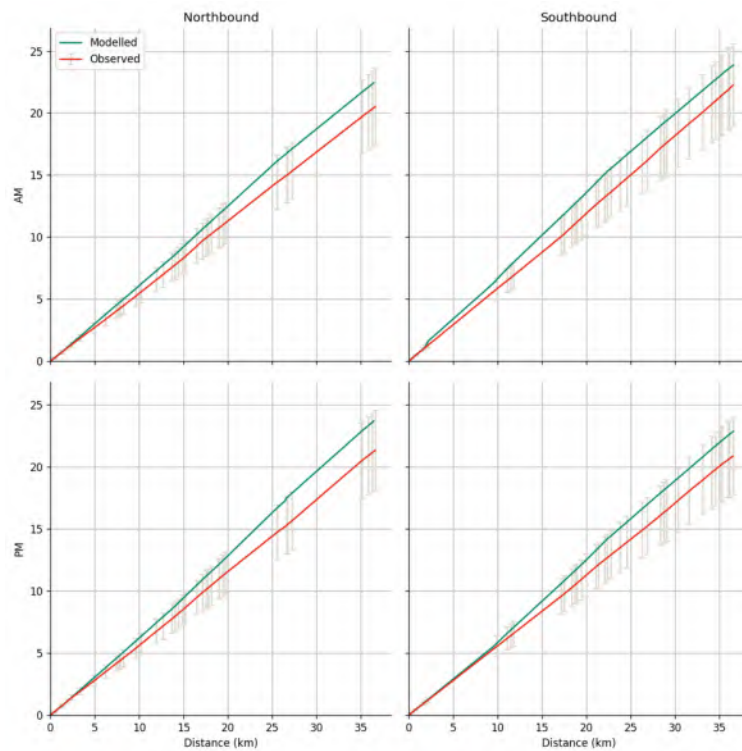
© OpenStreetMap contributors



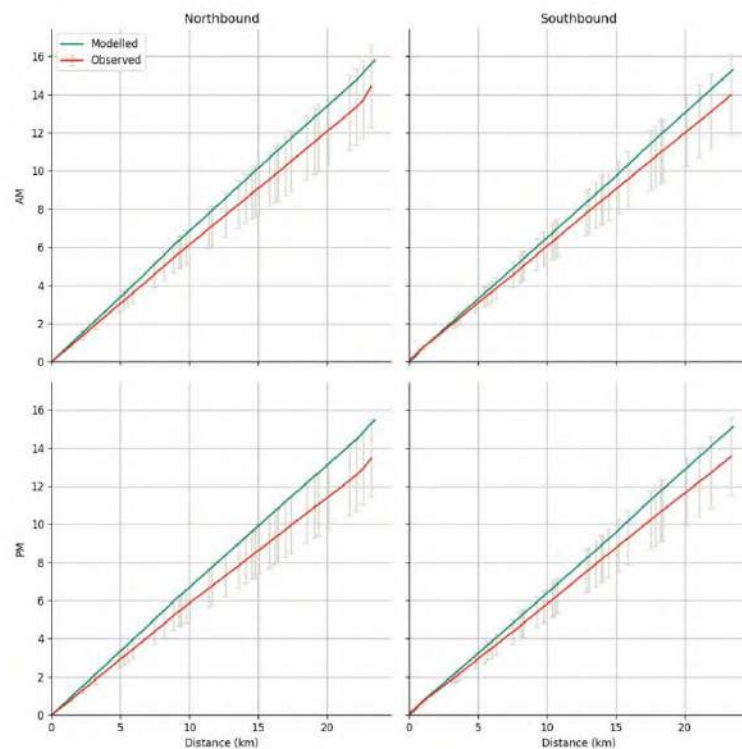
**Table 3.5: Journey Time Performance in the Vicinity of the Proposed Development (May 2024 TAG data book)**

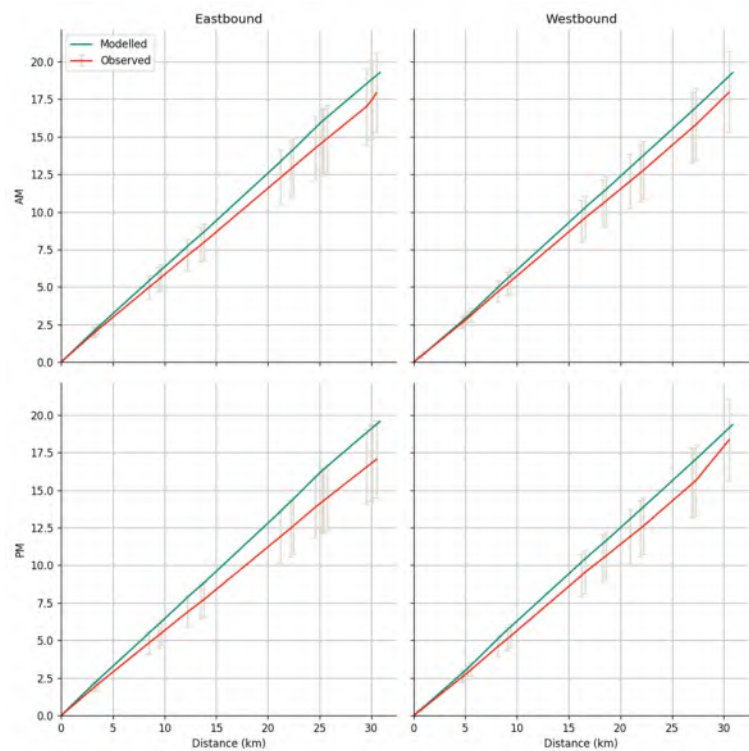
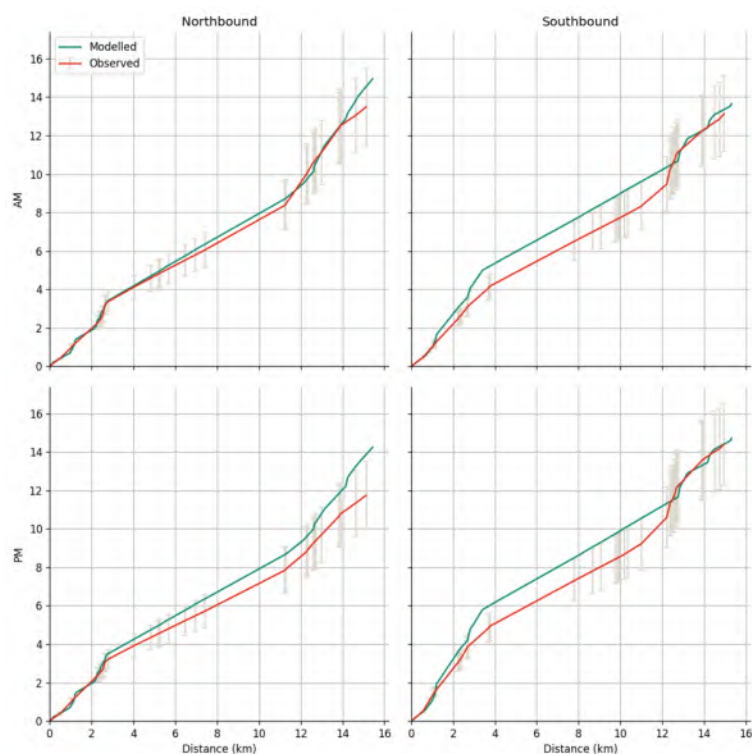
Route	AM Peak					PM Peak				
	Observed	Modelled	Abs Diff	% Diff	Pass	Observed	Modelled	Abs Diff	% Diff	Pass
M1 (Jn22 to 27) Northbound	20:30	22:26	01:56	9.4%	✓	21:20	23:43	02:22	11.1%	✓
M1 (Jn22 to 27) Southbound	22:15	23:52	01:36	7.2%	✓	20:52	22:52	02:00	9.6%	✓
A42 (Jn11 to M1) Northbound	14:27	15:48	01:21	9.4%	✓	13:27	15:27	02:00	14.8%	✓
A42 (Jn11 to M1) Southbound	13:59	15:19	01:20	9.5%	✓	13:33	15:07	01:34	11.5%	✓
A50 (A515 to B6540) Eastbound	17:55	19:16	01:21	7.6%	✓	17:03	19:34	02:31	14.8%	✓
A50 (A515 to B6540) Westbound	17:57	19:16	01:19	7.3%	✓	18:20	19:22	01:01	5.6%	✓
A453 (M1 Jn23a to A52) Northbound	13:29	14:58	01:28	10.9%	✓	11:45	14:15	02:30	21.3%	✗
A453 (M1 Jn23a to A52) Southbound	13:08	13:40	00:32	4.0%	✓	14:24	14:43	00:19	2.2%	✓

**Figure 3.5: M1 (Junction 22 to Junction 27) Journey Time Validation Graphs (May 2024 TAG data book)**



**Figure 3.6: A42 (Junction 11 to M1) Journey Time Validation Graphs (May 2024 TAG data book)**



**Figure 3.7: A50 (A515 to B6540) Journey Time Validation Graphs (May 2024 TAG data book)****Figure 3.8: A453 (M1 Junction 23a to A52) Journey Time Validation Graphs (May 2024 TAG data book)**

## Section 4 – Summary

- 4.1.1 The EMFM<sub>2019</sub> highway model represents an average weekday in April / May / June in 2019 for the AM Peak and PM Peak hours. This review is focused on the suitability of the model for use in the strategic assessment of the proposed EMG Phase 2 development.
- 4.1.2 A base year model review for the EMFM<sub>2019</sub> was undertaken in 2022 / 2023 for the EMG Phase 2 application. However this previous version of the EMFM<sub>2019</sub> used the draft November 2022 TAG data book.
- 4.1.3 It is proposed that the EMFM<sub>2019</sub> is updated to use the latest May 2024 TAG data book for the EMG Phase 2 application. To demonstrate that the impact on the 2019 base year modelled flows due to the update of TAG data book version is small, modelled flow difference checks were undertaken. For most links, the absolute modelled flow differences between the 2019 base year model with the draft November 2022 TAG data book and the latest May 2024 TAG data book are fewer than 25 PCUs, and as such do not materially affect the overall base year model performance results.
- 4.1.4 The screenline, link flow and journey time performance in the vicinity of the proposed development has also been checked. For link flow and journey time performance, the pass rates for the model with May 2024 TAG data book are consistent with the model with the draft November 2022 TAG data book. For screenline performance, the pass rate for the AM Peak hour is consistent; however, for the PM Peak hour, the Nottingham Cordon (outbound) marginally passes for the model with the draft November 2022 TAG data book (i.e. difference of -4.9%) but marginally fails for the model with the latest May 2024 TAG data book (i.e. difference of -5.1%).
- 4.1.5 Overall, the EMFM<sub>2019</sub> (with the May 2024 TAG data book) is considered suitable for the strategic assessment of the proposed East Midlands Gateway Phase 2 development.

*Page intentionally blank.*

## About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivalled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at [aecom.com](https://aecom.com) and [@AECOM](https://twitter.com/AECOM).

**APPENDIX 8: PRTM Proforma v14 & Uncertainty Log v7**

---

# **Pan Regional Transport Model (PRTM) Development Testing Proforma**

## **Foreword:**

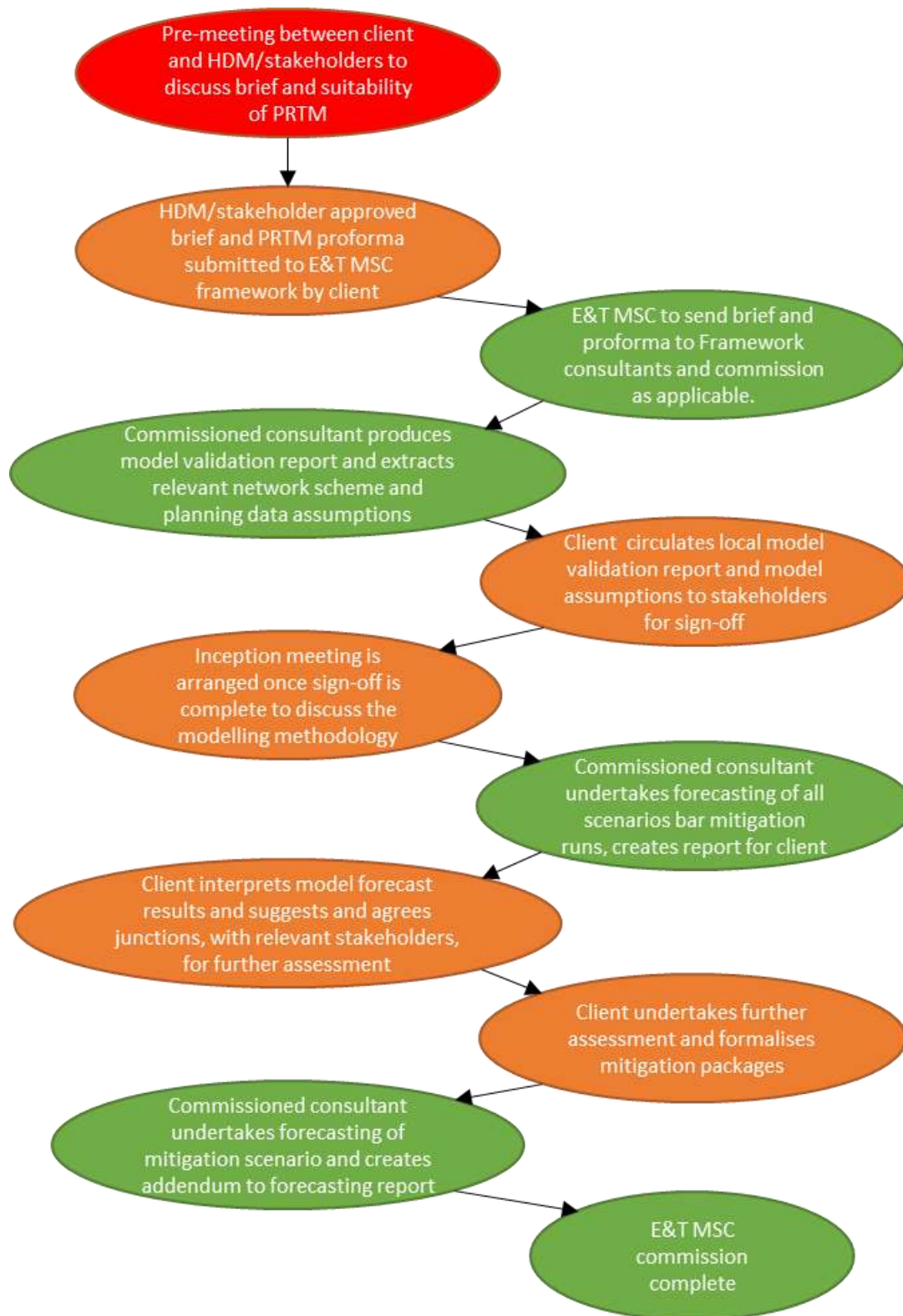
Before completing this form for development management purposes, it is recommended that you contact Leicestershire County Council (LCC) and seek advice from the Highway Development Management (HDM) team on the proposed use of PRTM. The HDM team can be contacted at [hdc@leics.gov.uk](mailto:hdc@leics.gov.uk).

Although not a requirement it is strongly recommended that potential stakeholders, e.g. LCC HDM, National Highways, sign-off on your brief and trip generation before submitting this proforma to Environment and Transport Modelling Services Contract (E&T MSC). This should ensure that any subsequent work proposal through E&T MSC is as accurate as possible in terms of scope, timescales and cost.

Please note that E&T MSC and wider Network Data and Intelligence (NDI) Team work independently from all other teams within LCC, including HDM. Please ensure any correspondence intended for the HDM team is sent to the case officer for your (pre)application; or, if unknown, to HDM's generic inbox: [hdc@leics.gov.uk](mailto:hdc@leics.gov.uk).

On the following page is an indicative flowchart summarising the general transport modelling process for using the PRTM to inform client Transport Assessments; this is a typical approach and has been simplified to a generic process – each individual application may differ from the below and as above advice should be sought from the HDM team.





### Section 1: Client Details

<b>Name:</b>	Paul Wilson
<b>Company:</b>	BWB Consulting Ltd (on behalf of Segro)
<b>Telephone:</b>	07889995471
<b>E-mail:</b>	paul.wilson@bwiconsulting.com
<b>Date:</b>	10/10/2024

### Section 2: Project Details

<b>Title:</b>	East Midlands Gateway Phase 2
<b>District / Location:</b>	Land to the southeast of EMA, and southwest of M1J23a in North West Leicestershire DC's jurisdiction
<b>Background:</b>	<p>EMFM modelling has recently been undertaken for forecast years of 2025 and 2035 (reference EMGP2 proforma Revision 6). Due to the passage of time with submitting the EMG2 application, revised EMFM modelling is now required for higher forecast years of 2028 (opening year) and 2038 (10 years post opening).</p> <p>There have been changes to the evening peak hour trip rates and the scale of development, which is now being proposed at 400,000sqm on EMG2 (to account for 300,000sqm of ground floorspace and 100,000sqm of potential B8 mezzanine floorspace) plus 30,000sqm of B8 floorspace on EMG1 (Plot 16). The entire EMG2 development is now proposed to be served by a single point of access via a fourth arm from the A453/Hunter Road roundabout. Plot 16 on EMG1 would be served by the existing access via Wilder's Way.</p> <p>The revised uncertainty log also picks up on any new developments during the higher opening and future years.</p> <p>This version of the proforma sets out the updated modelling work based on the above changes. We are however considering other scenarios and a 'vision and validate' sensitivity test based on more up to date EMG1 trip rates and considering in detail the activity generated by mezzanines. However, further information will need to be shared, and methodology agreed with the TWG, for these scenarios, which will be set out in due course in a separate proforma assuming such an approach is indeed continued with.</p>

### Section 3: Development Details

Please input your development phasing into the provided table on the right; if it is a mixed-use site, please separate dwellings and employment floorspace with a comma. This table will act as an overview to the detail provided further in this proforma as well as the supporting brief (if available).

There are two main forms of assessment that the E&T MSC offers, a highway-only model run and a full-PRTM model run. Your HDM Case Officer will confirm which type of assessment is needed for your development.

For highway-only model runs please provide details in section 3a, for full model runs please provide details in section 3b.

Please provide a brief description of the access arrangements in the box below; if there are preliminary scheme drawings available please provide these alongside submission of this proforma via email attachment.

#### Brief description of access arrangements:

Having reflected on matters recently, the access proposals to EMG2 are being revised. One main access is now being introduced, via a fourth arm of the existing A453/Hunter Road roundabout to serve 100% of the development plus the bus interchange, which can then connect directly into the site.

A separate emergency access would also be provided, but that won't affect the revised modelling work.

Development on Plot 16 of EMG1 would be served by the existing access via Wilder's Way.

Year	No.
2021	Figure
2022	Figure
2023	Figure
2024	Figure
2025	Figure
2026	Figure
2027	Figure
2028	130,000sqm
2029	100,000sqm
2030	100,000sqm
2031	100,000sqm
2032	Figure
2033	Figure
2034	Figure
2035	Figure
2036	Figure
2037	Figure
2038	Figure
2039	Figure
2040	Figure
2041	Figure
2042	Figure
2043	Figure
2044	Figure
2045	Figure
2046	Figure
2047	Figure
2048	Figure
2049	Figure
2050	Figure
2051	Figure
<b>Total</b>	<b>430,000sqm</b>

### Section 3a: Highway Model Only Development Details

Please provide either the agreed trip rates and/or trip generation for your development in the relevant tables below. Depending on your land use and agreed approach with LCC HDM, values may not be required for all three time periods.

#### Trip Rates:

Housing: N/A

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles									
HGV's									
Total									

Employment: B2

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	0.376	0.057	0.433	-	-	-	0.046	0.363	0.408
HGV's	0.016	0.014	0.030	-	-	-	0.003	0.006	0.009
Total	0.392	0.071	0.463	-	-	-	0.049	0.369	0.417

Employment: B8

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	0.121	0.013	0.135	-	-	-	0.040	0.140	0.180
HGV's	0.019	0.023	0.041	-	-	-	0.025	0.015	0.040
Total	0.140	0.036	0.176	-	-	-	0.065	0.155	0.220

The B8 trip rates for the PM peak now mirror the 1600 to 1700 hour shoulder peak trip rates adopted for EMG1

**Trip Generation:**

Housing: N/A

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles									
HGV's									
Total									

**EMG2 (400,000sqm)**

Employment: B2; 60,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	226	34	260	-	-	-	28	218	246
HGV's	10	8	18	-	-	-	2	4	6
Total	235	43	278	-	-	-	30	222	252

Employment: B8 340,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	411	44	455	-	-	-	136	476	612
HGV's	65	78	143	-	-	-	85	51	136
Total	476	122	598	-	-	-	221	527	748

Employment: TOTAL EMG2 DEVELOPMENT

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	637	78	715	-	-	-	164	694	858
HGV's	75	86	161	-	-	-	87	55	142
Total	711	165	876	-	-	-	250	748	998

### Plot 16 EMG1 (30,000sqm)

Employment: B8 30,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	36	4	40	-	-	-	12	42	54
HGV's	6	7	13	-	-	-	8	5	13
Total	42	11	53	-	-	-	20	47	67

### Section 3b: Full Model Run Development Details

Please provide the number of dwellings and/or employment floorspace, or preferably if known, jobs for each of the sub-categories below.

#### Employment Development Land Use:

Land Use	Class	Unit	Quantum	Jobs
Shops	A1	m <sup>2</sup>		
Business	B1a	m <sup>2</sup>		
General Industrial	B2	m <sup>2</sup>	60,000	TBC
Storage or Distribution	B8	m <sup>2</sup>	370,000*	TBC
Research & Development	B1b	m <sup>2</sup>		
Leisure	D2	m <sup>2</sup>		
Hotels	C1	Beds		
Education	D1	Jobs		

\* includes 340,000sqm of B8 floorspace on EMG2 and 30,000sqm of B8 floorspace on Plot 16 of EMG1

#### Housing Development Land Use:

Land Use	Class	Dwellings
Dwellings	C3	

## Section 4: Modelling Required

### Assessment Years:

Please select your assessment years from the options below. Please note that if you need PRTM forecast years to infer model flows to correspond with data collection, you will need to select the 'shoulder' forecast years (i.e. inferring the 2018 model forecast year will require 2016 and 2021 PRTM forecast years). Bespoke individual forecast years may be requested with the "Other, please specify" option, but this does not guarantee inclusion in any provided proposal.

2014 (base) <input type="checkbox"/>	2016 <input type="checkbox"/>	2021 <input type="checkbox"/>
2026 <input type="checkbox"/>	2031 <input type="checkbox"/>	2036 <input type="checkbox"/>
2041 <input type="checkbox"/>	2046 <input type="checkbox"/>	2051 <input type="checkbox"/>
Other, please specify:	2028 and 2038 forecast years are required (year of opening and post 10 years). A revised 2022 forecast base year assessment is also required, alongside a 2023/2024 forecast base for air and noise quality purposes (exact approach TBC with AECOM post the meeting on 3/10/24).	

If required, please provide proposed phasing in each forecast year selected above, in the box below. An example has been included in green, please delete and populate with your data.

2022: 0% development (do minimum)  
2028: 100% occupancy  
2038: 100% occupancy

### Assessment Options:

Please select which scenarios you will want testing, as well as defining which model year each scenario corresponds to as this can potentially be multiple forecast years for one scenario; this will depend on your discussions with HDM and their requirements.

Scenario	Choice	Model Year(s)
Core	Assumed	2022/2028/2038
Core + no development + access strategy	<input type="checkbox"/>	
Core + development + no mitigation	Assumed	2028/2038
Core + development + mitigation	<input checked="" type="checkbox"/>	2028/2038

Other, please specify:	<p>The following scenarios will need testing as part of the Stage 1 modelling:</p> <ul style="list-style-type: none"> <li>i) 2019 baseline year (for air quality purposes)</li> <li>ii) 2022/2023/2024 forecast base year (2023 and 2024 TBC for noise and air quality purposes)</li> <li>iii) 2028/2038 forecast year without development (with EM Freeport and Local Plan related schemes, including Isley Woodhouse, Land West of Castle Donington and the Coaker Land schemes)</li> <li>iv) 2028/2038 forecast year with development (with EM Freeport and Local Plan related schemes, including Isley Woodhouse, Land West of Castle Donington and the Coaker Land schemes)</li> <li>v) Construction traffic – further information still to be provided</li> </ul> <p>NB Covid sensitivity testing is to be considered further for the TWG to agree the approach to be adopted in the Stage 2 modelling work; further information has been provided by AECOM/Jacobs to inform decision making</p> <p>There will be a need to run the mitigation schemes through the EMFM once agreed. This will test the core development trips included in this proforma plus a scenario with reduced development trips as part of a 'vision and validate' strategy, details to be provided.</p> <p>Please therefore include fee for two mitigation runs (hopefully this will be limited to one).</p> <p>Additional scenarios have been requested from an air and noise quality perspective which has been sent separately via a Technical Note from Buro Happold.</p>
------------------------	--

### Time Period Selection:

Please select the time periods you would like your development assessed in.

AM (0800-0900)	<input checked="" type="checkbox"/>
IP (average hour for 1000-1600)	<input type="checkbox"/>
PM (1700-1800)	<input checked="" type="checkbox"/>



### Indicative list of Junctions for Further Assessment:

If known, please provide an indicative list of expected junctions that may be required for further assessment in the box below. This, in turn, will facilitate the delivery of strategic model outputs to inform any further detailed junction assessments. Failing that, a rough estimation of the number of junctions that **may** require further assessment will aid consultants in producing robust quotations within their proposals.

We have currently agreed the following 17 junctions will be modelled as part of the Transport Assessment, which we will require strategic model outputs for (NB LCountyC in particular have confirmed that they will agree the study area following modelling outputs). The purpose of this list is simply to allow AECOM to quote for providing detailed data over a defined area, albeit this may change later.

- Junction 2) A453/Hunter Road Roundabout (Leicestershire)
- Junction 3) Finger Farm Roundabout (National Highways)
- Junction 4) A453/EMGP1 Signal Gyratory (National Highways)
- Junction 5) M1 Junction 24 (National Highways)
- Junction 6) A453/East Midlands Airport Signal Junction (Leicestershire)
- Junction 7) A453/Grimes Gate Priority Junction (Leicestershire)
- Junction 8) A453/The Green Priority Junction (Leicestershire)
- Junction 9) A453/East Midlands Airport Roundabout (Leicestershire)
- Junction 10) A453/Walton Hill Signal Junction (Leicestershire)
- Junction 11) A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout (National Highways)
- Junction 12) M1 Junction 23 (National Highways)
- Junction 13) A50 Junction 1 (National Highways)
- Junction 14) M1 Junction 25 (National Highways)
- Junction 15) Station Road/Broad Rushes Roundabout (Leicestershire)
- Junction 16) A453/Kegworth Road dumbbell Roundabouts (Nottinghamshire)
- Junction 17) A453/Barton Lane/West Leake dumbbell Roundabouts (Nottinghamshire)

## Section 5: Pre-Modelling Outputs

This section details the options available to the client pre-modelling; typically, in aid of model assurance for project stakeholders to ensure no abortive work is undertaken. Please de-select which pre-modelling outputs you do not require, as these are usually standard documents provided to HDM.

Project Specific Study Area Model Validation Report	<input checked="" type="checkbox"/>
Local Planning Data Assumptions	<input checked="" type="checkbox"/>
Network Scheme Uncertainty Log	<input checked="" type="checkbox"/>

NB a project specific validation report is assumed not needed given a previous LMVR has already been produced; the hope being that the minor changes to the other two items above are a quick and simple exercise.

NNB AECOM confirmed in the last TWG that an addendum will be produced in light of TAG Databook changes and model comparisons undertaken.

## **Section 6: Post-Modelling Outputs**

### **Highway Model Outputs:**

The following highway model output options are available post-transport-model assignment. Some metrics below will need to be specified by the client after analysis of the forecasting report; for instance, “individual junction plots” which would tie in with the relevant sub-section in Section 4.

Area of Influence (AoI) (criteria defined as 5% and 30 PCU change)	Assumed
Highway Flow Changes within AoI	Assumed
Highway Delay Changes within AoI	☒
Individual Junction Plots – Turning Flows	☒
Individual Junction Plots – Volume/Capacity Ratio	☒
Maximum Volume/Capacity Ratio Plots	☒
Select Link Analysis of Development Traffic (link based)	☒
Provision of flow data for junction design/assessment	☒
AADT/AAWT	☒
<p>The following model outputs would be required in shape file format for the purposes of our subsequent analysis (which may overlap with above).</p> <ul style="list-style-type: none"> <li>- AM/PM Peak flows classified into Lights/Heavies/Total</li> <li>- AM/PM/AADT Development only flows classified into Lights/Heavies/Total</li> <li>- Maximum Junction VoC</li> <li>- Link Delay</li> <li>- Link Queue</li> <li>- AADT classified into Lights/Heavies/Total</li> <li>- AAWT (24hr, 18hr, 8hr) classified into Lights/Heavies/Total</li> <li>- Mean speeds of links</li> <li>- Road Class</li> </ul> <p>Further to the above extraction of cordon matrices (actual flows) for the VISSIM modelling extent is required which includes the following junctions:</p> <ul style="list-style-type: none"> <li>- M1 J24;</li> <li>- M1 J24a southbound merge onto the M1 and M1 junction 24;</li> <li>- A453/EMG Phase 1/Kegworth Bypass signal controlled gyratory;</li> <li>- M1 J23a Finger Farm roundabout (including M1/A42 on and off slip roads);</li> <li>- A453/Hunter Road/minor EMG Phase 2 access roundabout;</li> </ul> <p>The outputs from the cordon matrices should include:</p> <ul style="list-style-type: none"> <li>- Cordon matrices (in vehicle) for <ul style="list-style-type: none"> <li>o Cars / LGVs / HGVs</li> <li>o AM Peak hour / PM Peak hour (including shoulder peaks if available)</li> </ul> </li> <li>- The cordon matrices to be provided in spreadsheet format.</li> </ul> <p>The above should provide an exhaustive list of information requirements, however, as discussed with LCC's NDI team and AECOM during a meeting on 16/05/24 there may be benefit in</p>	

including for a provisional additional fee of £10k for any other additional requests, which wouldn't be invoiced if not required.	
---	--

### Variable Demand Model Outputs (full PRTM run required):

The following demand model output options are available post-transport-model assignment.

Mode Share reporting; PT, Car, Active	<input type="checkbox"/>
Trip Distance, 24-hour trip making & sustainability	<input type="checkbox"/>

### Public Transport Model Outputs (full PRTM run required):

The following highway model output options are available post-transport-model assignment.

Change in travel time, distances & speeds	<input type="checkbox"/>
Distribution Analysis/Diagrams of Development Traffic	<input type="checkbox"/>
Travel Time Changes along Key Routes	<input type="checkbox"/>
Public Transport Passenger Changes	<input type="checkbox"/>

### Environmental Model Outputs:

Environmental model outputs are available post-transport-model assignment. Please note that environmental outputs will require a separate commission via the E&T MSC Manager, please contact [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk) if you require emission or dispersion modelling to support your application.

## Section 7: Supporting Documents

### Supporting Documents:

Please provide any supporting documents that have been selected below to the E&T MSC Manager upon delivery of your proforma.

Location Plan	<input checked="" type="checkbox"/>
Access Scheme Drawings	<input checked="" type="checkbox"/>
Development Masterplan (to be updated in the coming weeks)	<input type="checkbox"/>
Other, please specify:	Click here to enter text

### Client's Expected Timescales:

Please provide an approximation for your client's timescales for this modelling commission in the box below; please take into consideration HDM's and National Highways' standard response times and sign-off procedures to avoid unrealistic timescales being provided and slippage to your project.

<p>As discussed with LCC's NDI team and AECOM during recent meetings there is an urgent need to pick the modelling work back up.</p>
--

## Section 8: Contact Details

Email the completed form, along with supporting documents to [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk)

For queries regarding the modelling process please contact:

Laura Good – ETCF & E&T MSC Manager  
Email: [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk)

Version Control

Project East Midlands Gateway Phase 2  
DocumentUncertainty Log

Revision History		Date
Revision	Details	
v1.0 draft	Housing and employment data for NW Leicestershire, and neighbouring districts for Derbyshire and Nottinghamshire, based on PRTM2.3 planning data version HH50Emp51, with additional information from: <i>Employment Input Spreadsheet for Planning Authority TB Notts CC Oct 11 Broxtowe.xlsx</i> <i>Housing Input Spreadsheet for Planning Authority TB Notts CC Oct 11 2021 Broxtowe.xlsm</i> <i>RBC Employment Input Spreadsheet for Planning Authority Rushcliffe.xlsx</i> <i>RBC Housing Input Spreadsheet for Planning Authority Rushcliffe.xlsx</i>  Highway network assumptions, based on PRTM2.3 network assumptions with the following edits: - Shuttle signals at the old railway bridge on Tickow Lane - added - Buttercup Lane, Shepshed - added - A47 roundabout between Wykin Road and Outlands Drive - added - A47/Dan's Lane - added - B582 Barlestone Road / B585 Bosworth Lane signalisation - added - A38 grade-separated junctions (Kingsway Roundabout, Markeaton Island and Little Eaton Roundabout) - added	14/09/2022
v1.1 draft	With updated EM Freeport data (ID Emp_North West Leicestershire_905 to Emp_North West Leicestershire_914)	05/10/2022
v2.0	Housing data: - Data for Leicester City added (blue text)  'Employment data: - Data for Leicester City added (blue text) - Freeport sites excluded - rows 124 to 126 and rows 133 to 140 have been updated to "N". -- It should be noted that for the sensitivity test for this application, the Freeport sites will be included (i.e. rows 124 to 126 and rows 133 to 140 will be included)  Highway newtork assumptions: - row 72 Lutterworth East Development Associated Mitigations updated from "N" to "Y", certainty status updated from "Reasonably Foreseeable" to "More than Likely"	27/10/2022
v3.0	Housing data: - 2014 to 2019 data - greyed out as base year (2019) model will be used for this application - Rushcliffe - data updated based on updated housing data received on 25/11/2022 and 05/12/2022 - Broxtowe - rows 469 and 473 HS2 Innovation and Chetwynd Barracks sites - development phasing updated - Leicester City - 19 sites have been excluded (please refer to Col BA "Include"); trajectory for selected sites updated based on data received on 08/12/2022  Employment data: - 2014 to 2019 data - greyed out as base year (2019) model will be used for this application - rows 133 to 139 - Rushcliffe Uniper Site - typo correction for Col C from "Leicestershire" to "Nottinghamshire" - Rushcliffe - data updated based on updated housing data received on 14/12/2022 - NWL - Site of Former Sawley Crossroads Service Station (18/01115/FUL) and LAnd at East Midlands Point (Junction 23A) (18/02227/FULM) added  Highway newtork assumptions: - row 162 A38 grade-separated junctions (Kingsway Roundabout, Markeaton Island and Little Eaton Roundabout) - forecast year updated from "2026" to "2024" - row 111 Toton Innovation Hub (HS2) access - first forecast year updated from "2031" to "2026" - row 163 Toton Link Road scheme - added with first forecast year "2026" - Include maker is "N"	21/12/2022
v4.0	Employment data: - Land South Of Junction 1 Of The A50 Castle Donington Leicestershire (19/01496/OUTM) - added	22/02/2022
v5.0	Housing data and Employment data for North West Leicestershire have been updated for the next stage of modelling work for EMG Phase 2 to be undertaken around Summer 2024. Historic data (pre-2019) removed. -- Please note that the following NWL Local Plan sites have been added (assume these sites will be included in the Sensitivity Test only): --- Land North and South of Park Lane, Castle Donington (CD10) - 1,076 dwellings --- Isley Woodhouse (IW1) - 4,500 dwellings and 23,000sqm of employment floorspace (by 2040, 1,9000 dwellings and 4,600sqm employment floorspace) --- Land West of Hilltop Farm, Castle Donington (EMP89) - 6,000sqm office floorspace and 11,850sqm industry/warehousing floorspace --- Land to the north of J11 A/M42 (EMP82) - 28ha site area - potential for strategic distribution purposes  Highway network assumptions: -- highway network assumptions have been updated to the latest version available which includes Scheme 187: --- Scheme 187 A50 J1 signalisation of two additional arms (Tamworth Road and Trent Lane) (opening year = 2025)	21/05/2024



v6.0	<div>Employment data</div> <div>--- SEGRO EMG Phase 2 - development quantum updated from 300,000sqm to 400,000sqm</div> <div>--- Land North of Remembrance Way (A453), Kegworth (EMP73 (part)) - 40,000sqm industry/warehousing floorspace - added (assume 50% industry, 50% warehousing; assumed trajectory 2025-2034)</div> <div>--- Land North of Derby Road (A6), Kegworth (EMP73 (part)) - 30,000sqm industry/warehousing floorspace - added (assume 50% industry, 50% warehousing; assumed trajectory 2025-2034)</div> <div>--- Uniper site - "include" marker chagned to "Y" for parts of the site. Trajectory for parts of the site updated from 2023/24 to 2025/26.</div> <div>'Highyway network assumptions:</div> <div>--- Scheme 188 Blaby Desford Road/Ratby Lane signalisation (2022) - added</div> <div>--- Scheme 189 Nottinghamshire A52 Gamston roundabout (2023) - added</div> <div>--- Scheme 190 Nottinghamshire A52 Wheatcroft junction (2028) - added</div> <div>--- Scheme 191 Nottinghamshire A52 Nottingham Knight junction (2028) - added</div>	26/06/2024
v7.0	<div>Housing data</div> <div>--- Land North and South of Park Lane, Castle Donington (CD10) - trajectory u[pdated to start from 2027; "include" marker updated to "Y"</div> <div>--- Isley Woodhouse (IW1) - "include" marker updated to "Y"</div> <div>Employment data</div> <div>--- Uniper site - "include" marker updated to "Y"</div> <div>--- EMIP - "include" marker updated to "Y"</div> <div>--- EMA Aviation expansion - "include" marker updated to "Y"</div> <div>--- Land West of Hilltop Farm, Castle Donington (EMP89) - "include" marker updated to "Y"</div> <div>--- Isley Woodhouse (IW1) - "include" marker updated to "Y"</div> <div>--- Land to the north of J11 A/M42 (EMP82) - "include" marker updated to "Y"</div> <div>--- Land North of Remembrance Way (A453), Kegworth (EMP73 (part)) - "include" marker updated to "Y"</div> <div>--- Land North of Derby Road (A6), Kegworth (EMP73 (part)) - "include" marker updated to "Y"</div>	04/07/2024

[illegible]





[illegible]

[illegible]





[illegible]

[illegible]

[illegible]

Highway Network Scheme Assumptions

Scheme No.	Location	Scheme Name	Included from...	Included
16	Earl Shilton	Access arrangements for SUE / Highway improvements for SUE	2026	Y
17	Barwell	Access arrangements for SUE / Highway improvements for SUE	2026	Y
18	Lubbesthorpe	Access arrangements for SUE including strategic traffic link to the A563 Lubbesthorpe Way	2021	Y
20	Loughborough	A512 widening B591 to M1 J23, improvements to J23 and completion of dualling thereafter to either Snell's Nook Lane or Epinal Way junction	2021	Y
23	Coalville	4. Bardon Road Link: Southern section only	2026	Y
24	Castle Donington	Western Link Road from Back Lane to Tops Hill, NWLDC package of measures to help mitigate growth planned	2021	Y
25	Lubbesthorpe	Link across M69 to join North and South of the Lubbesthorpe development.	2031	Y
26	Earl Shilton & Barwell	Highway improvements for SUE	2026	Y
27	Lubbesthorpe	Highway improvements for SUE	2026	Y
30	Loughborough	West of Loughborough SUE (access from the north via the A6 roundabout)	2022	Y
36	Blaby	Desford Crossroads	2026	N
37	Harborough	Harborough Strategic Development Area	2021	Y
38	Charnwood	North of Birstall SUE	2026	Y
39	Charnwood	Mountsorrel Lane, Rothley Link Road	2021	Y
40	Charnwood	A512 junction improvements	2021	Y
46	North of East Leicester	North of East Leicester Development Network - Thorpebury (previously Thurmaston) SUE.	2026	Y
53	Leicester City	Traffic Calming Schemes (Phase 2)	2021	Y
60	Leicester City	Welford Road	2021	Y
63	Leicester City	Waterside Development	2026	Y
66	Leicester City	Belgrave Gate South	2020	Y
70	Leicester City	Lancaster Road	2020	Y
71	Leicester City	Mansfield Street & Church Gate	2021	Y
72	Leicester City	SMBS Access to Burleys Way	2021	Y
73	Leicester City	Vaughan Way	2020	Y
74	Leicester City	Ashton Green	2021	Y
108	Leicester City	LNW2 Ravensbridge Drive / Blackbird Road	2020	Y
104	Melton	MMDR Northern Section	2026	Y
105	Melton	MMDR Eastern Section	2026	Y
106	Melton	MMDR Southern Section	2026	Y
109	Melton	Gladman's Site (Leicester Rd and Kirby Lane Access)	2021	Y
114	Leicester City	Beaumont Leys Anstey Lane Improvements	2021	Y
115	Hinckley	Hinckley Rugby Road Corridor Improvements - Phase 4	2023	Y
116	Leicester City	Putney Road West Improvement	2022	Y
117	Lutterworth	Frank Whittle Roundabout approaches	2021	Y
601	Lutterworth	Lutterworth East Development (Development Access (A4304, Gilmorton Road and A426))	2026	Y
602	Lutterworth	Lutterworth East Development associated mitigations	2031	Y
603	Lutterworth	Lutterworth East Development (Link Road between A4304 and A426)	2031	Y
604	Lutterworth	Lutterworth East Development (Gilmorton Road bridge bus restriction)	2026	Y
119	Bardon Hill	Bardon Hill Link Road North Section	2026	Y
120	Coalville	Hoo Ash Roundabout	2025	Y
121	Coalville	Thornborough Road Roundabout	2025	Y
122	Coalville	Dual Carriageway from Thornborough Rd to Whitwick Road	2025	Y
123	Coalville	Whitwick Road Roundabout	2025	Y
124	Coalville	Broom Leys Road Junction	2025	Y
125	Coalville	Bardon Link Road Junction	2025	Y
126	Coalville	Birch Tree Roundabout	2025	Y
128	Coalville	Flying Horse Roundabout	2025	Y
129	Coalville	Fieldhead Roundabout	2025	Y
134	Hinckley	DPD A5 Access	2021	Y
137	Padge Hall	Padge Hall Development Access	2024	Y
140	Leicester City	Abbey Park Road Cycle Provision	2021	Y
142	Blaby	A47/Kirby Lane Tesco Express	2021	Y
143	Leicester City	Abbey Street	2021	Y
144	Leicester City	A50 Groby Road Bus Lane	2022	Y
150	Harborough	Magna Park Extension Access - Mere Lane, Lutterworth	2021	Y
151	Harborough	Magna Park Extension Access - A5, Lutterworth	2026	Y

152	Blaby	Highway improvements for Lubbethorpe SUE	2021	Y
153	Blaby	Foxhunter Roundabout Eastbound Approach	2021	Y
154	Loughborough	West of Loughborough SUE (connection to the northern arm of the A512 roundabout)	2036	Y
155	Harborough	B4114/B581 Signalisation Improvement, Broughton Astley	2026	Y
157	Blaby	Blaby DPD Site Access	2026	Y
158	Blaby	West of St Johns (Blaby DPD) Site Access	2026	Y
159	Harborough	Wigston Direction for Growth Site Access	2026	Y
160	Blaby	Everard Way Closure, Fosse Park	2020	Y
161	Loughborough	Access connection for the Science Park via the A512 roundabout	2031	Y
163	NWL	Money Hill Site Access A511	2026	Y
164	Derbyshire	Wragley Way (South Derbyshire) SUE Access A50	2031	Y
166	Derbyshire	Clifton (Rushcliffe) SUE Access	2022	Y
167	Derbyshire	EMIP A50 (Freeport)	2030	Y
169	Derbyshire	Toton Innovation Hub (HS2)	2026	Y
170	Nottinghamshire	Ratcliffe Power Station A453 (Freeport)	2030	Y
171	Rugby	Rugby Radio Station - A5 Access	2022	Y
174	North West Leicestershire	Mercia Park	2020	Y
175	Leicester City	Western Park Golf Course	2029	Y
176	Harborough	Kettering Road Signalisation	2021	Y
177	Charnwood	Shuttle signals on Tickow Lane (over bridge)	2022	Y
178	Charnwood	Buttercup Lane in Shepshed	2022	Y
179	Blaby	Dans Lane (A47)	2023	Y
180	Hinckley	B582 / B585 signalisation	2023	Y
181	Hinckley	A47 roundabout between Wykin Rd and Outlands Dr	2021	Y
502	M6 J10-13	M54-Stafford ALR	2021	Y
504	M54-M6 Toll	New Link Road min 2 lane motorway	2024	Y
507	M6 J13-J16	Stafford South to Stoke ALR	2022	Y
510	M1 J13-16	MK South - J16 ALR	2022	Y
513	M40 M42	M40 J16-M42 J3 ALR	2026	Y
516	A46 Coventry	Remove Binley and Walsgrove roundabouts M40-M6 as 'expressway standard'(ie all grade separated junctions)	2026	Y
520	A46 Toll Bar End	Grade separated jcn at TBE & Stonebridge Hwy to 3 lanes	2021	Y
526	Newark N	Dualling Newark N bypass first stages now in RIS 2	2031	Y
527	Newark S	A1-A46 link S of Newark; part constructed. Not in MRTM list	2031	Y
528	Lincoln E	A15-A158; under construction	2021	Y
529	Lincoln S	A158-A46; *sketchy details*; envisaged as dual carriageway... Assumed costing will be similar to Lincoln E bypass and will be 60mph single	2031	Y
530	Grantham S	A1-A52 link bypassing Grantham; under construction	2023	Y
9	Warwickshire	M6 J2 - J4 SMART motorway	2021	Y
201	Nuneaton and Bedworth Borough	Coton Arches	2021	Y
202	Nuneaton and Bedworth Borough	A4254b Eastboro Way P1	2024	Y
203	Nuneaton and Bedworth Borough	College Street / A444	2026	Y
204	Nuneaton and Bedworth Borough	Transforming Nuneaton	2026	Y
205	Nuneaton and Bedworth Borough	Croft Road/Greenmoor Road Priority	2031	Y
206	Nuneaton and Bedworth Borough	A47 Old Hinckley Road	2024	Y
207	Nuneaton and Bedworth Borough	Coventry Road / Gipsy Lane	2026	Y
208	Nuneaton and Bedworth Borough	A4254 / B4114 / Eastboro Way	2026	Y
209	Nuneaton and Bedworth Borough	Nuneaton Northern Sites Link Road	2026	Y
210	North Warwickshire	B5000 Market Street/Bridge St Signals	2026	Y
211	North Warwickshire	A5 Dualling between Grendon and Dordon Junction	2033	Y
213	Rugby Borough	A426/A4071 Avon Mill Roundabout/Newbold Road/Hunters Lane Priority Junction	2026	Y
214	Rugby Borough	Ashlawn Road/Hillmorton Road	2021	Y
215	Rugby Borough	A5 Northern Access to DIRFT III	2021	Y
216	Rugby Borough	A5/A428 Halfway House Roundabout	2026	Y
217	Rugby Borough	M1 Junction 18	2031	Y
218	Rugby Borough	M6 to Coton House	2021	Y
219	Rugby Borough	A5 Southern Access to DIRFT III	2021	Y
221	North Warwickshire	A5 dualling Grendon to Atherstone	2031	Y
223	Rugby Borough	M6 J2 Signalisation	2024	Y
250	Nuneaton and Bedworth Borough	Callendar Farm Phase 2	2031	Y
251	Nuneaton and Bedworth Borough	Bermuda Triangle Project	2026	Y

252	Rugby Borough	Ansty Park Access (Combe Fields Road)	2020	Y
182	Castle Donington	Land South of A50 J1 Development Access	2024	Y
183	Hinckley	B4114 Coventry Rd / Broughton Rd widening	2021	Y
184	Shepshed	A512 Ashby Rd Quarry access/signalised jnc	2021	Y
185	Bardon	Tungsten Park, Bardon A511	2021	Y
186	NWL	EMAGIC Segro EMG Phase 2 Development Access	2028	N
306	Leicester City	St George Street (Queen St to Southampton St)	2022	Y
307	Leicester City	Dover Street (Granby Street Jct)	2024	Y
305	Leicester City	Granby St (Bishop St to Halford St)	2024	Y
304	Leicester City	Granby St (N'hampton St to St George's Way)	2022	Y
303	Leicester City	Pocklington's Walk	2022	Y
302	Leicester City	Aylestone Road, Saffron Lane to Oxford Street (A426)	2023	Y
301	Leicester City	Saffron Lane (B5366)	2023	Y
149	Leicester City	Duns Lane/Braunstone Gate	2023	Y
148	Leicester City	Abbey Park Road (Eastern section and bridge)	2023	Y
147	Leicester City	Anstey Lane (A5630)	2022	Y
146	Leicester City	St. Margaret's to Birstall (A6)	2024	Y
145	Leicester City	Melton Road (A607)	2023	Y
77	Leicester City	Belgrave Gate/Haymarket/Church Gate Pedestrianisation	2020	Y
187	NWL	A50 J1 signalisation of two additional arms (Tamworth Road and Trent Lane)	2025	Y
188	Blaby	Desford Road/Ratby Lane signalisation	2022	Y
189	Nottinghamshire	A52 Gamston roundabout	2023	Y
190	Nottinghamshire	A52 Wheatcroft junction	2028	Y
191	Nottinghamshire	A52 Nottingham Knight junction	2028	Y
n/a	Derbyshire	A38 grade-separated junctions (Kingsway Roundabout, Markeaton Island and Little Eaton Roundabout)	2024	Y
n/a	Broxtowe	Toton Link Road	2026	N

**APPENDIX 9: EMFM Forecasting Report (document reference EMFM 2019 – East  
Midlands Gateway Phase 2: Forecasting Report v1.0)**

---



# **EMFM 2019**

## **East Midlands Gateway Phase 2: Forecasting Report**

## Quality Information

**Prepared by**

Billy Wong

Principal Consultant

**Checked by**

Jonathan Morrow

Associate Director

**Approved by**

Mark Dazeley

Regional Director

## Revision History

Revision	Revision date	Details	Authorised	Name	Position
v1.0	2025-02-04	For Issue	Yes	Mark Dazeley	Regional Director

### Prepared by:

AECOM Limited  
Marlborough Court  
10 Bricket Road  
St Albans  
Hertfordshire  
AL1 3JX

[aecom.com](https://www.aecom.com)

© 2025 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Google Earth Pro™ imagery in the form of Google Map™ and Google Street View™ have been used, unmodified, within this document. This imagery has been used within the extents of the AECOM license agreement with Google Inc.

## Table of Contents

Section 1 – Overview .....	5
1.1 Introduction .....	5
1.2 Report Structure .....	7
Section 2 – Forecast Approach and Assumptions .....	8
2.1 Introduction .....	8
2.2 ‘Without Development’ Assumptions .....	8
2.3 Proposed Development Access Assumptions .....	9
2.4 Proposed Development Trip Generation Assumptions.....	9
2.5 Proposed Development Trip Distribution Assumptions .....	9
Section 3 – Forecast Model Results .....	19
3.1 Introduction .....	19
3.2 Forecast Development Traffic.....	19
3.3 Forecast Flow Change .....	19
3.4 Area of Influence.....	23
3.5 Forecast Delay Change .....	24
3.6 Forecast Node Volume-Capacity Ratios .....	27
3.7 Forecast Junction Turning Flows .....	30
Section 4 – Summary of the EMFM Assessment.....	32
4.1 Summary of Assessment.....	32
Appendix A Planning Data Assumptions.....	34
Appendix B Network Assumptions .....	35

## List of Tables

Table 2.1: Development Trip Generation (2028 and 2038).....	9
Table A.1: Residential Development Assumptions (sites with more than 500 dwellings) (North West Leicestershire).....	34
Table A.2: Employment Development Assumptions (sites with more than 750 jobs) (North West Leicestershire and East Midlands Freeport sites).....	34
Table B.1: Highway Network Assumptions.....	35

## List of Figures

Figure 1.1: Location of Proposed Development.....	5
Figure 1.2: Site Access Junction .....	6
Figure 2.1: HGV Trip Distribution to and from the Proposed Development for 2028 (AM).....	11
Figure 2.2: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (AM) .....	12
Figure 2.3: HGV Trip Distribution to and from the Proposed Development for 2028 (PM).....	13
Figure 2.4: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (PM) .....	14
Figure 2.5: HGV Trip Distribution to and from the Proposed Development for 2038 (AM).....	15
Figure 2.6: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (AM) .....	16
Figure 2.7: HGV Trip Distribution to and from the Proposed Development for 2038 (PM).....	17
Figure 2.8: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (PM) .....	18
Figure 3.1: Forecast Flow Change for 2028 ‘With Development (1a)’ minus ‘Without Development (1a)’ .....	21
Figure 3.2: Forecast Flow Change for 2038 ‘With Development (1a)’ minus ‘Without Development (1a)’ .....	22
Figure 3.3: Area of Influence .....	23

---

Figure 3.4: Forecast Delay Change for 2028 'With Development (1a)' minus 'Without Development (1a)' .....	25
Figure 3.5: Forecast Delay Change for 2038 'With Development (1a)' minus 'Without Development (1a)' .....	26
Figure 3.6: Forecast Node Volume-Capacity Ratio for 2028 'Without Development (1a)' and the 2028 'With Development (1a)' Scenarios .....	28
Figure 3.7: Forecast Node Volume-Capacity Ratio for 2038 'Without Development (1a)' and the 2038 'With Development (1a)' Scenarios .....	29
Figure 3.8: Location of Forecast Turning Flow Data .....	31

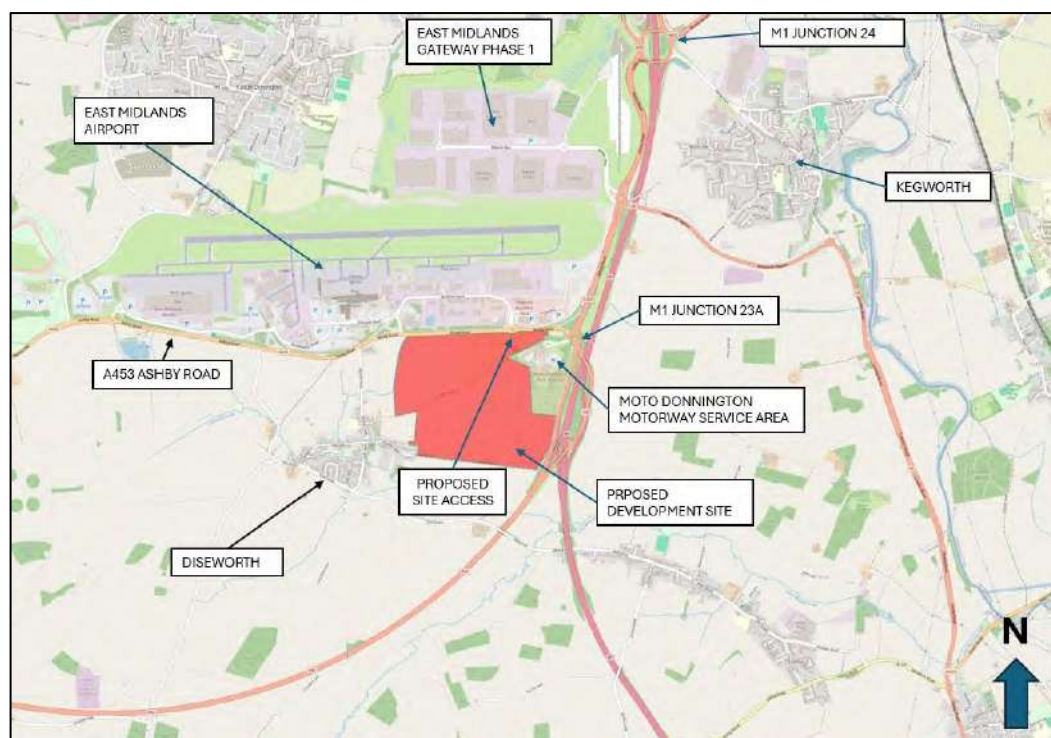


## Section 1 – Overview

### 1.1 Introduction

- 1.1.1 The East Midlands Gateway (EMG) Phase 2 development is a proposed employment development of mixed B2 (general industrial) and B8 (storage or distribution) use, with capacity for 400,000sqm floorspace (300,000sqm ground floorspace and 100,000sqm of B8 mezzanine floorspace) of industrial use, comprising 340,000sqm B8 and 60,000sqm B2. In addition to this, 30,000sqm of B8 floorspace is proposed on EMG Phase 1 (Plot 16).
- 1.1.2 The development site is located to the south of East Midlands Airport in Leicestershire and west of the A42 and is expected to build out by 2031.
- 1.1.3 Figure 1.1 shows an indication of the location of the proposed EMG Phase 2 development, denoted by the area shaded in red. The proposed development has a total area of circa 250 acres located to the south of the A453 and East Midlands Airport itself, to the east of Diseworth village. M1 Junction 23a lies to the east of the site with the Moto Donnington Motorway Service Area (MSA) directly abutting to the north-east.

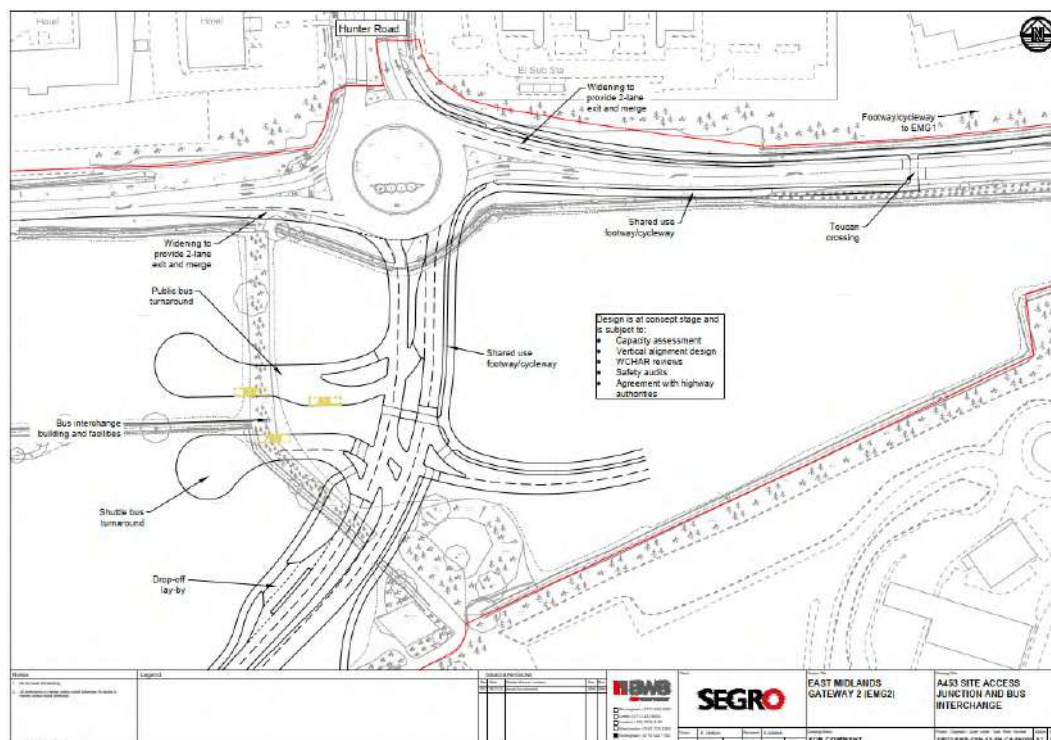
**Figure 1.1: Location of Proposed Development<sup>1</sup>**



© OpenStreetMap Contributors

- 1.1.4 The proposed EMG Phase 2 development will access the highway network via a single point of access:
- a fourth arm off the existing A453 / Hunter Road roundabout, as shown in Figure 1.2.
- 1.1.5 The proposed EMG Phase 1 (Plot 16) development will access the highway network via:
- the existing access via Wilder's Way.

<sup>1</sup> Location of Proposed Development adapted from Technical Note 1 – Transport Scoping Note, East Midlands Gateway Phase 2 (EMG-BWB-GEN-XX-RP-TR-0001\_TN1 Transport Scoping Note-S1-P3.pdf). Provided as part of the information pack with the PRTM Development Form for East Midlands Gateway Phase 2.

**Figure 1.2: Site Access Junction<sup>2</sup>**

1.1.6 The following development sites have been proposed at the nearby Isley Woodhouse site, on land west of Castle Donington, on land to the north of Kegworth, near Junction 11 of A/M42 and East Midlands Freeport sites. The forecast assumptions for the assessment of the East Midlands Gateway Phase 2 development will include these development sites:

- Isley Woodhouse (Site IW1), which comprises:
  - approximately 4,500 new homes and some 23,000sqm of employment floorspace (industry and warehousing)<sup>3</sup>.
- Land North and South of Park Lane, Castle Donington (Site CD10), which comprises:
  - around 1,076 homes<sup>4</sup>.
- Land West of Hilltop Farm, Castle Donington (Site EMP89), which comprises:
  - around 6,000sqm of offices and 11,850sqm of industry / smaller scale warehousing (use classes B2/B8)<sup>4</sup>.
- Land North of Remembrance Way (A453) and Land North of Derby Road (A6), Kegworth (Site EMP73)<sup>4</sup>, which comprises:
  - around 30,000sqm of industry / small scale warehousing (use classes B2/B8) on Land North of Derby Road (A6) site; and
  - around 40,000sqm of industry / small scale warehousing (use classes B2/B8) on Land North of A543 Remembrance Way site.
- Land to the North of J11 A/M42 (Site EMP82)<sup>4</sup>, which comprises:
  - 28ha of employment land for strategic distribution purposes.

<sup>2</sup> EMG2-BWB-GEN-XX-SK-CH-SK009 S2 P01

<sup>3</sup> Draft North West Leicestershire Local Plan 2020-2024 – Proposed Housing and Employment Allocation for Consultation ([www.nwleics.gov.uk/files/documents/proposed\\_housing\\_and\\_employment\\_allocations/Reg%2018%20%28Site%20Allocations%29%20Consultation\\_final.pdf](http://www.nwleics.gov.uk/files/documents/proposed_housing_and_employment_allocations/Reg%2018%20%28Site%20Allocations%29%20Consultation_final.pdf))

<sup>4</sup> EMGP2 Uncertainty Log v7.0 (Jul 2024).xlsx

- East Midlands Freeport sites, which include the Uniper site (Ratcliffe), East Midlands Intermodal Park (EMIP) site, and the East Midlands Airport Aviation Expansion site.
- 1.1.7 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the East Midlands Freeport Model (EMFM) for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours.
- 1.1.8 The strategic modelling assessment for the proposed EMG Phase 2 development will be undertaken in three stages, as follows:
- Stage 1a modelling (Proforma 14)
- 2022/2023/2024 'Without Development';
  - 2028/2038 'Without Development (1a)' without EMG Phase 2 development (with all Freeport and Local Plan sites (as listed in Paragraph 1.1.6)); and
  - 2028/2038 'With Development (1a)' with EMG2 development (with all Freeport and Local Plan sites (as listed in Paragraph 1.1.6)).
- Stage 1b modelling (Proforma 14a)
- 2028/2038 'Without Development (1b)' without EMG Phase 2 development (without Local Plan sites (as listed in Paragraph 1.1.6)); and
  - 2028/2038 'With Development (1b)' with EMG Phase 2 development (without Local Plan sites (as listed in Paragraph 1.1.6)).
- Stage 2 modelling (details to be confirmed)
- 2028/2038 with EMG Phase 2 and with mitigation measures; and
  - 2028/2038 with EMG Phase 2 construction.
- 1.1.9 This version of the report presents the forecast model results for Stage 1a only with Stage 1b and Stage 2 to follow.
- 1.1.10 This report is the Forecasting Report which documents the forecast model results for the EMFM strategic modelling assessment of the proposed development. This report follows the East Midlands Gateway Phase 2 Base Year Model Review Addendum report<sup>5</sup> which details the calibrated 2019 base year model review and performance in the vicinity of the proposed development site.

## 1.2 Report Structure

- 1.2.1 Following the introduction, this report contains the following sections:
- Section 2 – Forecast Approach and Assumptions: this section details the forecast assumptions applied within this assessment of the proposed development, including the assumed development trip generation and trip distribution.
  - Section 3 – Forecast Model Results: the section details the forecast results requested as part of the brief.
  - Section 4– Summary of the EMFM Assessment: this section provides a summary of the assessment of the proposed development.

<sup>5</sup> EMFM 2019 – East Midlands Gateway Phase 2: Base Year Model Review Addendum v1.0 (2024-08-19)

## Section 2 – Forecast Approach and Assumptions

### 2.1 Introduction

- 2.1.1 This section sets out the forecast assumptions applied for this application of the EMFM, and the methodology adopted to create the required model forecasts.
- 2.1.2 The following forecast model scenarios have been produced for this version of the report:  
Stage 1a modelling (Proforma 14)
- 2022/2023/2024 'Without Development';
  - 2028/2038 'Without Development (1a)' without EMG Phase 2 development (with all Freeport and Local Plan sites (as listed in Paragraph 1.1.6)); and
  - 2028/2038 'With Development (1a)' with EMG2 development (with all Freeport and Local Plan sites (as listed in Paragraph 1.1.6)).
- 2.1.3 The EMFM is a highway assignment model, linked to and derived from the PRTM (Pan-Regional Transport Model). For the development of the 2022, 2023, 2024 2028 and 2038 'Without Development' scenarios, an existing process to take the highway demand growth from the wider PRTM has been applied. Section 2.2 provides the 'Without Development' assumptions applied.
- 2.1.4 To produce the 'With Development (1a)' forecasts, the highway demand for the proposed development has been added to the EMFM 2028 'Without Development (1a)' and 2038 'Without Development (1a)' highway demand matrices and assigned in the EMFM. To estimate the development trip distribution, the gravity model within the PRTM has been used. Sections 2.3 to 2.5 provide the highway network and demand assumptions for the proposed development.
- 2.1.5 For information, both the EMFM and PRTM use the May 2024 TAG data book. This was the latest available TAG data book at the time of calibrating the PRTM. The EMFM was calibrated using the draft November 2022 TAG data book, again the latest TAG data book available during calibration. However, EMFM was updated to use the May 2024 TAG data book for this application. The impact on the 2019 base year modelled flows due to the update of the TAG data book was not considered material with most links having an absolute difference of fewer than 25 PCUs (Passenger Car Unit). The EMFM 2019, East Midlands Gateway Phase 2: Base Year Model Review Addendum (update to May 2024 TAG data book) (19/08/24) provides more detail.

### 2.2 'Without Development' Assumptions

- 2.2.1 The forecast planning and infrastructure schemes, in the format of an uncertainty log, were reviewed by the client and stakeholders.
- 2.2.2 Appendix A presents the planning data assumptions (residential and employment) within North West Leicestershire that have been incorporated in the forecast modelling. Given the number of developments in the uncertainty log, the reporting of the planning data are limited to residential sites with more than 500 dwellings and employment sites with more than 750 jobs. All available data that should be used in the modelling, irrespective of size, have been used in the model forecasts. The complete list of the planning assumptions, including data for neighbouring districts such as Rushcliffe, is included in the East Midlands Gateway Phase 2 Uncertainty Log v7.0<sup>6</sup>.
- 2.2.3 Appendix B presents the forecast assumptions for the highway network for this application.
- 2.2.4 As discussed in Paragraph 2.1.3, the EMFM is a highway assignment model, and a process to take the highway demand growth from the wider PRTM has been applied. Planning data assumptions (housing and employment) have been input into the PRTM and the full PRTM has been run for 2022, 2023, 2024, 2028 and 2038. Planning forecasts were unconstrained (NTEM minimum<sup>7</sup>) for this application as noted in the proposal<sup>8</sup>.

<sup>6</sup> EMGP2 Uncertainty Log v7.0 (Jul 2024).xlsx

<sup>7</sup> In the event that the planning data lead to below NTEM / TEMPro growth, the model reverts to NTEM / TEMPro as minimum.

<sup>8</sup> EMFM 2019 Fee Proposal – East Midlands Gateway Phase 2 v2.0 (2024-07-18)



## 2.3 Proposed Development Access Assumptions

- 2.3.1 To produce the 'With Development' network for 2028 and 2038, the assumed site accesses for the proposed development, as discussed in Paragraph 1.1.4, were added in the relevant 'Without Development' networks.
- 2.3.2 A development zone has been used to represent the proposed East Midlands Gateway Phase 2 development.

## 2.4 Proposed Development Trip Generation Assumptions

- 2.4.1 Development trip generation data for the proposed development were provided by the client which have been reproduced in Table 2.1.

**Table 2.1: Development Trip Generation (2028 and 2038)<sup>9</sup>**

	Light Vehicle Trips (in veh)			HGV Trips (in veh)			All (in veh)		
	Departing (Out)	Arriving (In)	Total	Departing (Out)	Arriving (In)	Total	Departing (Out)	Arriving (In)	Total
<b>East Midlands Gateway Phase 2 Development - Employment B2 (60,000sqm)</b>									
AM Peak hour (08:00 to 09:00)	34	226	<b>260</b>	8	10	<b>18</b>	43	235	<b>278</b>
PM Peak hour (17:00 to 18:00)	218	28	<b>246</b>	4	2	<b>6</b>	222	30	<b>252</b>
<b>East Midlands Gateway Phase 2 Development - Employment B8 (340,000sqm)</b>									
AM Peak hour (08:00 to 09:00)	44	411	<b>455</b>	78	65	<b>143</b>	122	476	<b>598</b>
PM Peak hour (17:00 to 18:00)	476	136	<b>612</b>	51	85	<b>136</b>	527	221	<b>748</b>
<b>East Midlands Gateway Phase 2 Development Total</b>									
AM Peak hour (08:00 to 09:00)	78	637	<b>715</b>	86	75	<b>161</b>	165	711	<b>876</b>
PM Peak hour (17:00 to 18:00)	694	164	<b>858</b>	55	87	<b>142</b>	748	250	<b>998</b>
<b>East Midlands Gateway Phase 1 (Plot 16) Development Total</b>									
AM Peak hour (08:00 to 09:00)	4	36	<b>40</b>	7	6	<b>13</b>	11	42	<b>53</b>
PM Peak hour (17:00 to 18:00)	42	12	<b>54</b>	5	8	<b>13</b>	47	20	<b>67</b>

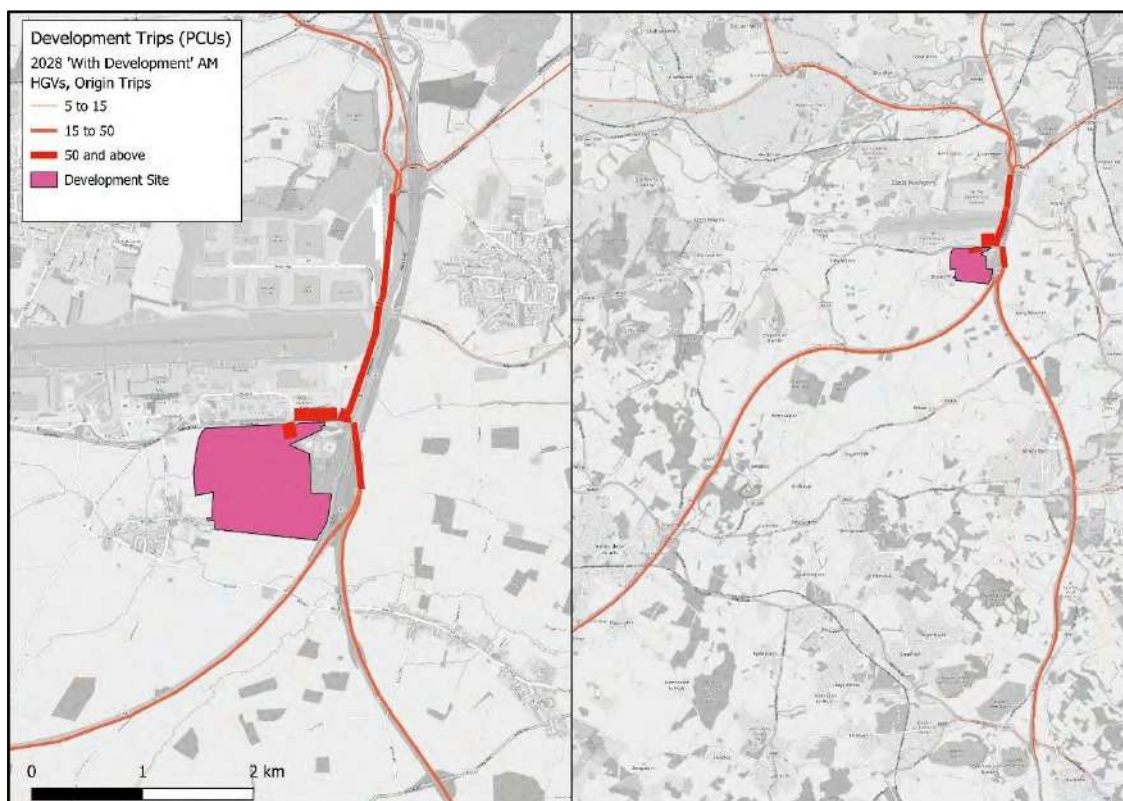
- 2.4.2 We assume that the proposed development will be fully build out (i.e. 100% occupancy) in the 2028 and 2038 'With Development (1a)' scenarios.

## 2.5 Proposed Development Trip Distribution Assumptions

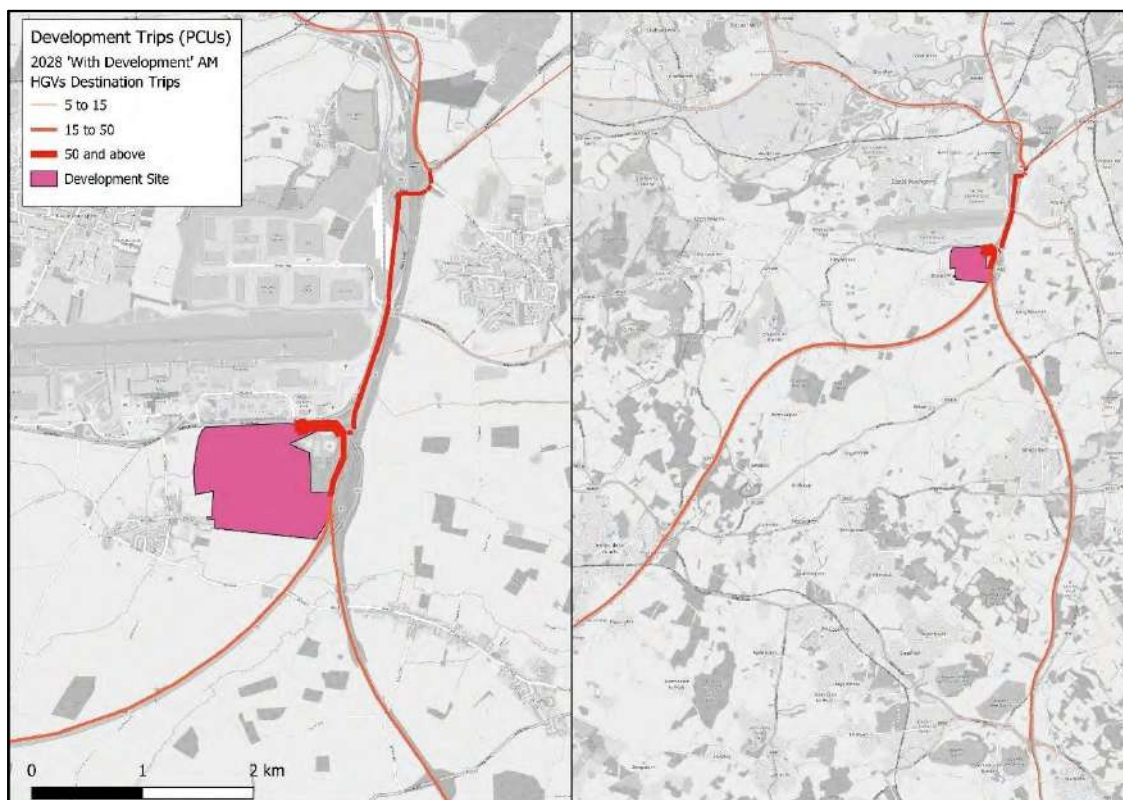
- 2.5.1 It was agreed that the development trip distributions are to be based on the PRTM 'gravity model' approach.
- 2.5.2 Figure 2.1 to Figure 2.8 show the forecast development trip distribution separately for HGVs and light vehicles on the highway network for the 2028 and 2038 'With Development (1a)' scenarios in PCUs. For information, the PCU factor for HGV is 2.0 and the PCU factor for the other assignment vehicle types (i.e. cars and LGVs) is 1.0.
- 2.5.3 These figures show that the forecast HGV development traffic has a broadly similar distribution to and from the proposed development in both the AM Peak and PM Peak hours, and both forecast years (i.e. 2028 and 2038). HGVs are forecast to use the M1, A50 and the

<sup>9</sup> 241010 EMGP2 PRTM Development Form rev 14.docx

- 
- A453 Remembrance Way to and from Derby and the north, and the M1 and A42 to and from Leicester, Birmingham and the south.
- 2.5.4 For light vehicle traffic, the majority of development-related trips during the AM Peak hour in 2028 are forecast to use the M1 southbound and the A42 towards Birmingham. In the northbound direction development trips are forecast to route via the M1 and Castle Donnington Relief Road towards Derby. By 2038 AM Peak hour, a higher proportion of trips is forecast to route south from the A453 towards Diseworth to access Gelscoe Lane and the A42.
- 2.5.5 Light vehicle development trips from the development in the PM Peak hour in 2028 are forecast to route north via the M1, the A50, A453 Remembrance Way and south via the M1 and towards Diseworth to access the A42. This pattern is forecast in the reverse for the AM Peak hour development trips to the proposed development but with fewer trips on the M1 northbound and more trips on Castle Donnington Relief Road to avoid the congested M1 Junction 24.
- 2.5.6 The routeing patterns for the development trips for 2038 forecast scenarios are similar to their respective patterns in 2028, although 2038 has a slightly higher proportion of development trips on local roads and fewer on the SRN, due to the higher congestion around the M1 Junction 24 area in the later forecast year (i.e. 2038).
- 2.5.7 It should be noted that the local networks through Diseworth, Castle Donnington and Kegworth have HGV restrictions applied. These restrictions are represented in the EMFM, and the HGV development trips are therefore forecast to route to and from the proposed development site via mainly the SRN.

**Figure 2.1: HGV Trip Distribution to and from the Proposed Development for 2028 (AM)****2028 'With Development (1a)' (AM), HGVs – From the Development**

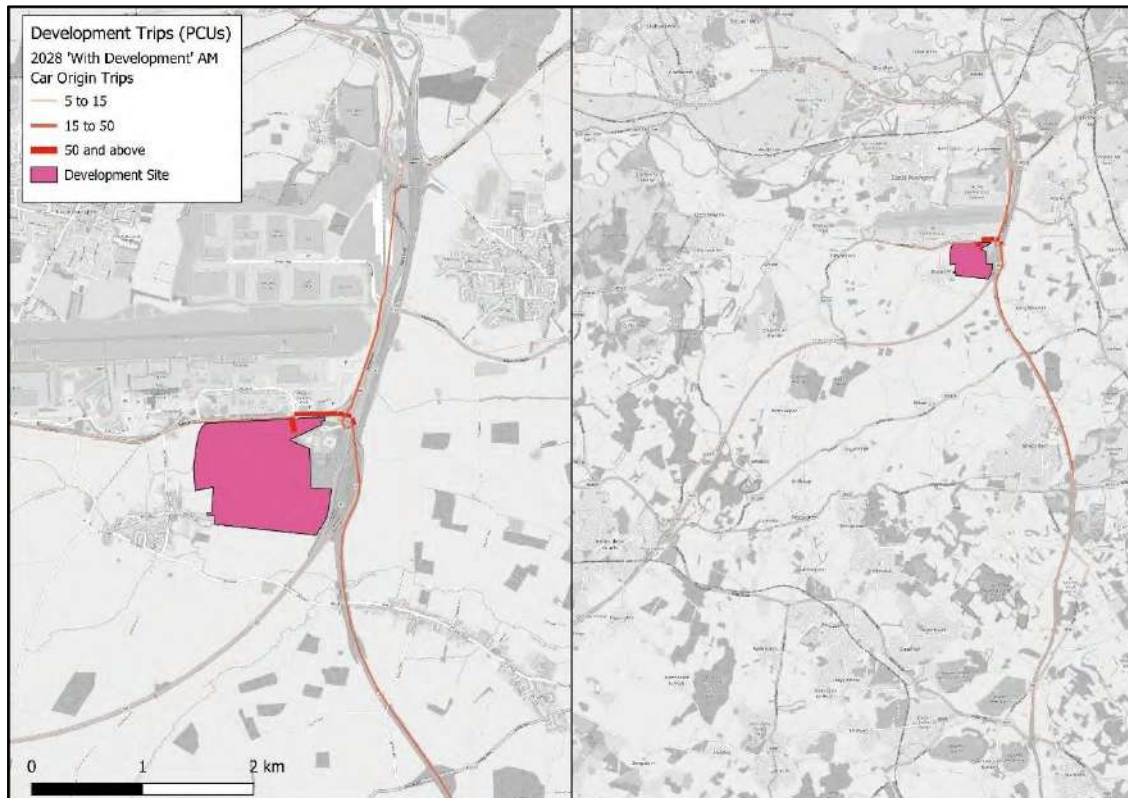
Contains Ordnance Survey data © Crown copyright and database right 2025

**2028 'With Development (1a)' (AM), HGVs – To the Development**

Contains Ordnance Survey data © Crown copyright and database right 2025

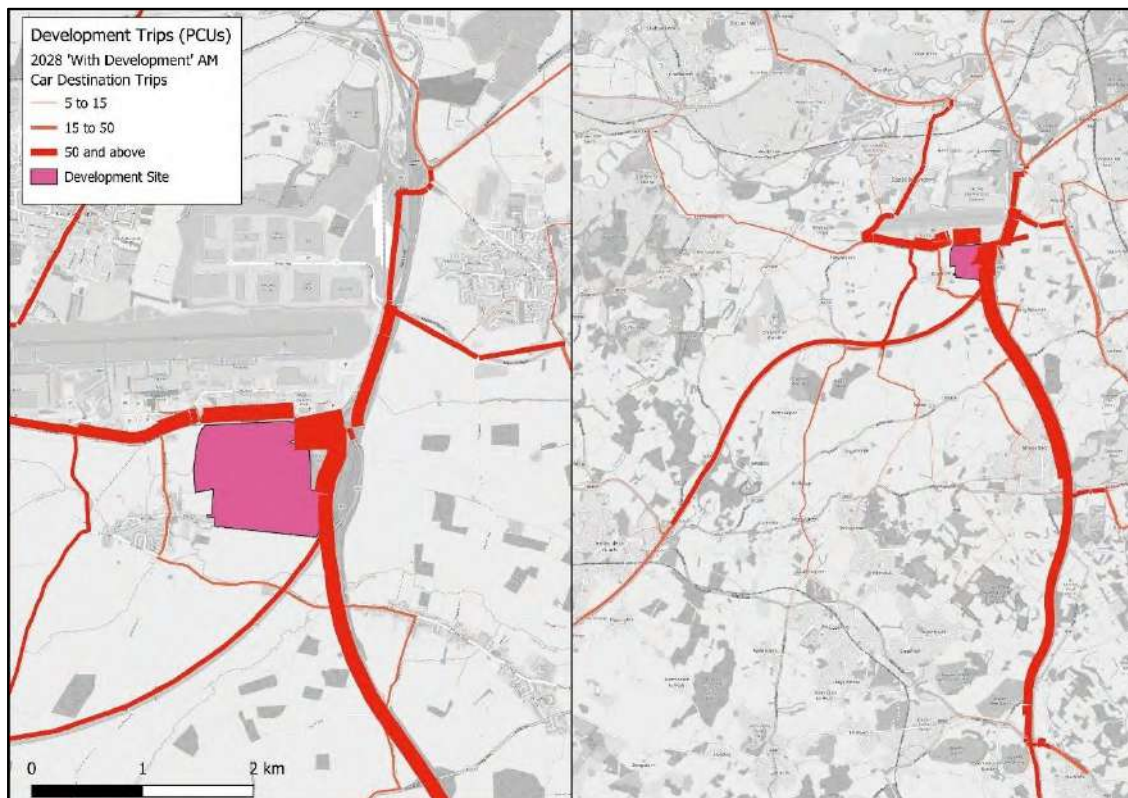


**Figure 2.2: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (AM)**  
**2028 'With Development (1a)' (AM), Light Vehicles – From the Development**

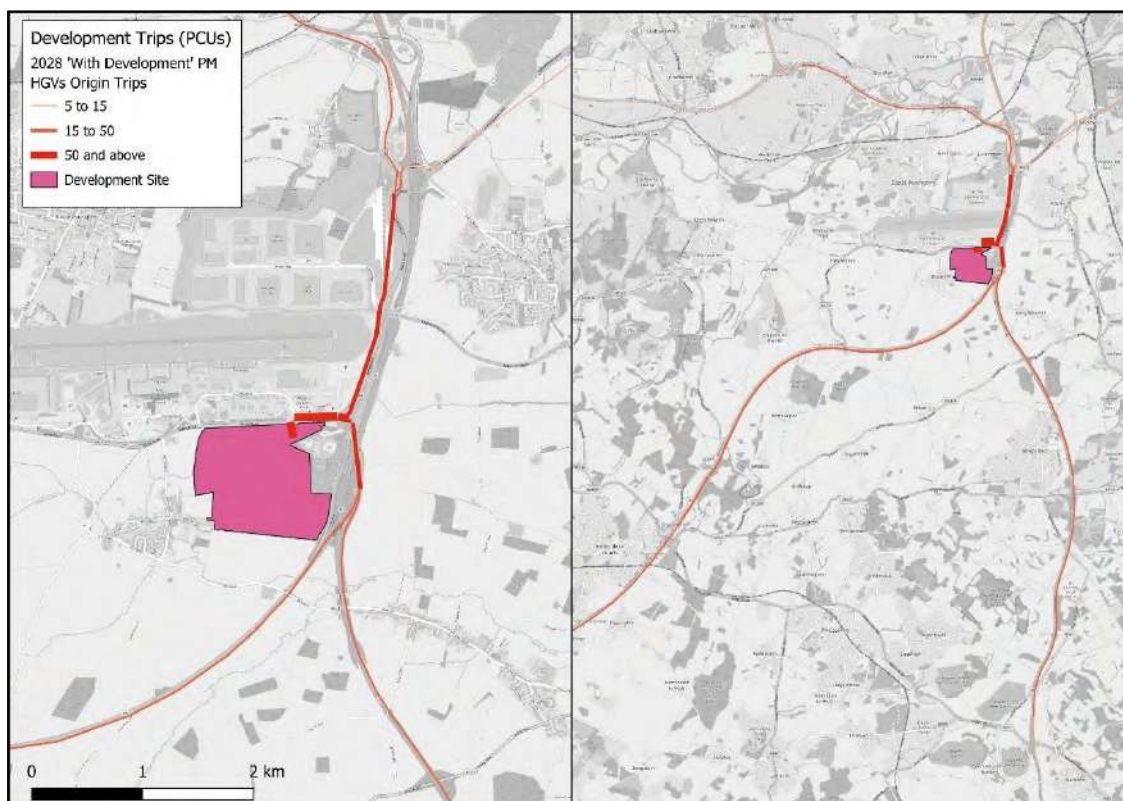


Contains Ordnance Survey data © Crown copyright and database right 2025

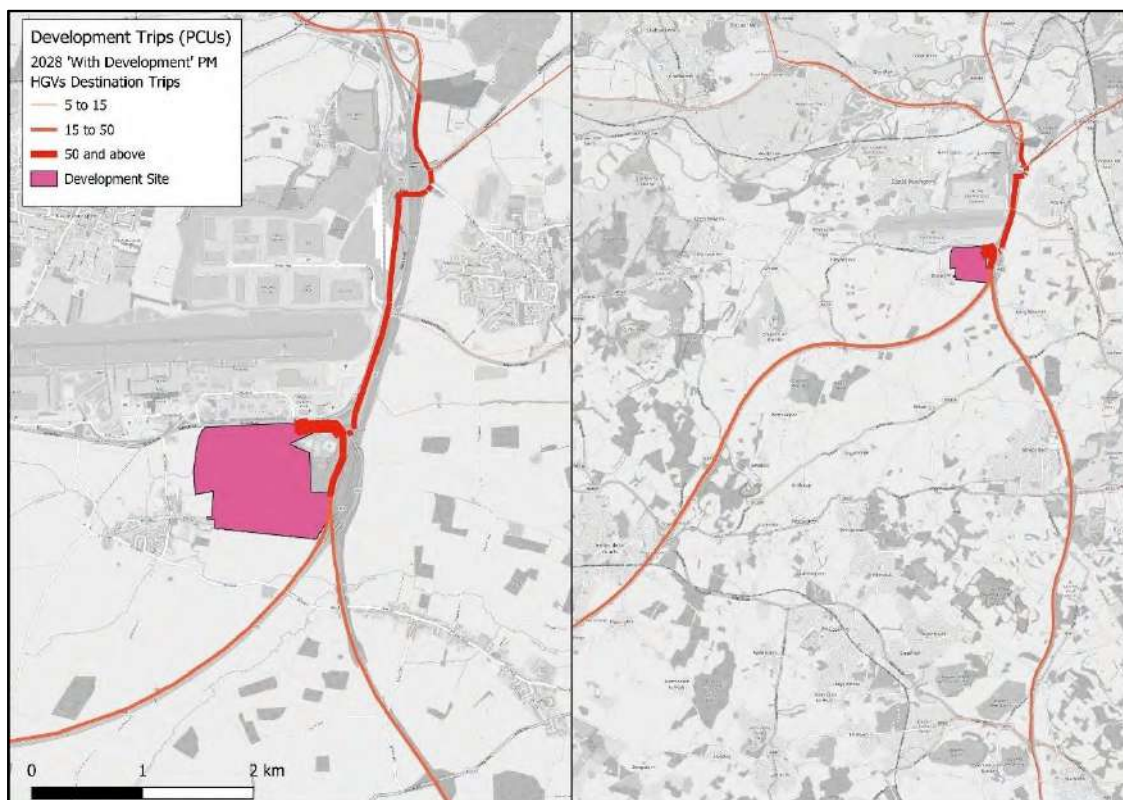
**2028 'With Development (1a)' (AM), Light Vehicles – To the Development**



Contains Ordnance Survey data © Crown copyright and database right 2025

**Figure 2.3: HGV Trip Distribution to and from the Proposed Development for 2028 (PM)****2028 'With Development (1a)' (PM), HGVs – From the Development**

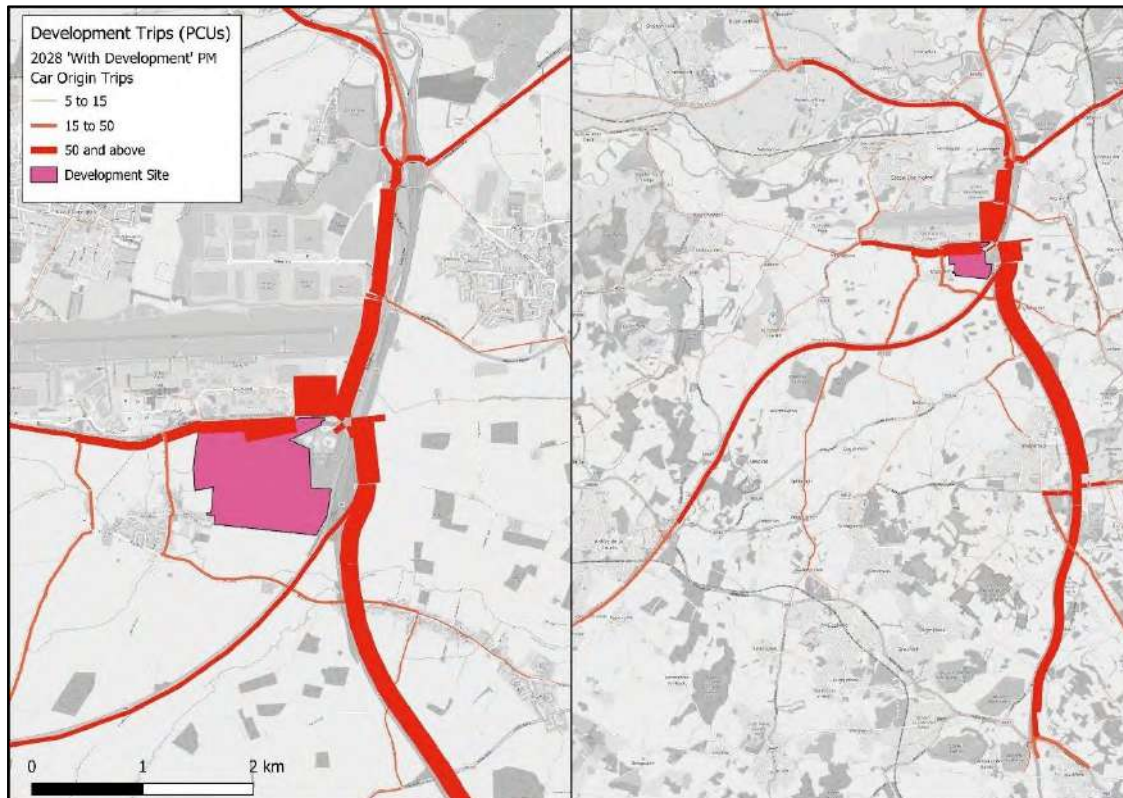
Contains Ordnance Survey data © Crown copyright and database right 2025

**2028 'With Development (1a)' (PM), HGVs – To the Development**

Contains Ordnance Survey data © Crown copyright and database right 2025

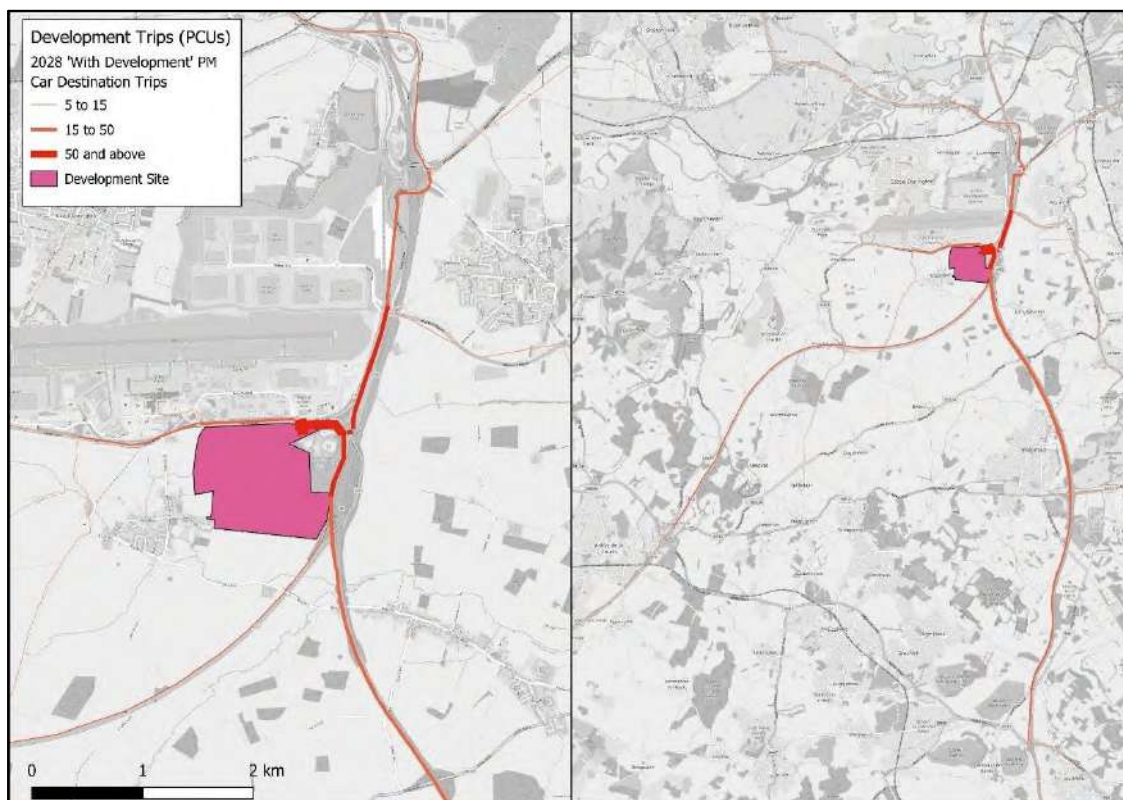


**Figure 2.4: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (PM)**  
**2028 'With Development (1a)' (PM), Light Vehicles – From the Development**

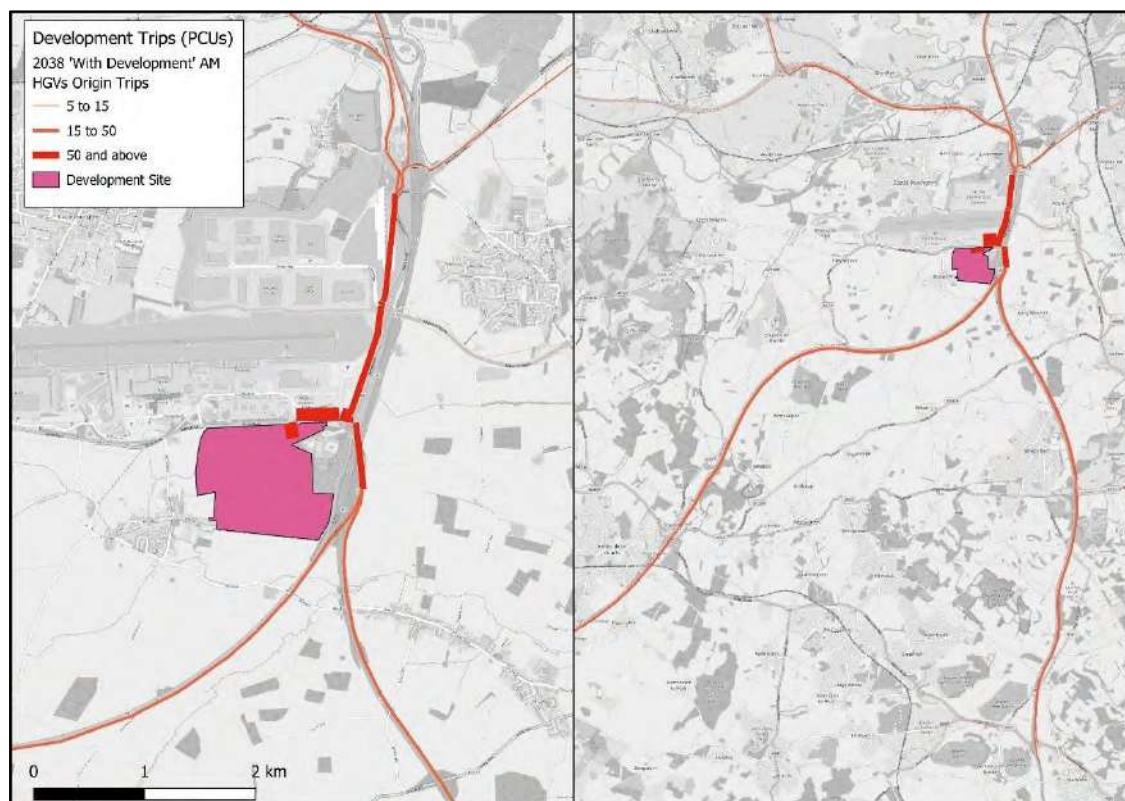


Contains Ordnance Survey data © Crown copyright and database right 2025

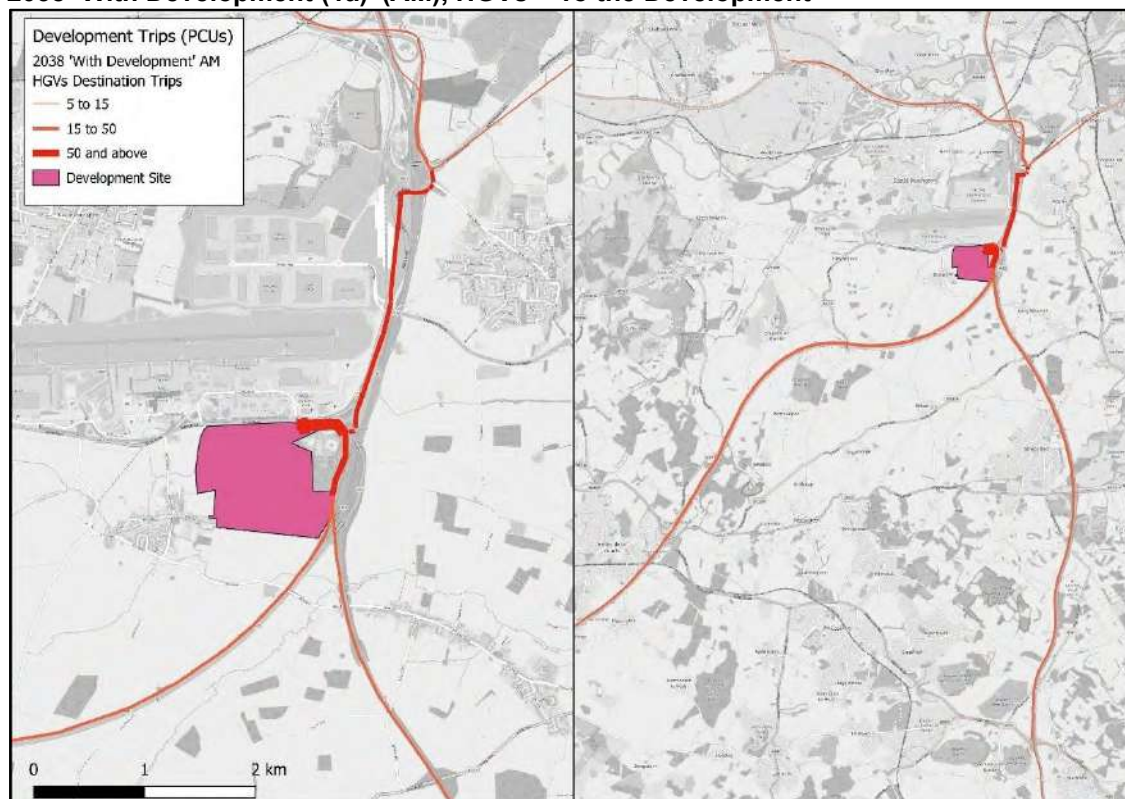
**2028 'With Development (1a)' (PM), Light Vehicles – To the Development**



Contains Ordnance Survey data © Crown copyright and database right 2025

**Figure 2.5: HGV Trip Distribution to and from the Proposed Development for 2038 (AM)****2038 'With Development (1a)' (AM), HGVs – From the Development**

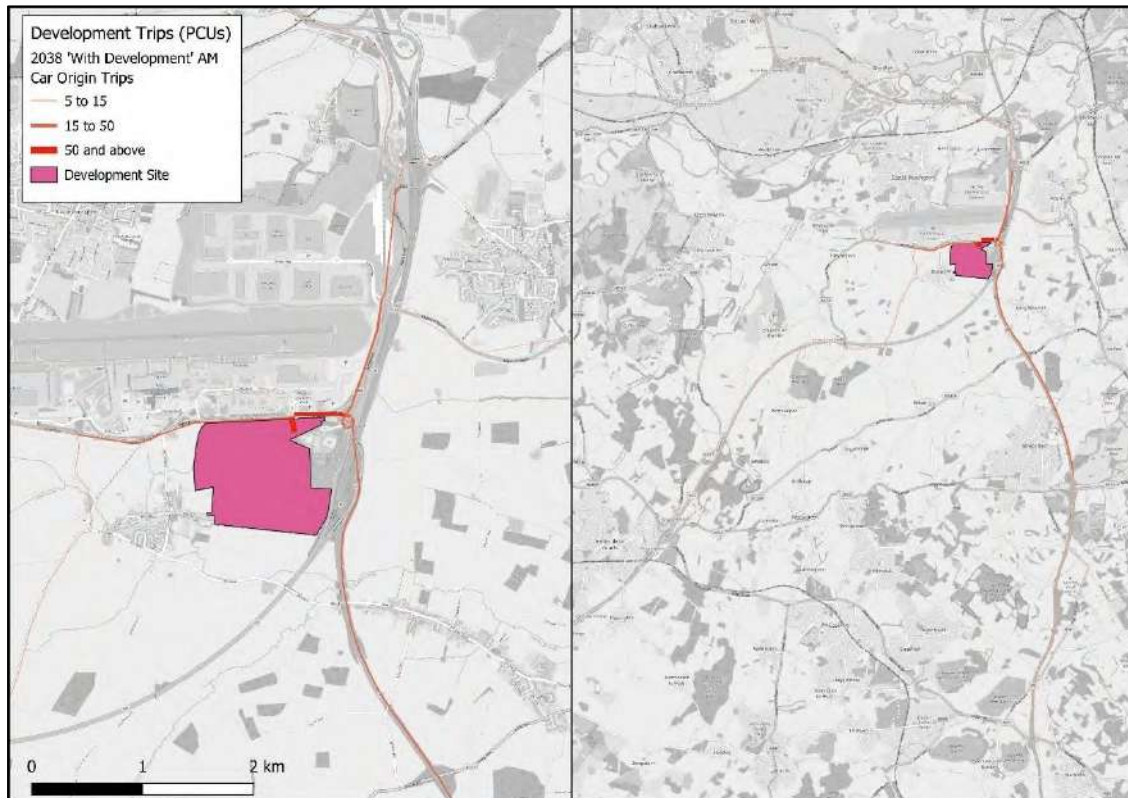
Contains Ordnance Survey data © Crown copyright and database right 2025

**2038 'With Development (1a)' (AM), HGVs – To the Development**

Contains Ordnance Survey data © Crown copyright and database right 2025

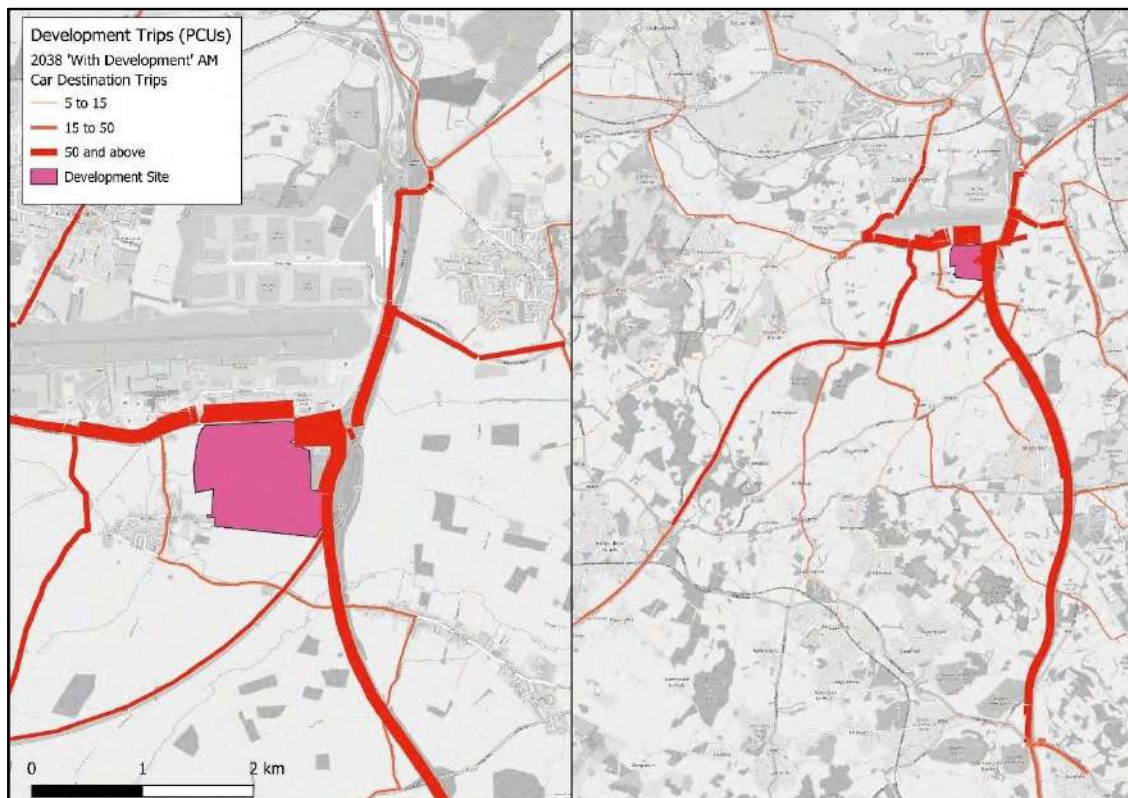


**Figure 2.6: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (AM)**  
**2038 'With Development (1a)' (AM), Light Vehicles – From the Development**



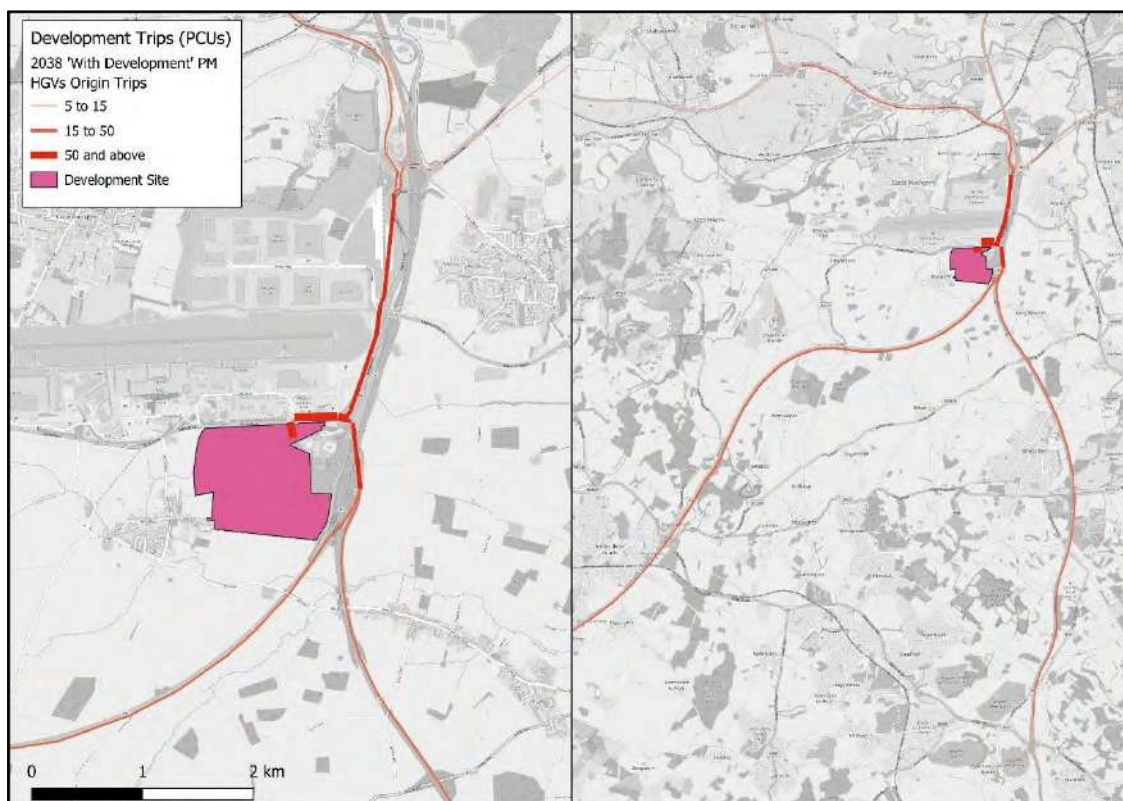
Contains Ordnance Survey data © Crown copyright and database right 2025

**2038 'With Development (1a)' (AM), Light Vehicles – To the Development**

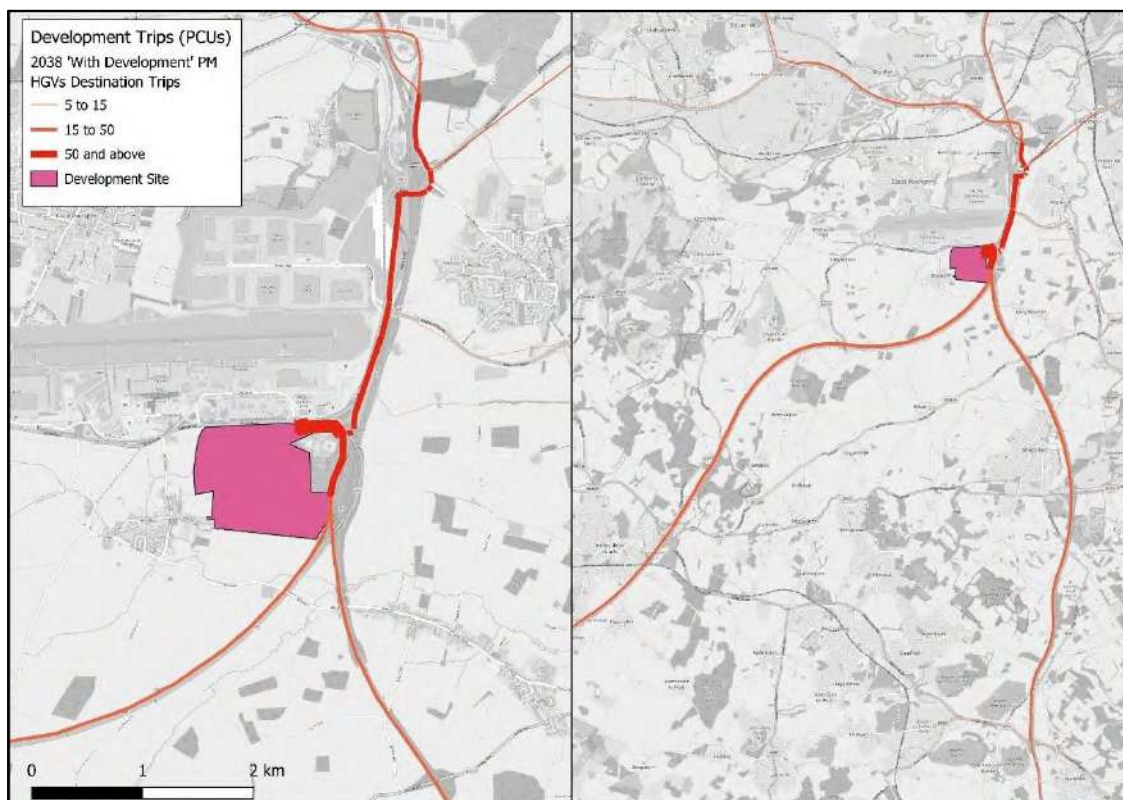


Contains Ordnance Survey data © Crown copyright and database right 2025



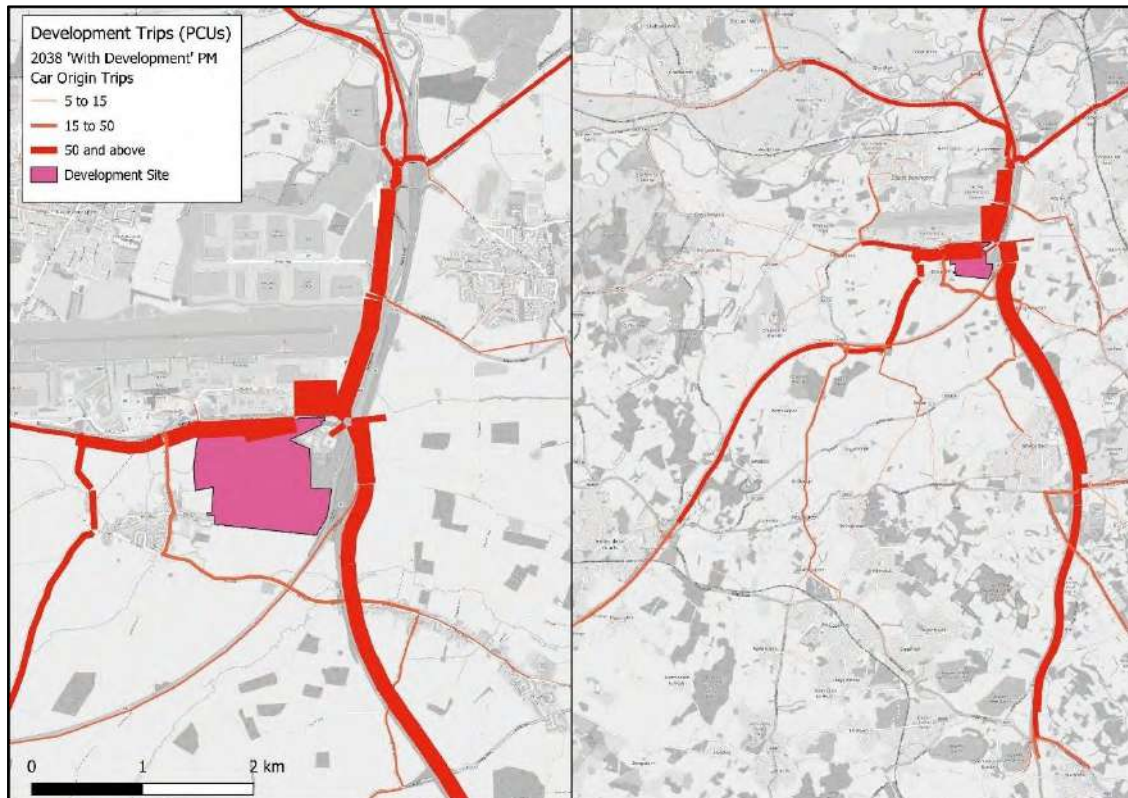
**Figure 2.7: HGV Trip Distribution to and from the Proposed Development for 2038 (PM)****2038 'With Development (1a)' (PM), HGVs – From the Development**

Contains Ordnance Survey data © Crown copyright and database right 2025

**2038 'With Development (1a)' (PM), HGVs – To the Development**

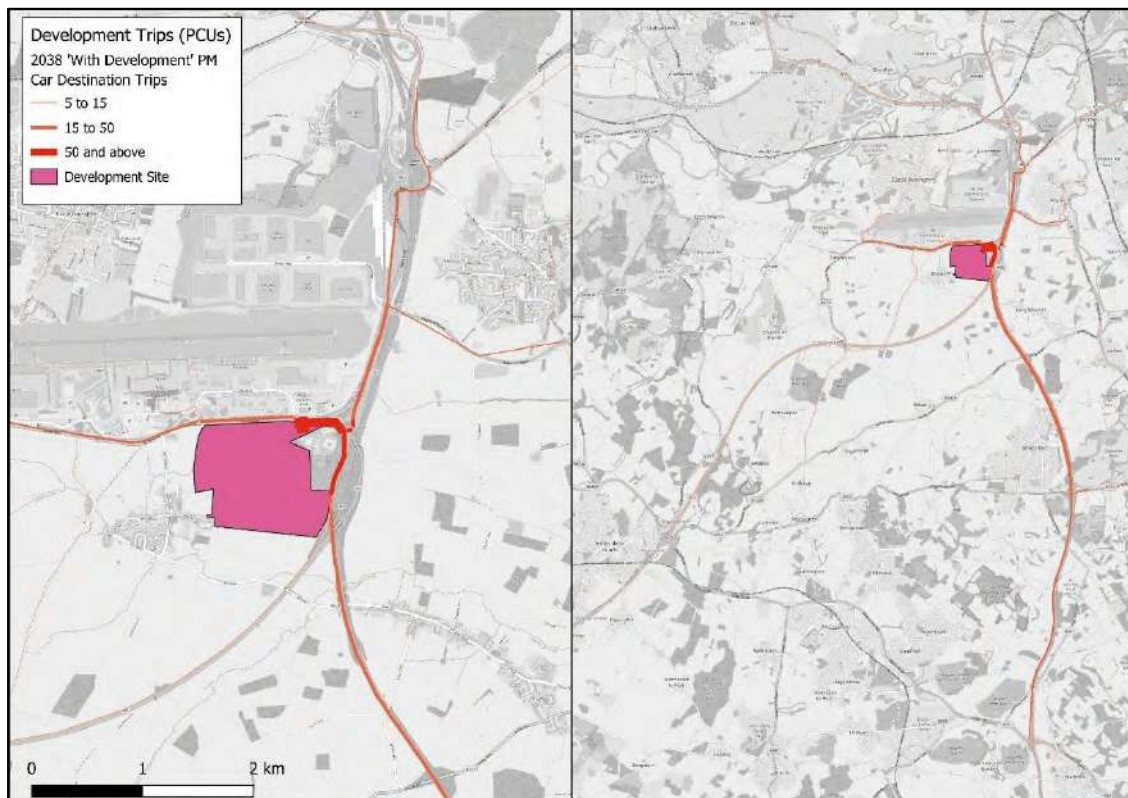
Contains Ordnance Survey data © Crown copyright and database right 2025

**Figure 2.8: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (PM)**  
**2038 'With Development (1a)' (PM), Light Vehicles – From the Development**



Contains Ordnance Survey data © Crown copyright and database right 2025

**2038 'With Development (1a)' (PM), Light Vehicles – To the Development**



Contains Ordnance Survey data © Crown copyright and database right 2025



## Section 3 – Forecast Model Results

### 3.1 Introduction

- 3.1.1 This section details the forecast model results for the proposed East Midlands Gateway Phase 2 development assessment for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours. The analysis includes:
- routing of the forecast development traffic in the 2028 and 2038 'With Development (1a)' scenarios (Section 2.5 and Section 3.2);
  - forecast flow changes in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios (Section 3.3);
  - an assessment of the Area of Influence (Aol) (Section 3.4);
  - forecast delay changes in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios (Section 3.5);
  - forecast maximum node volume-capacity ratios in the 2028 and 2038 'With Development (1a)' scenarios (Section 3.6); and
  - forecast turning flows (and volume-capacity ratios for turns) at selected junctions (Section 3.7).

### 3.2 Forecast Development Traffic

- 3.2.1 Figure 2.1 to Figure 2.8 in Section 2.5 illustrate the assigned forecast trip distribution to and from the proposed development in 2028 and 2038 for both AM Peak and PM Peak hours. These figures show that the HGV development traffic mainly routes via the SRN including the M1, A42, A50 and the A453 Remembrance Way.
- 3.2.2 For light vehicle development traffic, the M1 Junction 24 area is congested and has high delays, particularly in the AM Peak hour. As such, a proportion of the light vehicle trips to the development is forecast to route via Castle Donnington Relief Road and the A6 Kegworth Bypass to avoid the M1 Junction 24 and Junction 24a area.
- 3.2.3 The modelling shows that the light vehicle development traffic is forecast to:
- route to and from the north via the M1 and Castle Donnington Relief Road;
  - route to and from the south via the M1 and M1 Junction 23a;
  - route to and from the south-west using the A42 via both Diseworth and the M1 Junction 23a;
  - route to and from the west via the A50, M1 Junction 24 and through Castle Donnington Relief Road; and
  - route to and from the east via the A453 Remembrance Way, A6 Kegworth Bypass and through the local network of Kegworth and Diseworth.

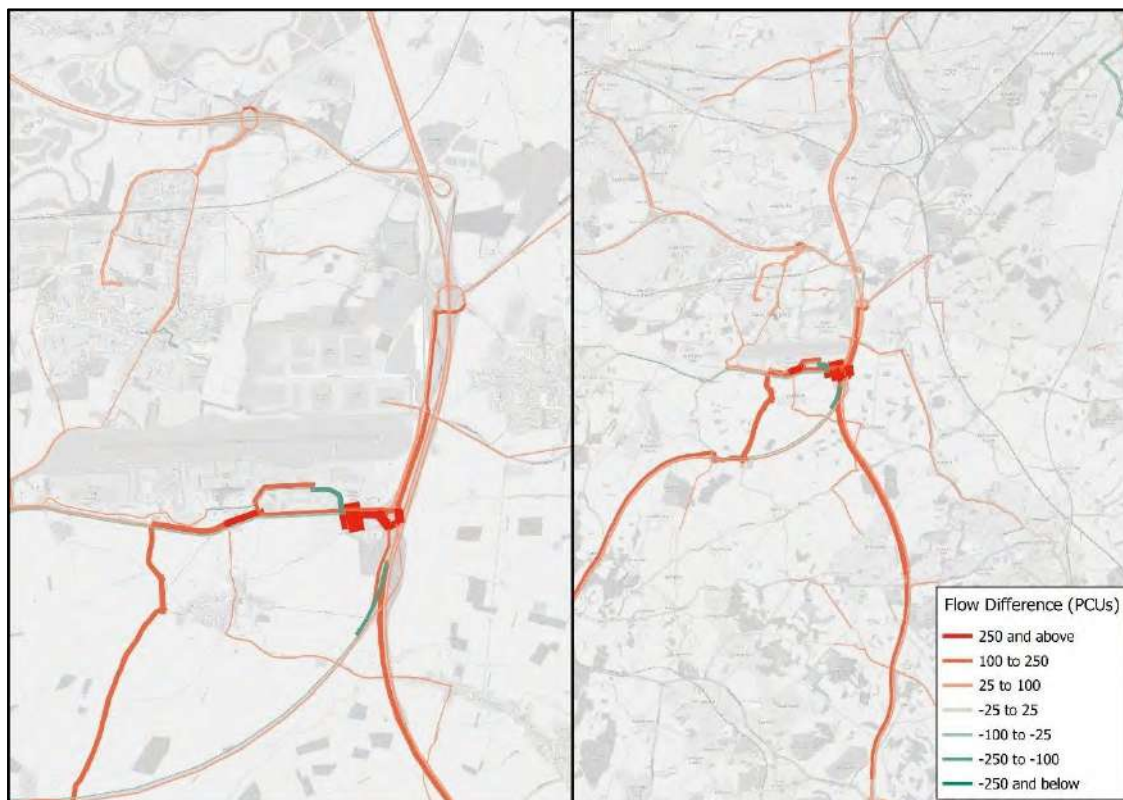
### 3.3 Forecast Flow Change

- 3.3.1 Figure 3.1 and Figure 3.2 show the forecast flow changes in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents an increase in traffic flow in the 'With Development (1a)' scenario and green bandwidth represents a decrease.
- 3.3.2 As expected, the largest increases in flows are forecast along the A453 in the immediate vicinity of the proposed development. The M1 and the A42 are also forecast to experience increases in flow across all modelled forecast scenarios. There is a decrease in traffic forecast on the east side of Beverley Road, particularly for the AM Peak hour. This decrease has been caused by traffic diverting off the Beverley Road / A453 / EMG Phase 2 access roundabout in the 'With Development (1a)' scenario and on to the A453 / East Midlands Airport signal-controlled junction. A high proportion of these trips are from the south routing via Gelscoe Lane and the A42.

- 
- 3.3.3 For the local network of Castle Donington, Kegworth and Diseworth, higher flows are forecast for 'With Development (1a)' scenarios when compared with the 'Without Development (1a)' scenarios. This is particularly notable for the AM Peak hour, as a proportion of the development trips is forecast to route via the local network to access / egress from the proposed development site to avoid the congested M1 Junction 24 area.
- 3.3.4 As discussed in Section 3.5.4, the Derby Road / Bostocks Lane signalised junction (to the north of the M1 Junction 25) is overcapacity in the 'Without Development (1a)' scenarios and sensitive to additional demand. This sensitivity has led to large localised delay fluctuations causing some traffic to reroute in the vicinity of the Derby Road / Bostocks Lane junction. This is most notable in the 2038 AM Peak hour (as shown in Figure 3.2).

**Figure 3.1: Forecast Flow Change for 2028 'With Development (1a)' minus 'Without Development (1a)'**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

**PM Peak hour**

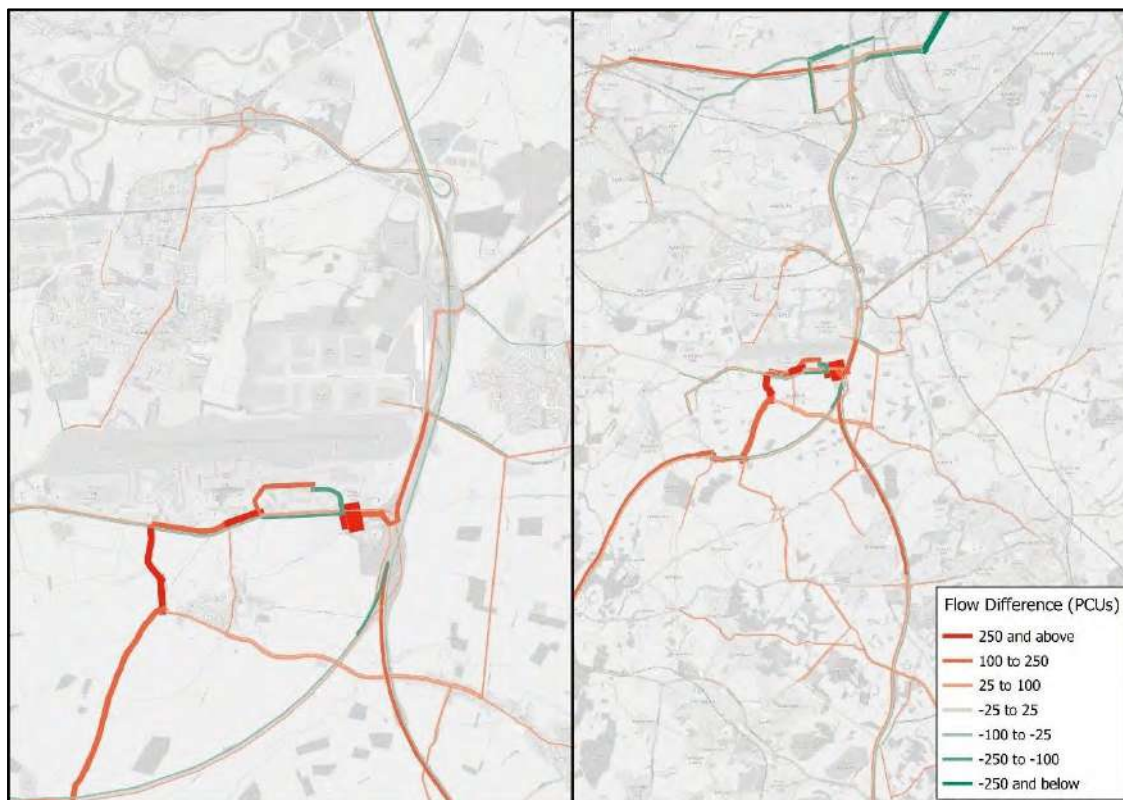


Contains Ordnance Survey data © Crown copyright and database right 2025



**Figure 3.2: Forecast Flow Change for 2038 'With Development (1a)' minus 'Without Development (1a)'**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

**PM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

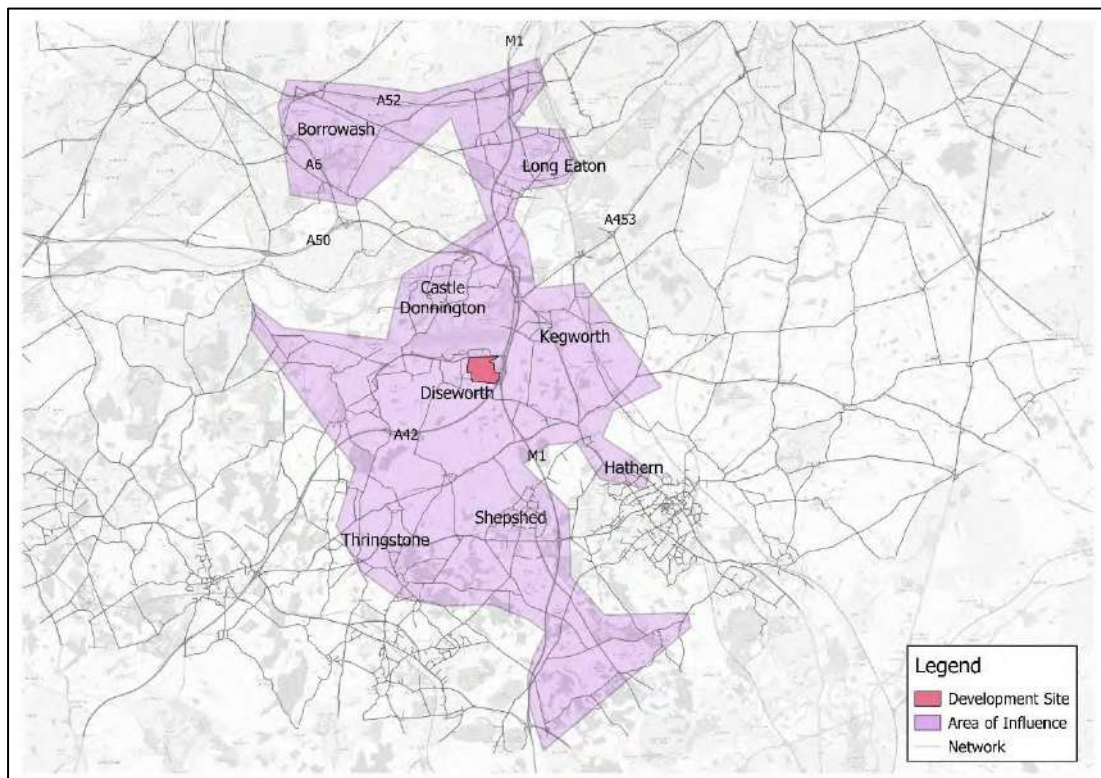
### 3.4 Area of Influence

3.4.1 Using the forecast flow changes between the 'With Development (1a)' and 'Without Development (1a)' scenarios, an indication of the Area of Influence (Aoi) has been defined. Figure 3.3 shows the Area of Influence for the proposed development.

3.4.2 For the proposed development, the Aoi has been defined by considering the links which are forecast to change flow by more than  $\pm 5\%$  and  $\pm 30$  PCUs between the 2028 and 2038 'With Development (1a)' and 'Without Development (1a)' scenarios in either the AM Peak or the PM Peak hours. The links which are forecast to meet these criteria are included in the Aoi, as shown in Figure 3.3, and contains the following areas / links:

- the A453 including Finger Farm roundabout;
- the M1 between Junction 23 and Junction 24a;
- the M1 Junction 25;
- the A42 Junction 14;
- the A52 Brian Clough Way between the M1 Junction 25 and Raynesway Interchange;
- the A6 Alvaston Bypass between Raynesway Park Interchange and Thulston Roundabout; and
- local roads in and around Borrowwash, Long Eaton; Castle Donnington; Kegworth; Diseworth; Hathern; Thringstone and Shepshed.

**Figure 3.3: Area of Influence**



Contains Ordnance Survey data © Crown copyright and database right 2025

### 3.5 Forecast Delay Change

- 3.5.1 As a result of forecast flow changes in the 'With development (1a)' scenario, there are also changes to the forecast delays on the highway network. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and the junction delay due to capacity constraints for individual turning movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.
- 3.5.2 Figure 3.4 and Figure 3.5 show the forecast delay changes (in seconds) in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios for the AM Peak and PM Peak hours. For the A453 in the immediate vicinity of the proposed development; delays are forecast to increase by up to 66 seconds due to increases in flow from the development site.
- 3.5.3 Increases in delay are forecast on the approaches and circulatory lanes of M1 Junction 24 for both AM Peak and PM Peak hours for the 2038 'With Development (1a)' scenario when compared with the 2038 'Without Development (1a)' scenario. Forecast delays are also higher on the approach to Finger Farm Roundabout from the A453 and southbound from Castle Donnington towards the A453 / Walton Hill signalised junction.
- 3.5.4 As noted in Paragraph 3.3.4, the Derby Road / Bostocks Lane signalised junction (to the north of M1 Junction 25) is forecast to be overcapacity in the 'Without Development (1a)' scenarios. This junction is therefore sensitive to additional demand leading to large delay fluctuations in the vicinity of the junction. As shown in Figure 3.4 and Figure 3.5, this is most notable in the 2028 and 2038 AM Peak hours. These fluctuations in delay are attributed to the sensitivity of this junction in and around the Derby Road / Bostocks Lane junction.



**Figure 3.4: Forecast Delay Change for 2028 'With Development (1a)' minus 'Without Development (1a)'**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

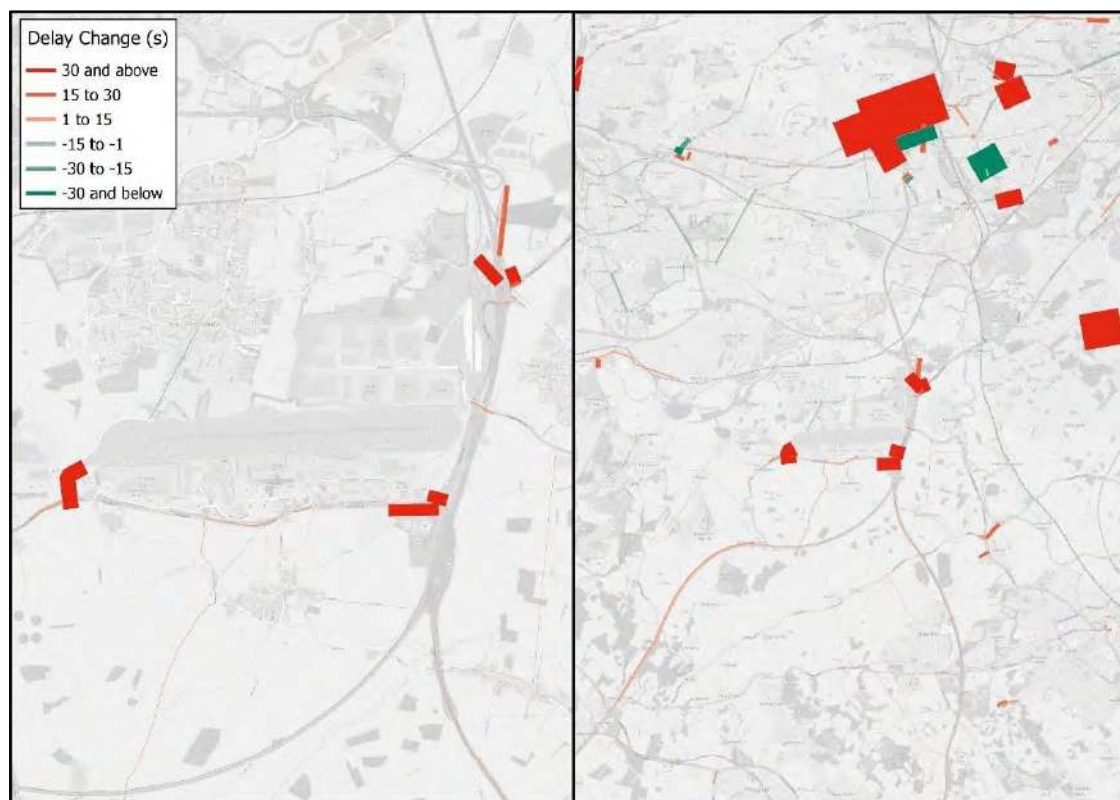
**PM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

**Figure 3.5: Forecast Delay Change for 2038 'With Development (1a)' minus 'Without Development (1a)'**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

**PM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

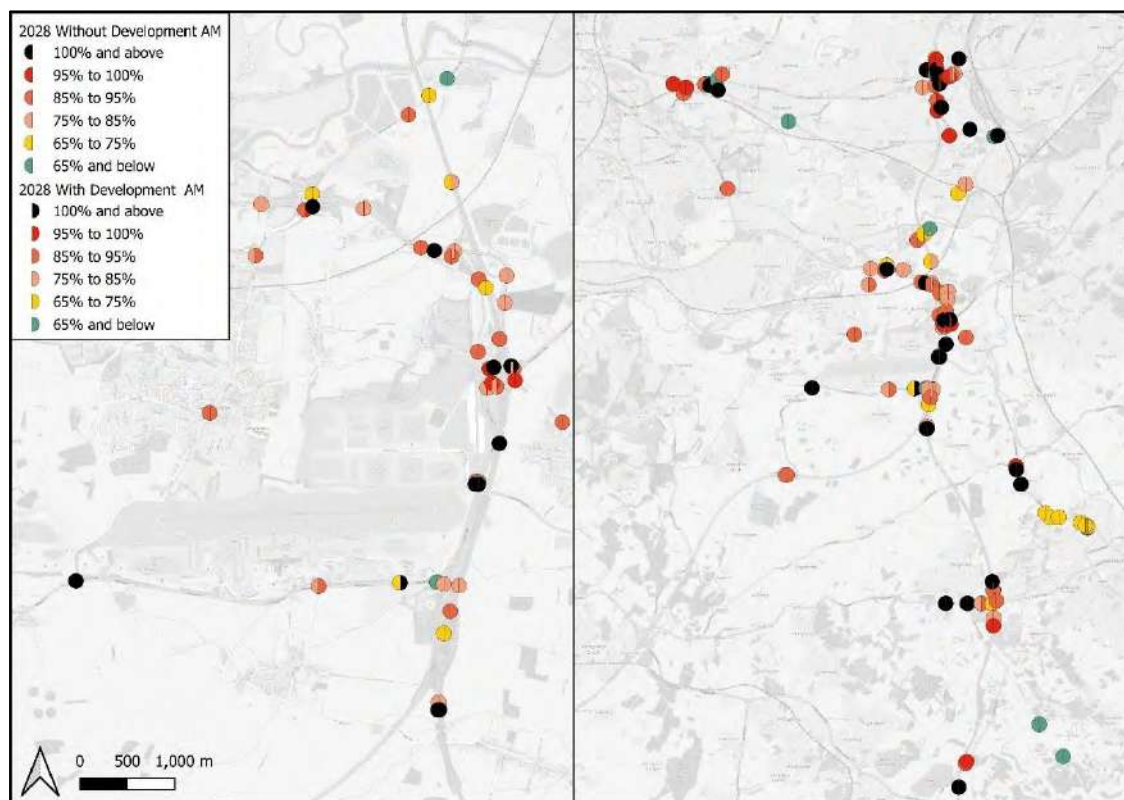
## 3.6 Forecast Node Volume-Capacity Ratios

- 3.6.1 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on a number of factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where the forecast flows are approaching or exceeding the forecast capacity.
- 3.6.2 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.
- 3.6.3 Figure 3.6 and Figure 3.7 show the forecast maximum junction volume-capacity ratios for 2028 and 2038, 'With Development (1a)' and 'Without Development (1a)' scenarios. For ease of comparison, the symbology has been designed to show the data for 'Without Development (1a)' and 'With Development (1a)' scenarios on the same plot.
- 3.6.4 The reader should note that Figure 3.6 and Figure 3.7 show a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the Aol, as defined in Figure 3.3, are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown, except for the node which is located at the proposed site access on the A453.
- 3.6.5 The forecast maximum node volume-capacity ratio plots show that the A453 / Beverly Road / EMG Phase 2 access roundabout junction, the signalised junction with the A453 / East Midlands Airport signalised junction and M1 Junction 24 are most affected by the proposed development. For 2028 and 2038, the proposed development increased the node volume-capacity ratios at these junctions.
- 3.6.6 For M1 Junction 24, the node volume-capacity ratios are high for the 'Without Development (1a)' scenarios, with multiple nodes at this junction exceeding 85%. For the 'With Development (1a)' scenarios, the node volume-capacity ratios remain high, exceeding 85%, showing that the M1 Junction 24 is forecast to have high delays.
- 3.6.7 In the AM Peak hour, the node volume-capacity ratios for the A453 / Beverly Road / EMG Phase 2 access roundabout junction is forecast to be greater than the PM Peak hour in both the 2028 and 2038 forecast year scenarios, consistent with the forecast delay shown in Figure 3.4 and Figure 3.5.
- 3.6.8 Comparing the forecast results between 2028 and 2038, the node volume-capacity ratios are forecast to be greater for the later forecast year (i.e. 2038) as forecast flows increase (when compared with 2028).



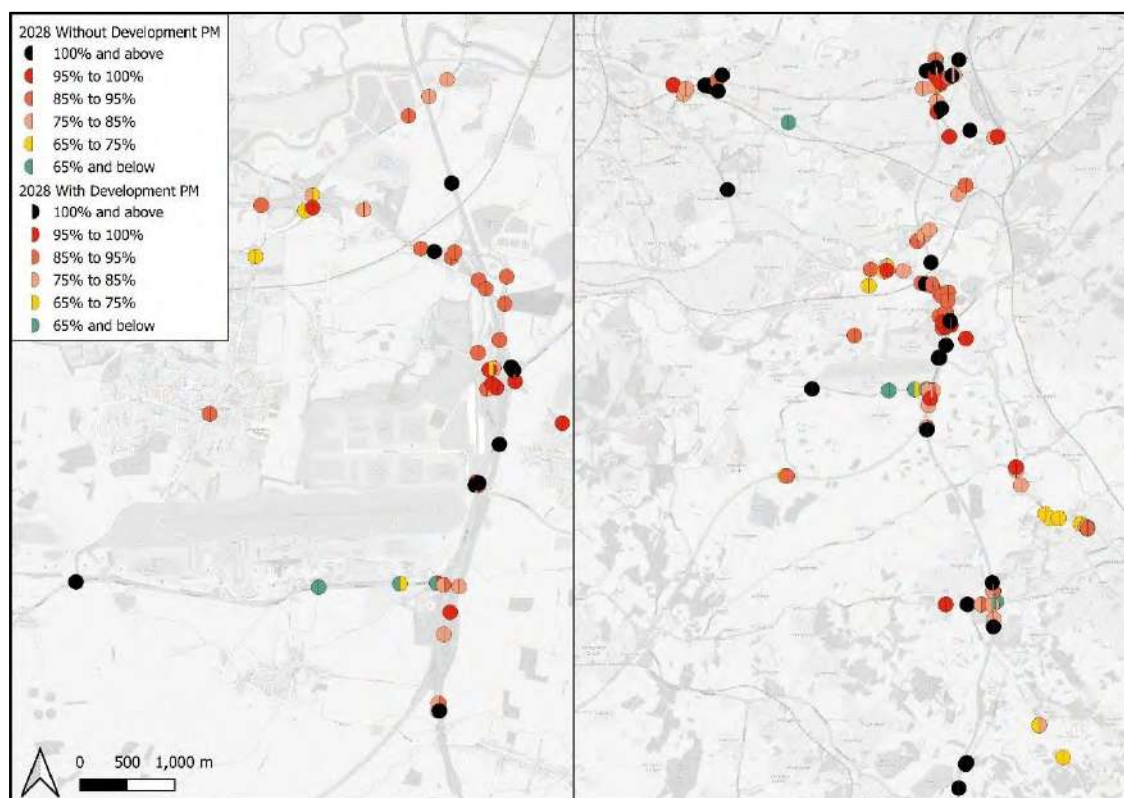
**Figure 3.6: Forecast Node Volume-Capacity Ratio for 2028 'Without Development (1a)' and the 2028 'With Development (1a)' Scenarios**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

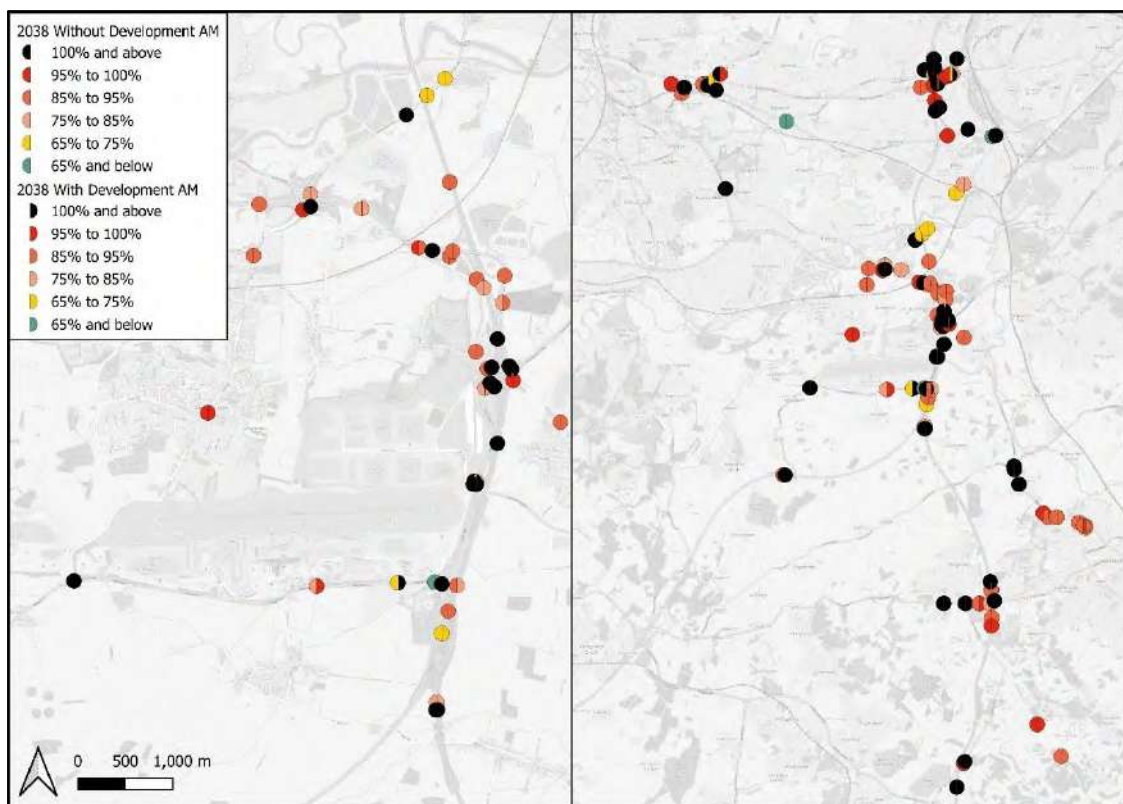
**PM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

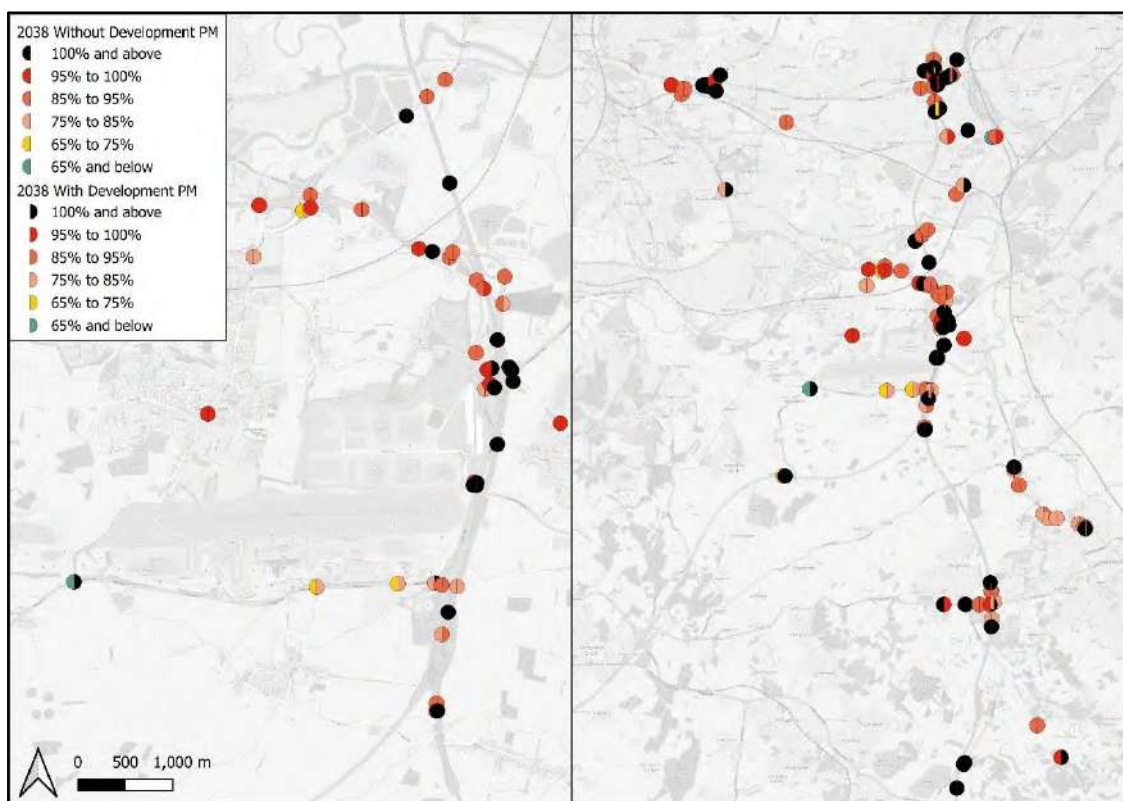
**Figure 3.7: Forecast Node Volume-Capacity Ratio for 2038 'Without Development (1a)' and the 2038 'With Development (1a)' Scenarios**

**AM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

**PM Peak hour**



Contains Ordnance Survey data © Crown copyright and database right 2025

### 3.7 Forecast Junction Turning Flows

3.7.1 Forecast turning flows have been extracted for the following 16 junctions (also shown in Figure 3.8) in the vicinity of the proposed development:

- A453 / Site access Roundabout (Junction 2);
- Finger Farm roundabout (Junction 3);
- A453 / A6 Kegworth Bypass gyratory (Junction 4);
- M1 Junction 24 (Junction 5);
- A453 / East Midlands Airport signal-controlled junction (Junction 6);
- A453 / Grimes Gate junction (Junction 7);
- A453 / The Green junction (Junction 8);
- A453 / East Midlands Airport (western) roundabout (Junction 9);
- A453 / Walton Hill signal-controlled junction (Junction 10);
- A42 Junction 14 / Top Brand / Gelscoe Lane (Junction 11);
- M1 Junction 23 (Junction 12);
- A50 Junction 1 (Junction 13);
- M1 Junction 25 (Junction 14);
- Station Road / Broad Rushes roundabout (Junction 15);
- A453 / Kegworth Road dumbbell roundabouts (Junction 16); and
- A453 / West Leake Lane / Barton Lane dumbbell roundabouts (Junction 17).

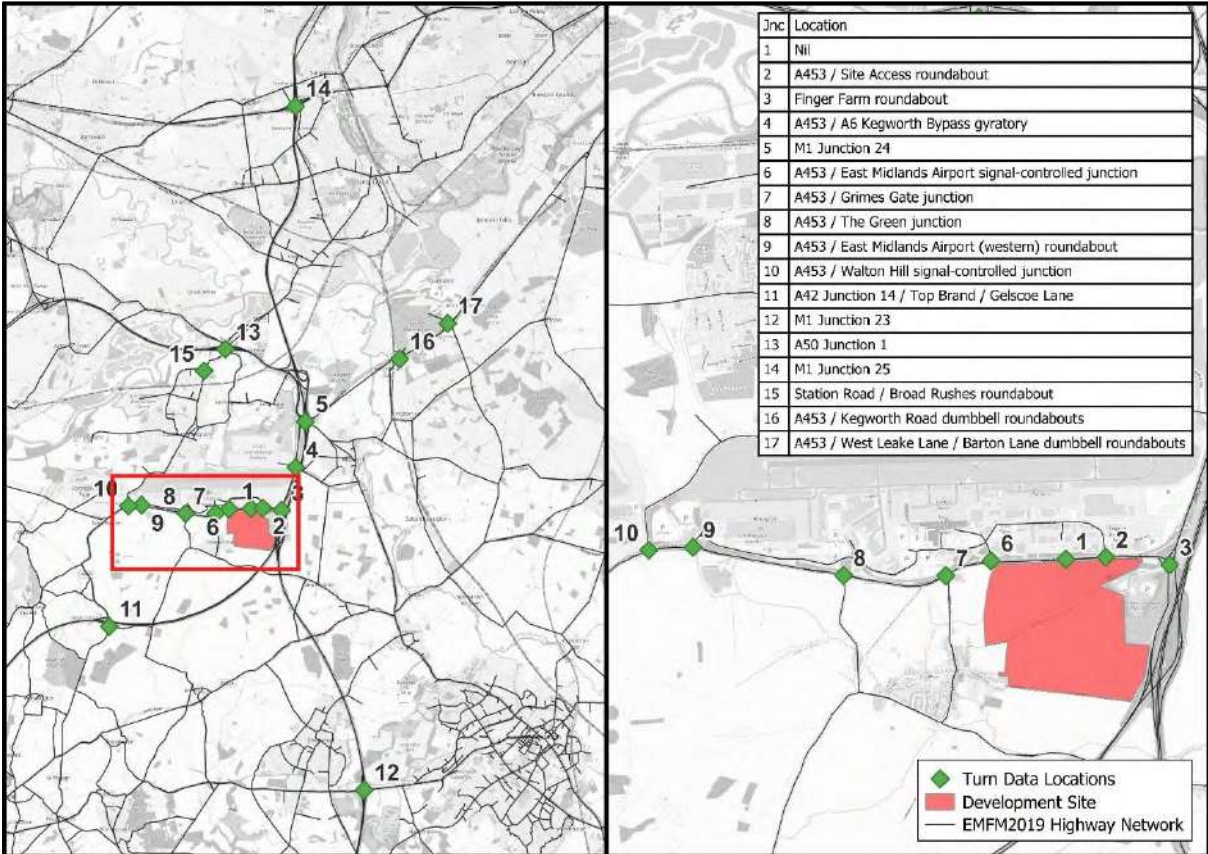
3.7.2 The data have been provided separately in MS Excel spreadsheet format<sup>10</sup> which contains the forecast turning flows for the AM Peak and PM Peak hours for light and heavy vehicles. Data are provided for the 2022, 2023, 2024, 2028 and 2038 'Without Development (1a)' and the 2028 and 2038 'With Development (1a)' scenarios. In addition to the turning flows, turn volume-capacity ratios have also been provided where available.

3.7.3 By design the EMFM highway model has not been calibrated or validated for individual turning movements, so care should be taken when using forecasts of flows and volume-capacity ratios at this level.

<sup>10</sup> EMGP2 - Junction Turning Flows\_v1.0 - For Issue.xlsx (provided via email on 23<sup>rd</sup> Jan 2025)



Figure 3.8: Location of Forecast Turning Flow Data



Contains Ordnance Survey data © Crown copyright and database right 2025

## Section 4 – Summary of the EMFM Assessment

### 4.1 Summary of Assessment

- 4.1.1 Using the East Midlands Freeport Model (EMFM), forecasts have been undertaken to produce the 2028 and 2038 'Without Development (1a)' and 'With Development (1a)' scenarios for both the AM Peak and PM Peak hours for the strategic assessment of the proposed East Midlands Gateway Phase 2 development.
- 4.1.2 Based on these model forecasts, the following is a summary of the key findings for the assessment of the proposed development.
- Development trips (HGVs) have been forecast to route via the following roads:
    - the M1 to and from the south and north;
    - the A42 to and from the south-west;
    - the A50 to and from the west; and
    - the A453 Remembrance Way to and from the east.
  - Development trips (light vehicles) have been forecast to route via the following roads:
    - the M1 to and from the south and north;
    - the A42, the A42 Junction 14, A453 and Gelscoe Lane from the south-west;
    - the A50 and through the local network of Castle Donington to and from the west; and
    - the A453 Remembrance Way, A6 Kegworth Bypass and through the local network of Kegworth and Diseworth to and from the east.
  - The forecast flow changes in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios show that the largest increases in flows are, as expected, forecast along the A453. The M1 and A42 are also forecast to experience increases in flows as well as the local network of Castle Donington, Kegworth and Diseworth.
  - An Area of Influence (Aol) for the proposed development has been defined by identifying links which are forecast to change by more than  $\pm 5\%$  and  $\pm 30$  PCUs between the 'With Development (1a)' and 'Without Development (1a)' scenarios for 2028 and 2038 in either the AM Peak or PM Peak hours. The forecast Aol includes:
    - the A453 including Finger Farm roundabout;
    - the M1 between Junction 23 and Junction 24a;
    - the M1 Junction 25;
    - the A42 Junction 14;
    - the A52 Brian Clough Way between M1 Junction 25 and Raynesway Interchange;
    - the A6 Alvaston Bypass between Raynesway Park Interchange and Thulston Roundabout; and
    - local roads in /around Borrowash, Long Eaton, Castle Donnington, Kegworth, Diseworth, Hathern, Thringston and Shepshed.
  - The forecast delay changes in 2028 and 2038 between the 'With Development (1a)' and 'Without Development (1a)' scenarios show the proposed development is forecast to increase the delays on the A453 and the approaches of the M1 Junction 24.
  - The forecast maximum node volume-capacity ratios show that the proposed development is forecast to increase pressure for the junctions along the A453 including the Finger Farm roundabout. For the M1 Junction 24, the node volume-capacity ratios are high for both the 'Without Development (1a)' and 'With Development (1a)' scenarios with multiple nodes at this junction exceeding 85% which shows high delays and congestion at this location.



- 
- 4.1.3 The forecasts undertaken reflect the forecast impact of the proposed development at East Midlands Gateway Phase 2. It should be noted that the results provided in this report are at a high level. Due to the strategic nature of the EMFM, not all roads are modelled, and the results should be interpreted with that in mind.
- 4.1.4 Although the EMFM modelling provides the strategic impact and form part of the proposed East Midlands Gateway Phase 2 assessment evidence packs, the overall assessment should be complemented by local operational assessment and analysis.

## Appendix A Planning Data Assumptions

**Table A.1: Residential Development Assumptions (sites with more than 500 dwellings) (North West Leicestershire)**

District	Location	Quantum	Timescale	Include
North West Leicestershire	Money Hill North of Nottingham Road	1,953	2021-2037	Y
North West Leicestershire	Land North and South of Park Lane	657	2021-2027	Y
North West Leicestershire	Land off Grange Road (South East Coalville)	3,433	2021-2035	Y
North West Leicestershire	Land at Measham Waterside Burton Road	585	2027-2041	Y
North West Leicestershire	Land North and South of Park Lane, Castle Donington (CD10)	1,076	2027-2036	N
North West Leicestershire	Isley Woodhouse (IW1)	4,500	2029-2050	N

**Table A.2: Employment Development Assumptions (sites with more than 750 jobs) (North West Leicestershire and East Midlands Freeport sites)**

For information, the following table shows the employment sites with more than 750 jobs within North West Leicestershire as well as the sites associated with the East Midlands Freeport development in South Derbyshire.

District	Location	Quantum	Timescale	Include
North West Leicestershire	Mercia Park	393,100 sqm (floorspace)	2023-2027	Y
North West Leicestershire	Strategic Rail Freight Interchange on Land North of East Midlands Airport/West of M1 Junction 24	499,630 sqm (floorspace)	2020-2025	Y
North West Leicestershire	Money Hill	15.9 ha (Site Area)	2027-2031	Y
North West Leicestershire	Segro East Midlands Gateway Phase 2	400,000 sqm (floorspace)	2028-2031	N
North West Leicestershire	Land South of Junction 1 of the A50 Castle Donington Leicestershire	92,500 sqm (floorspace)	2026-2029	Y
North West Leicestershire*	East Midlands Airport Aviation Expansion	940 Jobs	2026-2028	Y
North West Leicestershire	Land West of Hilltop Farm, Castle Donington (Emp89)	17,850 sqm (floorspace)	2025-2034	N
North West Leicestershire	Land North of Remembrance Way (A453), Kegworth (Emp73 (Part))	40,000 sqm (floorspace)	2025-2034	N
South Derbyshire*	EMIP Masterplan 1	4,440 Jobs	2026-2030	Y
South Derbyshire*	EMIP Masterplan 2	3,540 Jobs	2026-2030	Y
South Derbyshire*	EMIP Masterplan 3	1,620 Jobs	2026-2030	Y

\* East Midlands Freeport development sites

## Appendix B Network Assumptions

**Table B.1: Highway Network Assumptions**

Location	Scheme Name	Forecast Year	Include
Earl Shilton	Access arrangements for SUE / Highway improvements for SUE	2026	Y
Barwell	Access arrangements for SUE / Highway improvements for SUE	2026	Y
Lubbesthorpe	Access arrangements for SUE including strategic traffic link to the A563 Lubbesthorpe Way	2021	Y
Loughborough	A512 widening B591 to M1 J23, improvements to J23 and completion of dualling thereafter to either Snell's Nook Lane or Epinal Way junction	2021	Y
Coalville	4. Bardon Road Link: Southern section only	2026	Y
Castle Donington	Western Link Road from Back Lane to Tops Hill, NWLDC package of measures to help mitigate growth planned	2021	Y
Lubbesthorpe	Link across M69 to join North and South of the Lubbesthorpe development.	2031	Y
Earl Shilton & Barwell	Highway improvements for SUE	2026	Y
Lubbesthorpe	Highway improvements for SUE	2026	Y
Loughborough	West of Loughborough SUE (access from the north via the A6 roundabout)	2022	Y
Blaby	Desford Crossroads	2026	N
Harborough	Harborough Strategic Development Area	2021	Y
Charnwood	North of Birstall SUE	2026	Y
Charnwood	Mountsorrel Lane, Rothley Link Road	2021	Y
Charnwood	A512 junction improvements	2021	Y
North of East Leicester	North of East Leicester Development Network - Thorpebury (previously Thurmaston) SUE.	2026	Y
Leicester City	Traffic Calming Schemes (Phase 2)	2021	Y
Leicester City	Welford Road	2021	Y
Leicester City	Waterside Development	2026	Y
Leicester City	Belgrave Gate South	2020	Y
Leicester City	Lancaster Road	2020	Y
Leicester City	Mansfield Street & Church Gate	2021	Y
Leicester City	SMBS Access to Burleys Way	2021	Y
Leicester City	Vaughan Way	2020	Y
Leicester City	Ashton Green	2021	Y
Leicester City	LNW2 Ravensbridge Drive / Blackbird Road	2020	Y
Melton	MMDR Northern Section	2026	Y
Melton	MMDR Eastern Section	2026	Y
Melton	MMDR Southern Section	2026	Y
Melton	Gladman's Site (Leicester Road and Kirby Lane Access)	2021	Y

Location	Scheme Name	Forecast Year	Include
Leicester City	Beaumont Leys Anstey Lane Improvements	2021	Y
Hinckley	Hinckley Rugby Road Corridor Improvements - Phase 4	2023	Y
Leicester City	Putney Road West Improvement	2022	Y
Lutterworth	Frank Whittle Roundabout approaches	2021	Y
Lutterworth	Lutterworth East Development (Development Access (A4304, Gilmorton Road and A426))	2026	Y
Lutterworth	Lutterworth East Development associated mitigations	2031	Y
Lutterworth	Lutterworth East Development (Link Road between A4304 and A426)	2031	Y
Lutterworth	Lutterworth East Development (Gilmorton Road bridge bus restriction)	2026	Y
Bardon Hill	Bardon Hill Link Road North Section	2026	Y
Coalville	Hoo Ash Roundabout	2025	Y
Coalville	Thornborough Road Roundabout	2025	Y
Coalville	Dual Carriageway from Thornborough Rd to Whitwick Road	2025	Y
Coalville	Whitwick Road Roundabout	2025	Y
Coalville	Broom Leys Road Junction	2025	Y
Coalville	Bardon Link Road Junction	2025	Y
Coalville	Birch Tree Roundabout	2025	Y
Coalville	Flying Horse Roundabout	2025	Y
Coalville	Fieldhead Roundabout	2025	Y
Hinckley	DPD A5 Access	2021	Y
Padge Hall	Padge Hall Development Access	2024	Y
Leicester City	Abbey Park Road Cycle Provision	2021	Y
Blaby	A47 / Kirby Lane Tesco Express	2021	Y
Leicester City	Abbey Street	2021	Y
Leicester City	A50 Groby Road Bus Lane	2022	Y
Harborough	Magna Park Extension Access - Mere Lane, Lutterworth	2021	Y
Harborough	Magna Park Extension Access - A5, Lutterworth	2026	Y
Blaby	Highway improvements for Lubbesthorpe SUE	2021	Y
Blaby	Foxhunter Roundabout Eastbound Approach	2021	Y
Loughborough	West of Loughborough SUE (connection to the northern arm of the A512 roundabout)	2036	Y
Harborough	B4114 / B581 Signalisation Improvement, Broughton Astley	2026	Y
Blaby	Blaby DPD Site Access	2026	Y
Blaby	West of St Johns (Blaby DPD) Site Access	2026	Y
Harborough	Wigston Direction for Growth Site Access	2026	Y
Blaby	Everard Way Closure, Fosse Park	2020	Y
Loughborough	Access connection for the Science Park via the A512 roundabout	2031	Y

Location	Scheme Name	Forecast Year	Include
North West Leicestershire	Money Hill Site Access A511	2026	Y
Derbyshire	Wragley Way (South Derbyshire) SUE Access A50	2031	Y
Derbyshire	Clifton (Rushcliffe) SUE Access	2022	Y
Derbyshire	EMIP A50 (Freeport)	2030	Y
Derbyshire	Toton Innovation Hub (HS2)	2026	Y
Nottinghamshire	Ratcliffe Power Station A453 (Freeport)	2030	Y
Rugby	Rugby Radio Station - A5 Access	2022	Y
North West Leicestershire	Mercia Park	2020	Y
Leicester City	Western Park Golf Course	2029	Y
Harborough	Kettering Road Signalisation	2021	Y
Charnwood	Shuttle signals on Tickow Lane (over bridge)	2022	Y
Charnwood	Buttercup Lane in Shepshed	2022	Y
Blaby	Dans Lane (A47)	2023	Y
Hinckley	B582 / B585 signalisation	2023	Y
Hinckley	A47 roundabout between Wykin Road and Outlands Drive	2021	Y
M6 Junction 10-13	M54-Stafford ALR	2021	Y
M54-M6 Toll	New Link Road min 2 lane motorway	2024	Y
M6 J13-J16	Stafford South to Stoke ALR	2022	Y
M1 J13-16	MK South - J16 ALR	2022	Y
M40 M42	M40 J16-M42 J3 ALR	2026	Y
A46 Coventry	Remove Binley and Walsgrove roundabouts M40-M6 as 'expressway standard' (i.e. all grade separated junctions)	2026	Y
A46 Toll Bar End	Grade separated junction at TBE & Stonebridge Highway to 3 lanes	2021	Y
Newark North	Dualling Newark N bypass first stages now in RIS 2	2031	Y
Newark South	A1-A46 link S of Newark; part constructed. Not in MRTM list	2031	Y
Lincoln East	A15-A158; under construction	2021	Y
Lincoln South	A158-A46; *sketchy details*; envisaged as dual carriageway... Assumed costing will be similar to Lincoln E bypass and will be 60mph single	2031	Y
Grantham South	A1-A52 link bypassing Grantham; under construction	2023	Y
Warwickshire	M6 J2 - J4 SMART motorway	2021	Y
Nuneaton and Bedworth Borough	Coton Arches	2021	Y
Nuneaton and Bedworth Borough	A4254b Eastboro Way Phase 1	2024	Y
Nuneaton and Bedworth Borough	College Street / A444	2026	Y

Location	Scheme Name	Forecast Year	Include
Nuneaton and Bedworth Borough	Transforming Nuneaton	2026	Y
Nuneaton and Bedworth Borough	Croft Road / Greenmoor Road Priority	2031	Y
Nuneaton and Bedworth Borough	A47 Old Hinckley Road	2024	Y
Nuneaton and Bedworth Borough	Coventry Road / Gipsy Lane	2026	Y
Nuneaton and Bedworth Borough	A4254 / B4114 / Eastboro Way	2026	Y
Nuneaton and Bedworth Borough	Nuneaton Northern Sites Link Road	2026	Y
North Warwickshire	B5000 Market Street/Bridge Street Signals	2026	Y
North Warwickshire	A5 Dualling between Grendon and Dordon Junction	2033	Y
Rugby Borough	A426/A4071 Avon Mill Roundabout/Newbold Road/Hunters Lane Priority Junction	2026	Y
Rugby Borough	Ashlawn Road/Hillmorton Road	2021	Y
Rugby Borough	A5 Northern Access to DIRFT III	2021	Y
Rugby Borough	A5/A428 Halfway House Roundabout	2026	Y
Rugby Borough	M1 Junction 18	2031	Y
Rugby Borough	M6 to Coton House	2021	Y
Rugby Borough	A5 Southern Access to DIRFT III	2021	Y
North Warwickshire	A5 dualling Grendon to Atherstone	2031	Y
Rugby Borough	M6 J2 Signalisation	2024	Y
Nuneaton and Bedworth Borough	Callendar Farm Phase 2	2031	Y
Nuneaton and Bedworth Borough	Bermuda Triangle Project	2026	Y
Rugby Borough	Ansty Park Access (Combe Fields Road)	2020	Y
Castle Donington	Land South of A50 J1 Development Access	2024	Y
Hinckley	B4114 Coventry Rd / Broughton Rd widening	2021	Y
Shepshed	A512 Ashby Rd Quarry access/signalised junction	2021	Y
Bardon	Tungsten Park, Bardon A511	2021	Y
North West Leicestershire	Segro EMG Phase 2 Development Access	2028	N
Leicester City	St George Street (Queen Street to Southampton Street)	2022	Y
Leicester City	Dover Street (Granby Street Junction)	2024	Y
Leicester City	Granby Street (Bishop Street to Halford Street)	2024	Y
Leicester City	Granby Street (Northampton Street to Street George's Way)	2022	Y
Leicester City	Pocklington's Walk	2022	Y

Location	Scheme Name	Forecast Year	Include
Leicester City	Aylestone Road, Saffron Lane to Oxford Street (A426)	2023	Y
Leicester City	Saffron Lane (B5366)	2023	Y
Leicester City	Duns Lane/Braunstone Gate	2023	Y
Leicester City	Abbey Park Road (Eastern section and bridge)	2023	Y
Leicester City	Anstey Lane (A5630)	2022	Y
Leicester City	St. Margaret's to Birstall (A6)	2024	Y
Leicester City	Melton Road (A607)	2023	Y
Leicester City	Belgrave Gate/Haymarket/Church Gate Pedestrianisation	2020	Y
North West Leicestershire	A50 Junction 1 signalisation of two additional arms (Tamworth Road and Trent Lane)	2025	Y
Blaby	Desford Road/Ratby Lane signalisation	2022	Y
Nottinghamshire	A52 Gamston roundabout	2023	Y
Nottinghamshire	A52 Wheatcroft junction	2028	Y
Nottinghamshire	A52 Nottingham Knight junction	2028	Y
Derbyshire	A38 grade-separated junctions (Kingsway Roundabout, Markeaton Island and Little Eaton Roundabout)	2024	Y
Broxtowe	Toton Link Road	2026	N

## About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivalled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at [aecom.com](https://aecom.com) and [@AECOM](https://twitter.com/AECOM).



**APPENDIX 10: EMG2 Rail Freight Terminal Note (document reference EMG2-BWB-GEN-XX-RP-CH-0011\_S2-P01)**

---

# 1 INTRODUCTION

- ## 2 EMG1 CONSENTED TERMINAL

- [illegible]

**Figure 1:** EMG1 parameters plan extract for the rail terminal

- 2.5 More recently, separate planning consents under the Town and Country Planning Act have been approved to allow the majority of the terminal to have 15m high container stacks which allow for five high-cube (2.9m high) containers to be stacked. This has significantly increased the storage capacity of the terminal. However, this has not affected throughput of the terminal which is driven by the number of trains arriving and departing, which remains at a maximum of 16 trains per day.

### **3 OPERATIONAL EFFICIENCY**

- 3.1 At the time of writing, the terminal has around six trains per day (six arrivals and six departures). The terminal is operated by reach stackers, which are large vehicles that pick up containers and move them around the terminal, stack the containers and load & unload the trains.
- 3.2 When the terminal has more trains in the future, the most efficient operation of moving containers on and off the trains is to use cranes. The maximum crane height within the consented scheme for EMG1 is 20m as shown on **Figure 1** above as this was based on the container stack height of 10m.

### **4 EMG2 AMENDMENT**

- 4.1 The proposed amendment for EMG2 is to increase the maximum crane height to around 24m which will then permit the stacking of containers to 15m.
- 4.2 Whilst this may have environmental impacts that will be assessed as part of the Environmental Assessment for EMG2, this will not increase the number of trains serving the terminal beyond the 16 assessed for the consented EMG1 scheme and as such there will be no impact on the (road) traffic generated by the terminal.
- 4.3 Consequently, the trip generation details set out within PRTM proforma v14 (dated 10 October 2024) remain suitable and robust to test the impacts of the EMG2 development, without the need for further consideration of the proposed changes at the EMG1 rail terminal.

**APPENDIX 11: Trip Generation Core Assessment (document reference EMG2-BWB-GEN-XX-RP-TR-0012\_S2-P1)**

---

PROJECT NAME	East Midlands Gateway Phase 2 – Trip Generation: Core Assessment		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0012	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Paul Wilson	REVISION	P1
APPROVED	Matt Corner	DATE	18.10.24

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development located near East Midlands Airport in Leicestershire. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 This Technical Note presents the methodology used to calculate the traffic generation associated with the proposed development for use in the transport modelling work and Transport Assessment. It builds on lengthy discussions held with the Transport Working Group (TWG) consisting of key statutory highway consultees, including National Highways (NH), Leicestershire County Council and Nottinghamshire County Council.
- 1.3 This Technical Note adopts the following structure:
- **Section 2** outlines the proposed development details, including gross floor areas, land uses and the access strategy;
  - **Section 3** presents the trip generation calculations and assumptions for the core assessment; and
  - **Section 4** summarises the key details from the Technical Note.

## 2. DEVELOPMENT DETAILS

### Site Details

- 2.1 The proposed development seeks outline planning permission via a Development Consent Order for a large warehousing and distribution development, as an extension to the existing EMG1 Strategic Rail Freight Interchange. It comprises 430,000sqm of industrial development across the following sites:
- 400,000sqm of B2/B8 industrial development on EMG2, including 100,000sqm of B8 mezzanine floorspace.
  - 30,000sqm of B8 industrial development on Plot 16 of EMG1.
- 2.2 Access to the EMG2 development is currently proposed via a fourth arm from the existing A453/Hunter Road roundabout directly south of East Midlands Airport (although there is the possibility of proposing access further to the west on the A453 instead). Plot 16 on EMG1 would be served by Wilder's Way via the existing roundabout on the A453.



- 2.3 **Figure 1** shows the locations of the two development parcels in context of East Midlands Airport.

**Figure 1. Proposed Development Location**



### **3. TRIP GENERATION**

#### **Deriving Trip Rates**

- 3.1 BWB produced a Transport Scoping Note (report ref: EMG2-BWB-GEN-XX-TR-TR-0001\_Transport Scoping Note) dated 31 May 2022 proposing an initial set of B2 and B8 trip rates using the latest version of the TRICS database at that time. It also compared these against the previously agreed B8 trip rates used to assess the EMG1 development, which were based on surveyed information from the Swan Valley development from 2007.

- 3.2 Whilst the B8 trip rates from TRICS and Swan Valley were similar, it was agreed with the TWG that the original Swan Valley B8 trip rates for EMG1 and the new B2 trip rates from TRICS are adopted. The former was requested because said trip rates were higher than that generated using the latest TRICS Database at the time and provided consistency when considering the methodology adopted for the original EMG1 consent, even if subsequent surveyed information for EMG1 shows that the actual recorded trip rates are a lot lower.
- 3.3 Following on-going discussions with the TWG, it was also agreed that the higher 1600 to 1700 hour shoulder peak hour trip rates are adopted in the evening, rather than the traditional 1700 to 1800 hour period. The trip rates being adopted for EMG2 are therefore identical to the those adopted for EMG1 and form a robust assessment as a result.

### **Mezzanine Floorspace**

- 3.4 Discussions were also held with the TWG as to whether a reduced trip rate should be applied to the 100,000sqm mezzanine floorspace on the basis that mezzanines do not typically generate the same volume of activity as ground floorspace. This is because they are often used for ancillary purposes to enhance access to existing high level storage areas, or to house automated operations. HGV generations are also related to the number of loading bays, which would not increase as a result of mezzanines being introduced.
- 3.5 Whilst this was considered a reasonable assumption, there was no readily available empirical evidence to support reduced trip rates at the time, over and above the findings of the EMG1 surveys, so, again for robustness, it was agreed that the full trip rates are applied to 100% of the development floorspace i.e. 430,000sqm, to ensure a highly robust assessment.

### **Proposed Trip Rates & Traffic Generation**

- 3.6 The proposed trip rates (per 100sqm GFA) for both the B2 and B8 land uses are presented in **Table 1**.

**Table 1. Proposed Trip Rates**

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
B8 Trip Rates (retained from EMG1 Transport Assessment)*						
Total	0.140	0.036	0.176	0.065	0.155	0.220
HGVs	0.019	0.023	0.041	0.025	0.015	0.040
B2 Trip Rates (taken from TRICS)						
Total	0.392	0.071	0.463	0.049	0.369	0.417
HGVs	0.016	0.014	0.030	0.003	0.006	0.009

\*evening peak hour trip rates reflect 1600 to 1700 hour period

- 3.7 The proposed development seeks permission for 430,000sqm of industrial development comprising 370,000sqm of B8 development (including 30,000sqm on Plot 16 of EMG1 and 100,000sqm of mezzanine floor space) and 60,000sqm of B2 development. **Table 2** calculates the peak hour traffic generation as a result.

**Table 2. Proposed Development Traffic Generation**

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
340,000sqm B8 development at EMG2						
Total	476	122	598	221	527	748
HGVs	65	78	143	85	51	136
30,000sqm B8 development at Plot 16 of EMG1						
Total	42	11	53	20	47	67
HGVs	6	7	13	8	5	13
60,000sqm B2 development at EMG2						
Total	235	43	278	30	222	252
HGVs	10	8	18	2	4	6
Total 430,000sqm development						
Total	753	176	929	270	795	1,065
HGVs	81	93	174	95	60	155

- 3.8 The proposed development is therefore predicted to generate 929 trips in the morning peak hour and 1,065 trips in the evening peak hour, of which 53 in the morning and 67 in the evening would be generated by Plot 16 of EMG1. This trip generation is proposed to be taken forward and assessed as part of the PRTM modelling for the core assessment and is set out in the PRTM proforma v14 that has been issued to the TWG. A copy of also included at **Appendix 1**.

## HGV Movements to EMG1 Rail Freight Terminal

- 3.9 The PRTM assigns development trips to the network using an in-built gravity model with EMG1 adopted as a parent zone. It therefore does not assign any HGVs between the EMG2 site and the EMG1 Rail Freight Terminal and all HGVs are assigned further afield externally across the highway network. Whilst there is the potential for HGVs from EMG2 to use the EMG1 RFT, for the purposes of the strategic PRTM modelling, it is not proposed to consider HGV movements between the two sites.
- 3.10 Table 13 of Technical Note 04 that supported the EMG1 development considered different types of HGV movements:
1. External HGVs not using RFT i.e. unit to external
  2. Internal HGVs i.e. unit to RFT to unit
  3. External HGVs i.e. unit to RFT to external
  4. Total external HGVs (1 + 3)
- 3.11 An extract of the HGV trip generation from TN04 is shown at **Table 3**.

**Table 3. EMG1 Rail Freight Terminal Trips**

Time Window	HGVs EMG B8		
	Arrive	Depart	Two-way
00.00-01.00	81	96	177
01.00-02.00	92	92	183
02.00-03.00	98	98	195
03.00-04.00	67	104	171
04.00-05.00	92	61	153
05.00-06.00	141	86	226
06.00-07.00	141	61	202
07.00-08.00	128	171	299
08.00-09.00	104	128	232
09.00-10.00	134	122	257
10.00-11.00	153	165	318
11.00-12.00	134	128	263
12.00-13.00	104	92	195
13.00-14.00	86	141	226
14.00-15.00	104	165	269
15.00-16.00	67	128	195
16.00-17.00	141	86	226
17.00-18.00	110	134	244
18.00-19.00	134	110	244
19.00-20.00	116	79	195
20.00-21.00	128	104	232
21.00-22.00	79	116	195
22.00-23.00	73	92	165
23.00-00.00	86	98	183
Totals	2572	2657	5229

Internal HGVs 40% Rail Terminal Internal*		
Arrive	Depart	Two-way
-13	-12	-25
-14	-13	-27
-9	-15	-24
-13	-8	-21
-20	-11	-31
-20	-8	-28
-18	-24	-42
-14	-18	-32
-19	-17	-36
-21	-23	-44
-19	-18	-37
-14	-13	-27
-12	-19	-31
-14	-23	-37
-6	-18	-27
-20	-11	-31
-15	-19	-34
-19	-15	-34
-16	-11	-27
-18	-14	-32
-11	-16	-27
-10	-13	-23
-12	-13	-25
-358	-369	-727

Rail Terminal 60% external HGVs**		
Arrive	Depart	Two-way
1	1	2
2	2	4
2	2	4
2	2	4
4	4	8
14	14	28
33	33	66
44	44	87
28	28	56
28	28	56
39	39	77
37	37	73
49	49	97
39	39	78
28	28	56
39	39	77
44	44	87
40	40	80
37	37	74
22	22	44
9	9	17
4	4	8
2	2	4
1	1	2
545	545	1091

Total external HGVs SRFI		
Arrive	Depart	Two-way
54	85	139
61	81	142
96	87	183
60	91	150
83	67	149
135	86	223
164	86	249
154	191	345
118	138	256
143	133	277
170	185	355
152	147	299
138	127	265
113	160	273
118	182	299
97	149	246
164	118	282
135	155	290
152	132	284
122	90	213
119	98	217
72	104	176
65	80	145
74	85	159
2759	2834	5593

\* Based on Swan Valley HGV profile

\*\* Based on Hams Hall Train Arrivals

- 3.12 This shows that in the morning peak hour, 88 HGVs (32 + 56) of the total 320 HGVs (232 + 32 + 56) at EMG1 were predicted to visit the RFT (28%) and in the evening peak hour this is slightly higher at 32%. By applying the same percentages to the EMG2 B8 HGV traffic generation shown in **Table 2** (noting that all RFT visits from EMG2 would result in an external trip), then there could be 40 HGVs in the AM peak (18 arrivals, 22 departures) and 44 HGVs in the PM peak (28 arrivals, 16 departures) visiting the RFT. Diagrams 1 and 2 contained at the end of this report shows how this would change the balance of flows in the AM and PM peak hours respectively.
- 3.13 In summary, whilst there could be HGV movements between EMG2 and EMG1 RFT, the overall number is expected to be low. These HGVs will be assigned externally on the highway network and so are accounted for in the PRTM modelling. The only impact of HGVs visiting the EMG1 RFT, would be at the EMG1 roundabout as there would be a

slight change in turning movements i.e. outbound HGVs heading north through the junction towards M1J24 would instead turn left into EMG1 and inbound HGVs travelling south through the junction would turn right from EMG1 towards the site. Given this should have a minimal impact on the strategic modelling, it has been agreed with the TWG that this slight change in turning movements is tested as part of the VISSIM modelling.

### **Impacts of Proposed Changes at EMG1 Terminal**

- 3.14 The proposals seek permission to increase the height of the cranes at the EMG1 terminal. Questions had been raised by the TWG as to whether this could increase the number of HGVs visiting the EMG1 RFT and whether this needs accounting for in the traffic modelling. BWB produced a separate Technical Note (EMG2-BWB-GEN-XX-RP-CH-0011\_EMG1 Rail Terminal, issued to the TWG under separate cover on 15 October 2024) explaining how the changes at the EMG RFT would have no impact on road traffic and therefore should not need considering within the traffic modelling work. A copy of this note is included at **Appendix 2**.

## **4. SUMMARY**

- 4.1 This Technical Note has summarised the methodology adopted to calculate the peak hour trip generation for the EMG2 development. It adopts the same trip rates to those used to assess the EMG1 development, which based on a development of 430,000sqm results in 929 morning peak hour trips and 1,065 evening peak hour trips.
- 4.2 This trip generation is presented in the PRTM proforma v14 dated 10 October 2024, which is to be used within the upcoming PRTM modelling for the Stage 1 modelling work. Any additional 'Vision and Validate' assessment scenarios will be dealt with separately.



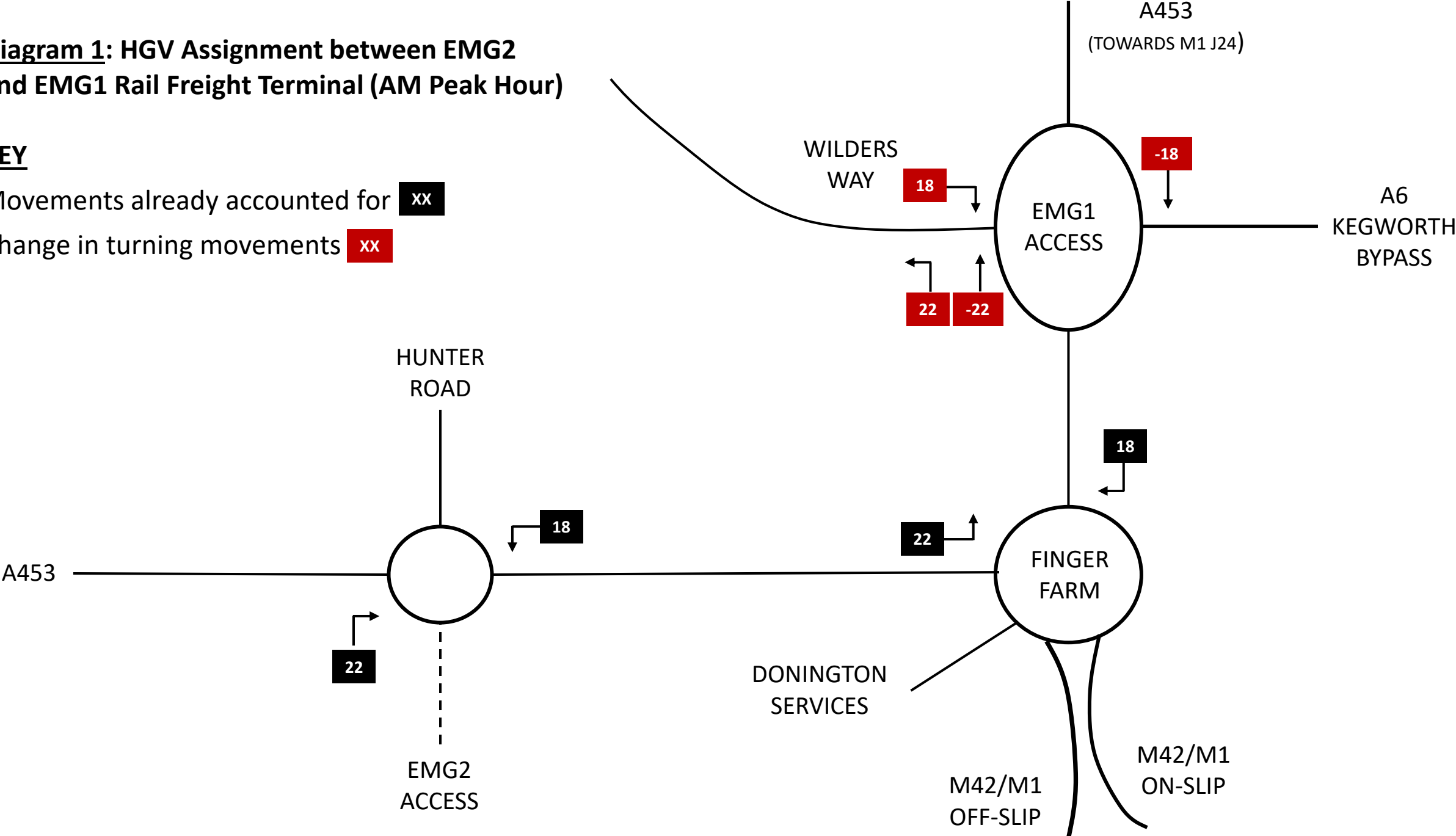
## DIAGRAMS

**Diagram 1: HGV Assignment between EMG2 and EMG1 Rail Freight Terminal (AM Peak Hour)**

**KEY**

Movements already accounted for **xx**

Change in turning movements **xx**

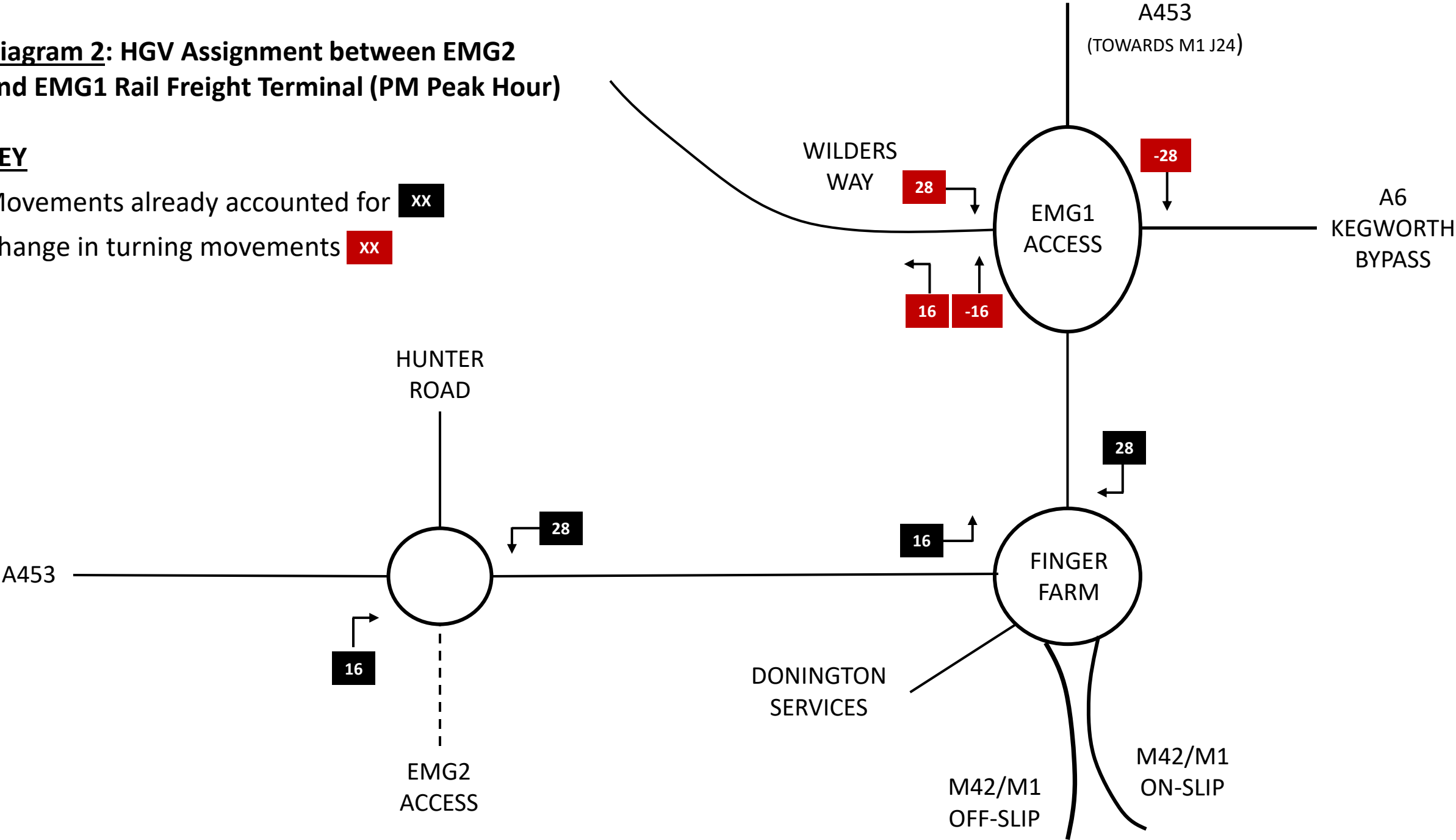


**Diagram 2: HGV Assignment between EMG2 and EMG1 Rail Freight Terminal (PM Peak Hour)**

**KEY**

Movements already accounted for **xx**

Change in turning movements **xx**



**APPENDIX 1: PRTM Proforma v14**

# **Pan Regional Transport Model (PRTM) Development Testing Proforma**

## **Foreword:**

Before completing this form for development management purposes, it is recommended that you contact Leicestershire County Council (LCC) and seek advice from the Highway Development Management (HDM) team on the proposed use of PRTM. The HDM team can be contacted at [hdc@leics.gov.uk](mailto:hdc@leics.gov.uk).

Although not a requirement it is strongly recommended that potential stakeholders, e.g. LCC HDM, National Highways, sign-off on your brief and trip generation before submitting this proforma to Environment and Transport Modelling Services Contract (E&T MSC). This should ensure that any subsequent work proposal through E&T MSC is as accurate as possible in terms of scope, timescales and cost.

Please note that E&T MSC and wider Network Data and Intelligence (NDI) Team work independently from all other teams within LCC, including HDM. Please ensure any correspondence intended for the HDM team is sent to the case officer for your (pre)application; or, if unknown, to HDM's generic inbox: [hdc@leics.gov.uk](mailto:hdc@leics.gov.uk).

On the following page is an indicative flowchart summarising the general transport modelling process for using the PRTM to inform client Transport Assessments; this is a typical approach and has been simplified to a generic process – each individual application may differ from the below and as above advice should be sought from the HDM team.





### Section 1: Client Details

<b>Name:</b>	Paul Wilson
<b>Company:</b>	BWB Consulting Ltd (on behalf of Segro)
<b>Telephone:</b>	07889995471
<b>E-mail:</b>	paul.wilson@bwiconsulting.com
<b>Date:</b>	10/10/2024

### Section 2: Project Details

<b>Title:</b>	East Midlands Gateway Phase 2
<b>District / Location:</b>	Land to the southeast of EMA, and southwest of M1J23a in North West Leicestershire DC's jurisdiction
<b>Background:</b>	<p>EMFM modelling has recently been undertaken for forecast years of 2025 and 2035 (reference EMGP2 proforma Revision 6). Due to the passage of time with submitting the EMG2 application, revised EMFM modelling is now required for higher forecast years of 2028 (opening year) and 2038 (10 years post opening).</p> <p>There have been changes to the evening peak hour trip rates and the scale of development, which is now being proposed at 400,000sqm on EMG2 (to account for 300,000sqm of ground floorspace and 100,000sqm of potential B8 mezzanine floorspace) plus 30,000sqm of B8 floorspace on EMG1 (Plot 16). The entire EMG2 development is now proposed to be served by a single point of access via a fourth arm from the A453/Hunter Road roundabout. Plot 16 on EMG1 would be served by the existing access via Wilder's Way.</p> <p>The revised uncertainty log also picks up on any new developments during the higher opening and future years.</p> <p>This version of the proforma sets out the updated modelling work based on the above changes. We are however considering other scenarios and a 'vision and validate' sensitivity test based on more up to date EMG1 trip rates and considering in detail the activity generated by mezzanines. However, further information will need to be shared, and methodology agreed with the TWG, for these scenarios, which will be set out in due course in a separate proforma assuming such an approach is indeed continued with.</p>

### Section 3: Development Details

Please input your development phasing into the provided table on the right; if it is a mixed-use site, please separate dwellings and employment floorspace with a comma. This table will act as an overview to the detail provided further in this proforma as well as the supporting brief (if available).

There are two main forms of assessment that the E&T MSC offers, a highway-only model run and a full-PRTM model run. Your HDM Case Officer will confirm which type of assessment is needed for your development.

For highway-only model runs please provide details in section 3a, for full model runs please provide details in section 3b.

Please provide a brief description of the access arrangements in the box below; if there are preliminary scheme drawings available please provide these alongside submission of this proforma via email attachment.

#### Brief description of access arrangements:

Having reflected on matters recently, the access proposals to EMG2 are being revised. One main access is now being introduced, via a fourth arm of the existing A453/Hunter Road roundabout to serve 100% of the development plus the bus interchange, which can then connect directly into the site.

A separate emergency access would also be provided, but that won't affect the revised modelling work.

Development on Plot 16 of EMG1 would be served by the existing access via Wilder's Way.

Year	No.
2021	Figure
2022	Figure
2023	Figure
2024	Figure
2025	Figure
2026	Figure
2027	Figure
2028	130,000sqm
2029	100,000sqm
2030	100,000sqm
2031	100,000sqm
2032	Figure
2033	Figure
2034	Figure
2035	Figure
2036	Figure
2037	Figure
2038	Figure
2039	Figure
2040	Figure
2041	Figure
2042	Figure
2043	Figure
2044	Figure
2045	Figure
2046	Figure
2047	Figure
2048	Figure
2049	Figure
2050	Figure
2051	Figure
<b>Total</b>	<b>430,000sqm</b>

### Section 3a: Highway Model Only Development Details

Please provide either the agreed trip rates and/or trip generation for your development in the relevant tables below. Depending on your land use and agreed approach with LCC HDM, values may not be required for all three time periods.

#### Trip Rates:

Housing: N/A

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles									
HGV's									
Total									

Employment: B2

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	0.376	0.057	0.433	-	-	-	0.046	0.363	0.408
HGV's	0.016	0.014	0.030	-	-	-	0.003	0.006	0.009
Total	0.392	0.071	0.463	-	-	-	0.049	0.369	0.417

Employment: B8

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	0.121	0.013	0.135	-	-	-	0.040	0.140	0.180
HGV's	0.019	0.023	0.041	-	-	-	0.025	0.015	0.040
Total	0.140	0.036	0.176	-	-	-	0.065	0.155	0.220

The B8 trip rates for the PM peak now mirror the 1600 to 1700 hour shoulder peak trip rates adopted for EMG1

**Trip Generation:**

Housing: N/A

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles									
HGV's									
Total									

**EMG2 (400,000sqm)**

Employment: B2; 60,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	226	34	260	-	-	-	28	218	246
HGV's	10	8	18	-	-	-	2	4	6
Total	235	43	278	-	-	-	30	222	252

Employment: B8 340,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	411	44	455	-	-	-	136	476	612
HGV's	65	78	143	-	-	-	85	51	136
Total	476	122	598	-	-	-	221	527	748

Employment: TOTAL EMG2 DEVELOPMENT

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	637	78	715	-	-	-	164	694	858
HGV's	75	86	161	-	-	-	87	55	142
Total	711	165	876	-	-	-	250	748	998

### Plot 16 EMG1 (30,000sqm)

Employment: B8 30,000sqm GFA

Vehicle Type	AM			IP			PM		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
Light Vehicles	36	4	40	-	-	-	12	42	54
HGV's	6	7	13	-	-	-	8	5	13
Total	42	11	53	-	-	-	20	47	67

### Section 3b: Full Model Run Development Details

Please provide the number of dwellings and/or employment floorspace, or preferably if known, jobs for each of the sub-categories below.

#### Employment Development Land Use:

Land Use	Class	Unit	Quantum	Jobs
Shops	A1	m <sup>2</sup>		
Business	B1a	m <sup>2</sup>		
General Industrial	B2	m <sup>2</sup>	60,000	TBC
Storage or Distribution	B8	m <sup>2</sup>	370,000*	TBC
Research & Development	B1b	m <sup>2</sup>		
Leisure	D2	m <sup>2</sup>		
Hotels	C1	Beds		
Education	D1	Jobs		

\* includes 340,000sqm of B8 floorspace on EMG2 and 30,000sqm of B8 floorspace on Plot 16 of EMG1

#### Housing Development Land Use:

Land Use	Class	Dwellings
Dwellings	C3	

## Section 4: Modelling Required

### Assessment Years:

Please select your assessment years from the options below. Please note that if you need PRTM forecast years to infer model flows to correspond with data collection, you will need to select the 'shoulder' forecast years (i.e. inferring the 2018 model forecast year will require 2016 and 2021 PRTM forecast years). Bespoke individual forecast years may be requested with the "Other, please specify" option, but this does not guarantee inclusion in any provided proposal.

2014 (base) <input type="checkbox"/>	2016 <input type="checkbox"/>	2021 <input type="checkbox"/>
2026 <input type="checkbox"/>	2031 <input type="checkbox"/>	2036 <input type="checkbox"/>
2041 <input type="checkbox"/>	2046 <input type="checkbox"/>	2051 <input type="checkbox"/>
Other, please specify:	2028 and 2038 forecast years are required (year of opening and post 10 years). A revised 2022 forecast base year assessment is also required, alongside a 2023/2024 forecast base for air and noise quality purposes (exact approach TBC with AECOM post the meeting on 3/10/24).	

If required, please provide proposed phasing in each forecast year selected above, in the box below. An example has been included in green, please delete and populate with your data.

2022: 0% development (do minimum)  
2028: 100% occupancy  
2038: 100% occupancy

### Assessment Options:

Please select which scenarios you will want testing, as well as defining which model year each scenario corresponds to as this can potentially be multiple forecast years for one scenario; this will depend on your discussions with HDM and their requirements.

Scenario	Choice	Model Year(s)
Core	Assumed	2022/2028/2038
Core + no development + access strategy	<input type="checkbox"/>	
Core + development + no mitigation	Assumed	2028/2038
Core + development + mitigation	<input checked="" type="checkbox"/>	2028/2038



Other, please specify:	<p>The following scenarios will need testing as part of the Stage 1 modelling:</p> <ul style="list-style-type: none"> <li>i) 2019 baseline year (for air quality purposes)</li> <li>ii) 2022/2023/2024 forecast base year (2023 and 2024 TBC for noise and air quality purposes)</li> <li>iii) 2028/2038 forecast year without development (with EM Freeport and Local Plan related schemes, including Isley Woodhouse, Land West of Castle Donington and the Coaker Land schemes)</li> <li>iv) 2028/2038 forecast year with development (with EM Freeport and Local Plan related schemes, including Isley Woodhouse, Land West of Castle Donington and the Coaker Land schemes)</li> <li>v) Construction traffic – further information still to be provided</li> </ul> <p>NB Covid sensitivity testing is to be considered further for the TWG to agree the approach to be adopted in the Stage 2 modelling work; further information has been provided by AECOM/Jacobs to inform decision making</p> <p>There will be a need to run the mitigation schemes through the EMFM once agreed. This will test the core development trips included in this proforma plus a scenario with reduced development trips as part of a 'vision and validate' strategy, details to be provided.</p> <p>Please therefore include fee for two mitigation runs (hopefully this will be limited to one).</p> <p>Additional scenarios have been requested from an air and noise quality perspective which has been sent separately via a Technical Note from Buro Happold.</p>
------------------------	--

### Time Period Selection:

Please select the time periods you would like your development assessed in.

AM (0800-0900)	<input checked="" type="checkbox"/>
IP (average hour for 1000-1600)	<input type="checkbox"/>
PM (1700-1800)	<input checked="" type="checkbox"/>

### Indicative list of Junctions for Further Assessment:

If known, please provide an indicative list of expected junctions that may be required for further assessment in the box below. This, in turn, will facilitate the delivery of strategic model outputs to inform any further detailed junction assessments. Failing that, a rough estimation of the number of junctions that **may** require further assessment will aid consultants in producing robust quotations within their proposals.

We have currently agreed the following 17 junctions will be modelled as part of the Transport Assessment, which we will require strategic model outputs for (NB LCountyC in particular have confirmed that they will agree the study area following modelling outputs). The purpose of this list is simply to allow AECOM to quote for providing detailed data over a defined area, albeit this may change later.

- Junction 2) A453/Hunter Road Roundabout (Leicestershire)
- Junction 3) Finger Farm Roundabout (National Highways)
- Junction 4) A453/EMGP1 Signal Gyratory (National Highways)
- Junction 5) M1 Junction 24 (National Highways)
- Junction 6) A453/East Midlands Airport Signal Junction (Leicestershire)
- Junction 7) A453/Grimes Gate Priority Junction (Leicestershire)
- Junction 8) A453/The Green Priority Junction (Leicestershire)
- Junction 9) A453/East Midlands Airport Roundabout (Leicestershire)
- Junction 10) A453/Walton Hill Signal Junction (Leicestershire)
- Junction 11) A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout (National Highways)
- Junction 12) M1 Junction 23 (National Highways)
- Junction 13) A50 Junction 1 (National Highways)
- Junction 14) M1 Junction 25 (National Highways)
- Junction 15) Station Road/Broad Rushes Roundabout (Leicestershire)
- Junction 16) A453/Kegworth Road dumbbell Roundabouts (Nottinghamshire)
- Junction 17) A453/Barton Lane/West Leake dumbbell Roundabouts (Nottinghamshire)

## Section 5: Pre-Modelling Outputs

This section details the options available to the client pre-modelling; typically, in aid of model assurance for project stakeholders to ensure no abortive work is undertaken. Please de-select which pre-modelling outputs you do not require, as these are usually standard documents provided to HDM.

Project Specific Study Area Model Validation Report	<input checked="" type="checkbox"/>
Local Planning Data Assumptions	<input checked="" type="checkbox"/>
Network Scheme Uncertainty Log	<input checked="" type="checkbox"/>

NB a project specific validation report is assumed not needed given a previous LMVR has already been produced; the hope being that the minor changes to the other two items above are a quick and simple exercise.

NNB AECOM confirmed in the last TWG that an addendum will be produced in light of TAG Databook changes and model comparisons undertaken.

## **Section 6: Post-Modelling Outputs**

### **Highway Model Outputs:**

The following highway model output options are available post-transport-model assignment. Some metrics below will need to be specified by the client after analysis of the forecasting report; for instance, “individual junction plots” which would tie in with the relevant sub-section in Section 4.

Area of Influence (Aol) (criteria defined as 5% and 30 PCU change)	Assumed
Highway Flow Changes within Aol	Assumed
Highway Delay Changes within Aol	☒
Individual Junction Plots – Turning Flows	☒
Individual Junction Plots – Volume/Capacity Ratio	☒
Maximum Volume/Capacity Ratio Plots	☒
Select Link Analysis of Development Traffic (link based)	☒
Provision of flow data for junction design/assessment	☒
AADT/AAWT	☒
<p>The following model outputs would be required in shape file format for the purposes of our subsequent analysis (which may overlap with above).</p> <ul style="list-style-type: none"> <li>- AM/PM Peak flows classified into Lights/Heavies/Total</li> <li>- AM/PM/AADT Development only flows classified into Lights/Heavies/Total</li> <li>- Maximum Junction VoC</li> <li>- Link Delay</li> <li>- Link Queue</li> <li>- AADT classified into Lights/Heavies/Total</li> <li>- AAWT (24hr, 18hr, 8hr) classified into Lights/Heavies/Total</li> <li>- Mean speeds of links</li> <li>- Road Class</li> </ul> <p>Further to the above extraction of cordon matrices (actual flows) for the VISSIM modelling extent is required which includes the following junctions:</p> <ul style="list-style-type: none"> <li>- M1 J24;</li> <li>- M1 J24a southbound merge onto the M1 and M1 junction 24;</li> <li>- A453/EMG Phase 1/Kegworth Bypass signal controlled gyratory;</li> <li>- M1 J23a Finger Farm roundabout (including M1/A42 on and off slip roads);</li> <li>- A453/Hunter Road/minor EMG Phase 2 access roundabout;</li> </ul> <p>The outputs from the cordon matrices should include:</p> <ul style="list-style-type: none"> <li>- Cordon matrices (in vehicle) for <ul style="list-style-type: none"> <li>o Cars / LGVs / HGVs</li> <li>o AM Peak hour / PM Peak hour (including shoulder peaks if available)</li> </ul> </li> <li>- The cordon matrices to be provided in spreadsheet format.</li> </ul> <p>The above should provide an exhaustive list of information requirements, however, as discussed with LCC's NDI team and AECOM during a meeting on 16/05/24 there may be benefit in</p>	

including for a provisional additional fee of £10k for any other additional requests, which wouldn't be invoiced if not required.	
---	--

### Variable Demand Model Outputs (full PRTM run required):

The following demand model output options are available post-transport-model assignment.

Mode Share reporting; PT, Car, Active	<input type="checkbox"/>
Trip Distance, 24-hour trip making & sustainability	<input type="checkbox"/>

### Public Transport Model Outputs (full PRTM run required):

The following highway model output options are available post-transport-model assignment.

Change in travel time, distances & speeds	<input type="checkbox"/>
Distribution Analysis/Diagrams of Development Traffic	<input type="checkbox"/>
Travel Time Changes along Key Routes	<input type="checkbox"/>
Public Transport Passenger Changes	<input type="checkbox"/>

### Environmental Model Outputs:

Environmental model outputs are available post-transport-model assignment. Please note that environmental outputs will require a separate commission via the E&T MSC Manager, please contact [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk) if you require emission or dispersion modelling to support your application.



## Section 7: Supporting Documents

### Supporting Documents:

Please provide any supporting documents that have been selected below to the E&T MSC Manager upon delivery of your proforma.

Location Plan	<input checked="" type="checkbox"/>
Access Scheme Drawings	<input checked="" type="checkbox"/>
Development Masterplan (to be updated in the coming weeks)	<input type="checkbox"/>
Other, please specify:	Click here to enter text

### Client's Expected Timescales:

Please provide an approximation for your client's timescales for this modelling commission in the box below; please take into consideration HDM's and National Highways' standard response times and sign-off procedures to avoid unrealistic timescales being provided and slippage to your project.

<p>As discussed with LCC's NDI team and AECOM during recent meetings there is an urgent need to pick the modelling work back up.</p>
--

## Section 8: Contact Details

Email the completed form, along with supporting documents to [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk)

For queries regarding the modelling process please contact:

Laura Good – ETCF & E&T MSC Manager  
Email: [ETCF@leics.gov.uk](mailto:ETCF@leics.gov.uk)

**APPENDIX 2: BWB Technical Note EMG-BWB-GEN-XX-RP-CH-0011 (EMG1 Rail Freight Terminal)**

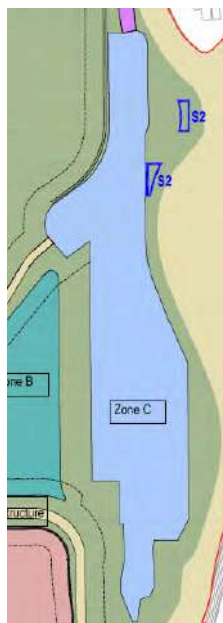
<b>Project</b>	<b>East Midlands Gateway 2 (EMG2)</b>		
<b>Document Number</b>	EMG2-BWB-GEN-XX-RP-CH-0011	<b>BWB Ref</b>	220500
<b>Author</b>	Simon Hilditch	<b>Status</b>	S2
<b>Checked</b>	Matt Corner	<b>Revision</b>	P01
<b>Approved</b>	Paul Wilson	<b>Date</b>	15.10.2024

## 1 INTRODUCTION

- 1.1 East Midlands Gateway 1 (EMG1) provided an intermodal rail terminal to serve the East Midlands. As part of the East Midlands Gateway 2 (EMG2) proposals an amendment is proposed to the EMG1 consented terminal.
- 1.2 The purpose of this note is to explain the consented terminal for EMG1, the proposed amendments for EMG2 and confirm that this does not impact the consented traffic envelope for EMG1.

## 2 EMG1 CONSENTED TERMINAL

- 2.1 The EMG1 terminal, as consented as part of the EMG1 development consent order (DCO), has the capacity to accommodate up to 16 trains per day (16 arrivals and 16 departures). It has four loading/unloading sidings, which are 775 metres long to accommodate the largest planned intermodal trains.
- 2.2 The (road) traffic envelope for the EMG1 terminal was determined, agreed and consented on the above basis.
- 2.3 Considerable space is provided within the rail terminal for the storage of containers. As part of the original EMG1 consent, the containers were permitted to be a maximum of 10m high stacks, which allowed for three high-cube (2.9m high) containers.
- 2.4 **Figure 1** below shows an extract of the Parameters Plan which is part of the EMG1 DCO.



**SCHEDULE OF PARAMETERS**

Zone	Number of Units	Maximum Development floorspace Per Zone In m <sup>2</sup>	Maximum Plateau level (In m Above Ordnance Datum)	Building Height Range measured to roof ridge / highest point
Zone B	1 to 2	938	58.40	Building 10.0m
				Container Storage max height 10.0m
Zone C	2 to 4	1,000	43.90	Building 10.0m
				Container Storage max height 10.0m
				Gantry Cranes 20.0 m max. ht

**Figure 1:** EMG1 parameters plan extract for the rail terminal

- 2.5 More recently, separate planning consents under the Town and Country Planning Act have been approved to allow the majority of the terminal to have 15m high container stacks which allow for five high-cube (2.9m high) containers to be stacked. This has significantly increased the storage capacity of the terminal. However, this has not affected throughput of the terminal which is driven by the number of trains arriving and departing, which remains at a maximum of 16 trains per day.

### **3 OPERATIONAL EFFICIENCY**

- 3.1 At the time of writing, the terminal has around six trains per day (six arrivals and six departures). The terminal is operated by reach stackers, which are large vehicles that pick up containers and move them around the terminal, stack the containers and load & unload the trains.
- 3.2 When the terminal has more trains in the future, the most efficient operation of moving containers on and off the trains is to use cranes. The maximum crane height within the consented scheme for EMG1 is 20m as shown on **Figure 1** above as this was based on the container stack height of 10m.

### **4 EMG2 AMENDMENT**

- 4.1 The proposed amendment for EMG2 is to increase the maximum crane height to around 24m which will then permit the stacking of containers to 15m.
- 4.2 Whilst this may have environmental impacts that will be assessed as part of the Environmental Assessment for EMG2, this will not increase the number of trains serving the terminal beyond the 16 assessed for the consented EMG1 scheme and as such there will be no impact on the (road) traffic generated by the terminal.
- 4.3 Consequently, the trip generation details set out within PRTM proforma v14 (dated 10 October 2024) remain suitable and robust to test the impacts of the EMG2 development, without the need for further consideration of the proposed changes at the EMG1 rail terminal.

**APPENDIX 12: Construction Traffic Calculations (document reference EMG2-BWB-GEN-XX-RP-TR-0013\_S2-P3)**

---

PROJECT NAME	East Midlands Gateway Phase 2 – Construction Traffic Calculations		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0013	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Simon Hilditch	REVISION	P3
APPROVED	Paul Wilson	DATE	11.04.25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 This Technical Note presents the methodology used to calculate the traffic generation during the construction phase of the development. It follows the same methodology adopted on other nationally significant employment DCO projects with Segro at East Midlands Gateway (EMG1) and Northampton Gateway, although without the Strategic Rail Freight Terminal element as this is not proposed at EMG2.
- 1.3 A separate Explanatory Note has been produced setting out the assumptions and process adopted in calculating construction traffic. A copy is included in **Appendix 1**.

## 2. CALCULATION METHODOLOGY

- 2.1 The following calculations consider the tonnes of material required to construct various components of the development based on a unit of measurement. The key components being:
- Roads (EMG2 and EMG1)
  - Off-site highway works (EMG2 site access, EMG1 site access, M1 J24, A453/The Green)
  - Bridges
  - Earthworks (EMG2 and EMG1)
  - Buildings (EMG2 and EMG1)
  - Landscaping (EMG2 and EMG1)
- 2.2 It should be noted that reference to EMG2 relates to the main site south of the A453 and East Midlands Airport, whilst reference to EMG1 relates to works associate with developing Plot 16 at the existing EMG site. The off-site highway works are based on the original PRTM modelling work and current mitigation design which reflect 2025 and 2035 future years. If the mitigation strategy changes as a result of the revised PRTM modelling, then this could affect the construction traffic calculations which would then need reconsidering.
- 2.3 The total number of HGV movements has been calculated based on 18.5T per movement.



- 2.4 The total number of LGV movements has been calculated based on the following percentages of the HGV movements for each construction component i.e. for 'roads (on-site)' the total number of LGVs equates to 20% of the total HGVs.
- Roads (on site) – 20%
  - Roads (off site) – 20%
  - Bridges – 40%
  - Earthworks – 50%
  - Buildings – 20%
  - Landscaping – 400%
- 2.5 The total number of cars and vans varies depending on each construction component and are based on Segro's knowledge of developing other sites. However, it has been assumed that cars have an occupancy rate of 1 person and vans have an occupancy rate of 2 people.
- 2.6 The number of construction days has been calculated at 49 weeks x 5 day = 245 days per year.
- 2.7 To establish daily construction movements, total construction traffic has been divided by the days per year x duration in years. A separate Excel Spreadsheet has been produced containing the detailed calculations, contents of which are included at **Appendix 2**, whilst an extract is shown below. A copy of the Excel spreadsheet can be provided on request. **Table 1** subsequently shows the daily construction vehicle movements across the five-year construction period for each vehicle type. This is broken down by works at EMG2, EMG1 and external highway works i.e. at M1 J24 and A453/The Green based on the current mitigation strategy, which is subject to confirmation using outputs from the revised PRTM modelling.
- 2.8 To give an example, for the 'Roads (EMG2 Main Site)' component, this is expected to be on-going for a total of 367.5 days based on 5 days per week for 49 weeks multiplied by 1.5 years ( $49 \times 5 \times 1.5$ ). Across the 367.5 days, there are expected to be a total of 7,750 HGV movements based on the total mass of material required. The daily number of HGVs has been calculated by dividing the total 7,750 HGV movements by 367.5 days, resulting in 21.09 daily HGVs ( $7,750 / 367.5$ ).
- 2.9 The daily number of LGV movements (4.22) has then been calculated based on 20% of the daily number of HGVs ( $21.09 \times 0.2 = 4.22$ ).

# CONSTRUCTION TRAFFIC CALCULATIONS

## EAST MIDLANDS GATEWAY PHASE 2



### Construction Traffic Movements (One Way)

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals					Yrs	Day	Average Movements per Day				
								HGV	LGV	Car	Van	Total			HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425	1.50	367.50	21.09	4.22	42.18	31.63	99.12
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320	1.00	245.00	12.45	2.49	7.47	7.47	29.88
Highway Works (M1J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400	2.00	490.00	32.65	6.53	19.59	19.59	78.37
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340	1.00	245.00	3.98	0.80	2.39	2.39	9.55
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192	0.20	49.00	1.63	0.33	0.98	0.98	3.92
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815	1.00	245.00	5.92	1.18	11.84	8.88	27.82
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240	1.50	367.50	4.35	1.74	8.16	8.16	22.42
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600	1.50	367.50	4.35	2.18	8.71	32.65	47.89
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650	1.00	245.00	0.61	0.31	1.22	4.59	6.73
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636	5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553	1.00	245.00	16.48	3.30	8.24	10.98	38.99
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552	2.00	490.00	0.66	2.64	1.32	2.64	7.25
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.11	0.44	0.22	0.44	1.21
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>			<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

NOTE1: highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.

NOTE2: EMG1 proposals not included, potentially add to buildings as sq ft?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1J24)	Highway works (EMG1 site access)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2)	E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscap e (EMG2)	Landscap e (EMG1)
Yr1	HGV	111.33	49.95	27.10	34.29	10.54	12.45	32.65	3.98	1.63	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr1	LGV	27.11	14.24	6.02	6.86	2.11	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr1	Car	97.03	52.55	23.91	20.57	21.09	7.47	19.59	2.39	0.98	11.84	4.08	8.71	1.22	9.89	8.24	1.32	0.22
Yr1	Vans	123.69	75.84	27.28	20.57	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr2	HGV	100.47	67.82	-	32.65	21.09	-	32.65	-	-	-	-	4.35	2.18	39.54	-	0.66	-
Yr2	LGV	24.12	17.59	-	6.53	4.22	-	6.53	-	-	-	-	1.74	1.09	7.91	-	2.64	-
Yr2	Cars	95.37	75.78	-	19.59	42.18	-	19.59	-	-	-	-	8.16	4.35	19.77	-	1.32	-
Yr2	Vans	104.71	85.12	-	19.59	31.63	-	19.59	-	-	-	-	8.16	16.33	26.36	-	2.64	-
Yr3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
TOTAL																		

**Table 1 – Daily Construction Vehicle Movements by Year**

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
<b>Yr 1</b>	<b>359</b>	<b>193</b>	<b>84</b>	<b>82</b>	<b>718</b>	<b>385</b>	<b>169</b>	<b>165</b>
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
<b>Yr 2</b>	<b>325</b>	<b>246</b>	-	<b>78</b>	<b>649</b>	<b>493</b>	-	<b>157</b>
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
<b>Yr 3</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 4</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 5</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-

- 2.10 For robustness, the calculations assume that all construction components would start in Year 1. The details in **Table 1** show that peak construction traffic would occur in Year 1 with a total of 718 daily two-way construction vehicle movements, comprising 385 movements for works at EMG2, 169 movements for works at EMG1 and 165 movements for external highway works. **Tables 2** and **3** set out the assumptions made for the timings of arrivals and departures for each vehicle type has been adopted.

**Table 2. Percentage Timings of Arrivals**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table 3. Percentage Timings of Departures**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- 2.11 The above assumptions were previously agreed for the East Midlands Gateway and Northampton Gateway DCO projects.
- 2.12 **Tables 4, 5 and 6** summarise the peak hour construction traffic for the EMG2 works, EMG1 works and external highway works respectively, based on the worst-case Year 1 construction period, taking into account the above assumptions. The Excel spreadsheet shows the volume of construction traffic across all 13 hours (0600 to 1900 hours) for clarity.

**Table 4. Peak Hour Construction Traffic Generation (EMG2 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	7	7	14	1	1	2
LGV	2	2	4	0	0	0
Car	11	2	13	3	16	19
Vans	23	5	27	6	35	41
<b>Total</b>	<b>43</b>	<b>16</b>	<b>58</b>	<b>10</b>	<b>52</b>	<b>62</b>

**Table 5. Peak Hour Construction Traffic Generation (EMG1 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	4	4	8	1	1	2
LGV	1	1	2	0	0	0
Car	5	1	6	1	7	8
Vans	8	2	10	2	12	14
<b>Total</b>	<b>18</b>	<b>8</b>	<b>26</b>	<b>4</b>	<b>20</b>	<b>24</b>

**Table 6. Peak Hour Construction Traffic Generation (External Highway works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	5	5	10	1	1	2
LGV	1	1	2	0	0	0
Car	4	1	5	1	6	7
Vans	6	2	8	2	9	11
<b>Total</b>	<b>16</b>	<b>9</b>	<b>25</b>	<b>4</b>	<b>16</b>	<b>20</b>

- 2.13 **Table 7** calculates the total peak hour construction traffic for all three sets out works, calculated as a sum of the values in **Tables 4, 5** and **6**.

**Table 7. Peak Hour Construction Traffic Generation (Total)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	17	17	34	3	3	6
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total</b>	<b>77</b>	<b>32</b>	<b>108</b>	<b>18</b>	<b>89</b>	<b>107</b>

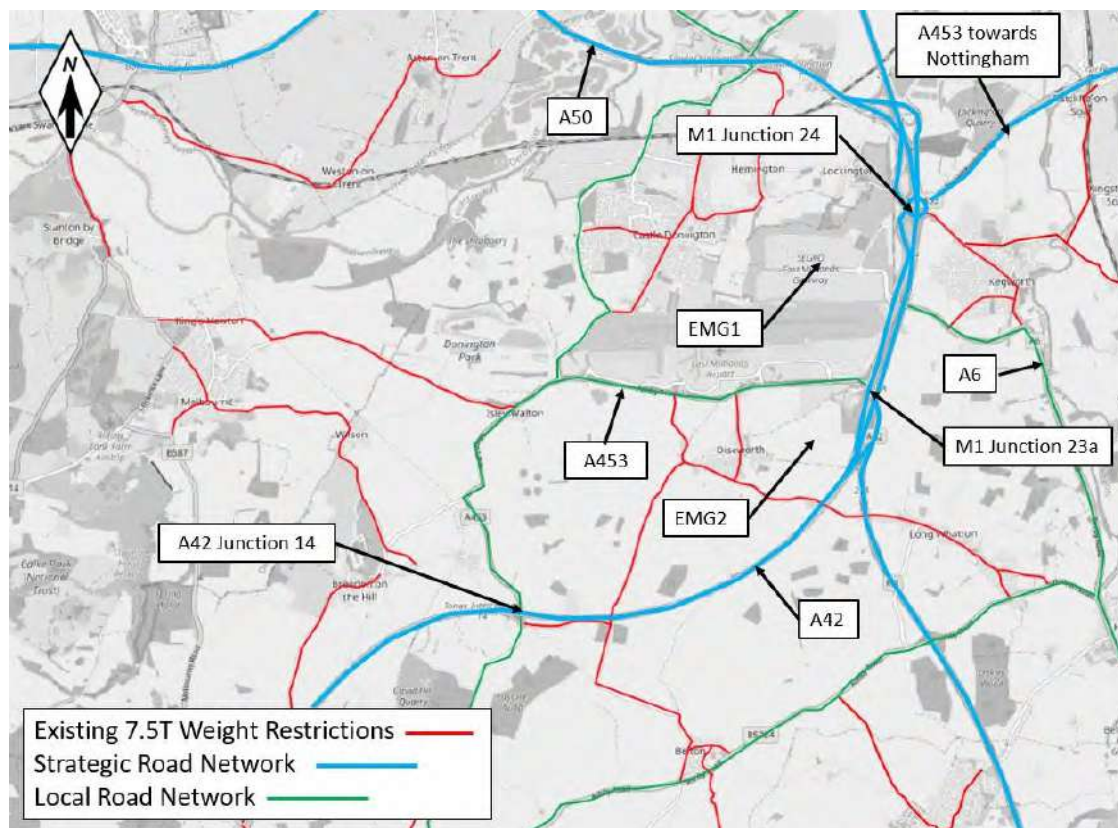
- 2.14 The details show that there is expected to be a total of 108 two-way construction vehicle movements in the morning peak hour and 107 in the evening peak hour, including both movements by operatives (car and van), LGVs and HGVs.

### **3. PROPOSED ASSESSMENT METHODOLOGY**

- 3.1 Whilst peak hour construction movements are expected to be low and do not warrant any further capacity assessment on the surrounding highway network, it is proposed that the peak hour/daily traffic is tested through the Pan Regional Transport Model (PRTM) to provide outputs to inform the ES Chapter, which requires an assessment of AADT construction traffic. Hence peak hour flows will be modelled and a factor will be applied in PRTM to derive AADT movements. This factor will mirror the daily construction vehicle calculations presented in **Table 1**.
- 3.2 The loading points of construction traffic in PRTM can be split by the various locations based on the values in **Tables 4, 5** and **6**. The distribution of construction traffic will be undertaken within PRTM based on the most appropriate methodology, which at this stage is expected to be via a gravity model approach.
- 3.3 The PRTM modelling of construction traffic will provide an indication of the likely increase in traffic across the network, which can be compared against the 2028/2038 forecast base year flows (without development), which are being provided as part of the Stage 1 modelling by AECOM. This will provide an understanding of the percentage increase in traffic which will be detailed in the ES Chapter.
- 3.4 Further details with regard to the routing of construction traffic and measures to limit impacts on the network will be provided in a separate Construction Traffic Management Plan. This includes a commitment to capping construction vehicle movements to those shown in **Tables 4, 5, 6** and **7** and monitoring traffic movements over the construction phase. In addition, consideration can be given to the impacts of lane closures and road space needed to deliver the external highways works, but again this will be covered separately at the appropriate time. HGV route choice will however need to consider existing weight restrictions on the surrounding roads, of which there are a number surrounding the site (as shown on **Figure 1**), which will help limit any impacts along the most sensitive routes and ensure that HGVs use the more strategic routes when travelling to the site. These weight restrictions are already coded into PRTM and was confirmed as part of the Base Model Validation Report.



**Figure 1. Existing Weight Restrictions**



## 4. SUMMARY

- 4.1 This Technical Note presents the traffic generation calculations for the construction phase of the EMG2 development. It follows previous methodologies adopted for other large DCO applications, including at East Midlands Gateway and Northampton Gateway and are based on inputs from an Excel spreadsheet provided by Segro.
- 4.2 The calculations consider each construction component individually and calculate the daily and peak hour construction vehicle movements for cars, LGVs, vans and HGVs across the five-year construction period.
- 4.3 The calculations confirm that peak construction activity would occur in Year 1, with a total of 718 daily two-way construction vehicle movements. When converted to peak hour traffic, there is expected to be a total of 108 movements in the AM peak hour and 107 movements in the PM peak hour (two-way). Whilst peak hour activity is expected to be low, construction traffic is proposed to be tested in PRTM for the purpose of obtaining AADT information for the ES Chapter.

## Appendix 1. Explanatory Note

## EMG2 Construction Traffic Calculations – Explanatory Note

### 1. Introduction

- 1.1 This Explanatory Note has been prepared to provide guidance to users reading BWB's Construction Traffic Calculations Technical Note ref: EMG2-BWB-GEN-XX-RP-TR-0013, which calculates the construction traffic forecasts for the East Midlands Gateway Phase 2 project (EMG2). It also provides guidance on navigating the accompanying Excel spreadsheet so that users can understand how the calculations have been derived and any assumptions made.

### 2. Methodology

- 2.1 The Excel spreadsheet includes two tabs. The 'calculations' tab provides the inputs and assumptions behind the calculations, whilst the 'Daily\_Hourly Flows' tab summarises the data for the purposes of reporting.
- 2.2 Starting with 'calculations' tab, this firstly lists the various construction components, the quantity of material needed to construct each component and the unit of measurement down the left-hand side.

Component	Input Unit	Quantity						Development Totals				
			HGV	LGV	Car	Van	Total	HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	7	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

- 2.3 The volume of HGVs is determined based on a resourced programme with standard elements of work, so in this instance the number of visits needed to deliver the quantity of material to build each particular component and is applied as a factor. The factors reflect historic survey work undertaken by Segro on existing construction sites. As an example, a HGV factor of 0.5 is applied to all highway works.

- 2.4 This factor is then used to calculate the total number of HGV movements that would be required to deliver the total quantum of material for each construction component.

Component	Input Unit	Quantity						Development Totals				
			HGV	LGV	Car	Van	Total	HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	7	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

- 2.5 The total number of LGV movements are then derived as a percentage of total HGV movements, again reflecting historic surveys Segro has undertaken. The following percentages are adopted for each construction component, noting that a higher proportion of LGVs are generated for landscaping purposes compared to highway works. These values reflect one-way movements.

- Roads = 20%
- Highway works = 20%
- Bridges = 40%
- Earthworks = 50%
- Buildings = 20%
- Landscaping = 400%

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.6 The methodology for calculating car and van movements is the same and based on a resource programme with a standard element of works and includes movements from operatives, management, visitors and supervisors, which derives a factor similar to HGVs and LGVs. The factors reflect the following occupancy rates:

- Car = 1 person
- Van = 2 persons

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.7 Finally, total construction vehicle movements are calculated as a sum of HGVs, LGVs, cars and vans.

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.8 The amount of time to complete each construction component is then set in years and reflects Segro's construction programme for EMG2. The number of years is then converted to working days, assuming 5 day working weeks for 49 weeks ((49 x 5) x no. of years). For example, the number of working days expected to complete the 'Roads (EMG2 Main Site)' component is 367.50 days ((49 x 5) x 1.5).



Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.9 The daily number of vehicle movements for each construction component is then calculated by dividing the total number of vehicles across the entire construction programme by the number of working days. For example, daily HGV movements for the 'Roads (EMG2 Main Site)' component is 21.09 calculated as (7,750 / 367.50).

Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.10 The daily number of movements is then profiled out for each year of construction based on the length of time that particular component is expected to take. To ensure a worst-case assessment, all components are set to start in Year 1, however in reality components will be staggered, for example a certain amount of earthworks is required before you can start constructing buildings.
- 2.11 Where a particular component is expected to end mid-way through a year i.e. 'Roads (EMG2 Main Site)' has a duration of 1.5 years, the daily values are taken in full for one of the years and divided by two for the other year, to calculate an average. This depends on each component, for example earthworks start early on in the construction programme, so daily movements for earthworks are taken in full for Year 1, whilst road construction would start later, and so daily movements are taken in full for Year 2.

[illegible]

Using the daily number of movements for each year of construction, total movements for works at EMG2, EMG1 and external highway works are calculated.

	Type	Overall Total	Total DMG	Total EMG1	Total External	Highway costs (DMG v site access)	Highway costs (EMG1 v access)	Highway costs (DMG v site access)	Highway costs (EMG1 v access)	Bridges	L/W BRAG1/L/W BRAG1	Building (EMG2)	Building (EMG2)	Landscaping (EMG2)	Landscaping (EMG2)				
W#1	HGV	113.93	68.99	27.43	54.28	10.56	32.45	32.05	8.48	1.05	5.92	2.18	4.35	0.51	19.77	56.48	0.66	0.1	
W#1	LOV	27.11	6.84	6.80	6.80	2.11	2.45	6.53	0.80	0.33	1.18	0.07	1.18	0.23	-	3.95	3.92	2.44	0.4
W#1	Cap	87.08	60.15	20.64	49.57	11.02	34.82	19.59	2.98	0.68	17.88	4.08	8.71	1.22	888	8.24	1.73	0.2	
W#1	Vans	123.69	78.84	27.28	20.57	21.58	19.59	2.09	0.98	0.88	4.28	32.65	4.59	13.38	99.98	2.64	0.6	0.4	
W#2	HGV	188.47	108.47	30.48	52.48	21.09	35.05	21.09	35.05	-	3.75	1.18	3.75	-	39.68	-	-	-	
W#2	LOV	36.12	13.58	-	6.58	4.22	-	1.74	-	-	1.04	1.08	-	-	7.81	-	-	-	
W#2	Cars	95.37	27.70	-	13.98	8.18	-	8.59	-	-	8.15	4.15	-	-	19.73	-	-	-	
W#2	Vans	146.71	104.18	18.58	-	16.63	19.55	-	-	-	8.15	16.33	-	-	36.86	-	-	-	
W#3	HGV	8.94	86.44	-	-	-	-	-	-	-	-	-	-	-	19.54	-	-	-	
W#3	LOV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-	
W#3	Cap	18.77	18.77	-	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
W#3	Vans	26.46	26.46	-	-	-	-	-	-	-	-	-	-	-	26.46	-	-	-	
W#4	HGV	18.54	38.54	-	-	-	-	-	-	-	-	-	-	-	18.54	-	-	-	
W#4	LOV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-	
W#4	Cap	18.77	18.77	-	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
W#4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-	
W#5	HGV	30.54	30.54	-	-	-	-	-	-	-	-	-	-	-	30.54	-	-	-	
W#5	LOV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-	
W#5	Cap	18.77	18.77	-	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
W#5	Vans	26.96	26.96	-	-	-	-	-	-	-	-	-	-	-	26.96	-	-	-	

Within the 'Daily\_Hourly\_Flows' tab, the average number of daily movements (one-way) for each vehicle type across each year are calculated using the values above (left hand side of table). These are then multiplied by two to derive two-way movements (right hand side of table), assuming that any vehicle arriving must then depart.

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
Yr 1	359	193	84	82	718	385	169	165
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
Yr 2	325	246	-	78	649	493	-	157
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
Yr 3	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
Yr 4	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
Yr 5	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-



- 2.14 In this instance, peak construction traffic is expected to occur in Year 1, as highlighted yellow in the table above. These worst-case values have therefore been adopted when converting daily movements to peak hour.
- 2.15 The following percentage breakdown of arrivals and departures for each vehicle type is assumed, with the traditional network peak periods highlighted yellow. These percentages are based on historic survey work undertaken by Segro.

% Arrivals by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
	100%	100%	100%	100%

% Departures by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
	100%	100%	100%	100%

- 2.16 Hourly arrivals and departures for each vehicle type are then calculated by multiplying the daily one-way movements to the percentages above. This has been split by the various locations, EMG2, EMG1 and Off-site highway works as they will have different origin/destination points on the network.

Inbound movements by Hour (EMG2) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	3	5
07:00-08:00	5	1	24	24
08:00-09:00	7	2	11	18
09:00-10:00	5	1	3	4
10:00-11:00	5	1	1	2
11:00-12:00	5	1	1	2
12:00-13:00	5	1	1	2
13:00-14:00	4	1	1	2
14:00-15:00	4	1	1	2
15:00-16:00	4	1	1	2
16:00-17:00	2	1	1	2
17:00-18:00	1	0	3	4
18:00-19:00	1	0	3	1
	45	11	54	80

Inbound movements by Hour (EMG1) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	3	1	11	12
08:00-09:00	4	1	5	8
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	1
11:00-12:00	3	1	0	1
12:00-13:00	3	1	0	1
13:00-14:00	2	1	0	1
14:00-15:00	2	1	0	1
15:00-16:00	2	0	0	1
16:00-17:00	1	0	1	1
17:00-18:00	1	0	1	1
18:00-19:00	1	0	1	0
	28	8	22	29

Inbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	3	1	4	4
08:00-09:00	3	1	4	4
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	0
11:00-12:00	3	1	0	0
12:00-13:00	3	1	0	0
13:00-14:00	3	1	0	0
14:00-15:00	3	1	0	0
15:00-16:00	3	1	0	0
16:00-17:00	1	0	1	0
17:00-18:00	1	0	1	0
18:00-19:00	1	0	1	0
	32	8	17	17

Outbound movements by Hour (EMG2) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	5	1	2	2
08:00-09:00	7	2	2	2
09:00-10:00	5	1	2	2
10:00-11:00	5	1	1	2
11:00-12:00	5	1	1	2
12:00-13:00	5	1	1	2
13:00-14:00	4	1	1	2
14:00-15:00	4	1	1	2
15:00-16:00	4	1	1	2
16:00-17:00	2	1	4	6
17:00-18:00	1	0	14	24
18:00-19:00	1	0	14	9
	45	11	54	80

Outbound movements by Hour (EMG1) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	3	1	1	1
08:00-09:00	4	1	1	1
09:00-10:00	3	1	0	1
10:00-11:00	3	1	0	1
11:00-12:00	3	1	0	1
12:00-13:00	3	1	0	1
13:00-14:00	2	1	0	1
14:00-15:00	2	0	0	1
15:00-16:00	2	0	0	1
16:00-17:00	1	0	4	8
17:00-18:00	1	0	7	8
18:00-19:00	1	0	4	3
	28	8	22	30

Outbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	3	1	4	4
08:00-09:00	3	1	4	4
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	0
11:00-12:00	3	1	0	0
12:00-13:00	3	1	0	0
13:00-14:00	3	1	0	0
14:00-15:00	3	1	0	0
15:00-16:00	3	1	0	0
16:00-17:00	1	0	1	0
17:00-18:00	1	0	1	0
18:00-19:00	1	0	1	0
	32	8	17	17

- 2.17 From this, total arrivals and departures can be calculated. This provides the final peak hour construction movements, which are set out in the report ref EMG2-BWB-GEN-XX-RP-TR-0013 and to be used for further assessment.

Inbound movements by Hour (total development) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	12
07:00-08:00	11	3	44	56
08:00-09:00	17	3	19	25
09:00-10:00	11	3	5	6
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	2	2
16:00-17:00	4	2	2	2
17:00-18:00	3	1	5	6
18:00-19:00	2	1	5	1
	110	29	98	120

Outbound movements by Hour (total development) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	11	3	3	2
08:00-09:00	17	3	4	5
09:00-10:00	11	3	4	2
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	8	10
16:00-17:00	4	2	15	37
17:00-18:00	3	1	29	37
18:00-19:00	2	1	24	15
	110	29	98	120

- 2.18 The formulas in-built within the spreadsheet assume that vans have an occupancy rate of 3 people. It has been agreed with the TWG for vans to adopt an occupancy rate of 2 people per van. The values for vans in the tables above have therefore been multiplied by 1.5 to calculate this. These are shown in the tables at the bottom of the excel spreadsheet, with the revised total development construction vehicles shown below.

Inbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	18
07:00-08:00	11	3	44	84
08:00-09:00	17	3	19	38
09:00-10:00	11	3	5	9
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	2	3
16:00-17:00	4	2	2	3
17:00-18:00	3	1	5	9
18:00-19:00	2	1	5	2
	110	29	98	180

Outbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	11	3	3	3
08:00-09:00	17	3	4	8
09:00-10:00	11	3	4	3
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	8	15
16:00-17:00	4	2	15	56
17:00-18:00	3	1	29	56
18:00-19:00	2	1	24	23
	110	29	98	180

**Appendix 2. Construction Traffic Flow Calculations Spreadsheet Extract**

Construction Traffic Movements (One Way)

								Development Totals								Average Movements per Day					
Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	HGV	LGV	Car	Van	Total	Yrs	Day	HGV	LGV	Car	Van	Total		
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425	1.50	367.50	21.09	4.22	42.18	31.63	99.12		
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320	1.00	245.00	12.45	2.49	7.47	7.47	29.88		
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400	2.00	490.00	32.65	6.53	19.59	19.59	78.37		
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340	1.00	245.00	3.98	0.80	2.39	2.39	9.55		
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192	0.20	49.00	1.63	0.33	0.98	0.98	3.92		
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815	1.00	245.00	5.92	1.18	11.84	8.88	27.82		
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240	1.50	367.50	4.35	1.74	8.16	8.16	22.42		
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600	1.50	367.50	4.35	2.18	8.71	32.65	47.89		
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650	1.00	245.00	0.61	0.31	1.22	4.59	6.73		
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636	5.00	1,225.00	39.54	7.91	19.77	26.36	93.58		
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553	1.00	245.00	16.48	3.30	8.24	10.98	38.99		
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552	2.00	490.00	0.66	2.64	1.32	2.64	7.25		
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.11	0.44	0.22	0.44	1.21		
								85,479	19,270	63,900	78,370	247,019									

NOTE1: highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.  
NOTE2: EMG1 proposals not included, potentially add to buildings as sq ft?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1J24)	Highway works (EMG1 site access)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2)	E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscape (EMG2)	Landscape (EMG1)
Yr 1	HGV	111.33	49.95	27.10	34.29	10.54	12.45	32.65	3.98	1.63	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr 1	LGV	27.11	14.24	6.02	6.86	2.11	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr 1	Car	97.03	52.55	23.91	20.57	21.09	7.47	19.59	2.39	0.98	11.84	4.08	8.71	1.22	9.89	8.24	1.32	0.22
Yr 1	Vans	123.69	75.84	27.28	20.57	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr 2	HGV	100.47	67.82	-	32.65	21.09	-	32.65	-	-	-	-	4.35	2.18	39.54	-	0.66	-
Yr 2	LGV	24.12	17.59	-	6.53	4.22	-	6.53	-	-	-	-	1.74	1.09	7.91	-	2.64	-
Yr 2	Cars	95.37	75.78	-	19.59	42.18	-	19.59	-	-	-	-	8.16	4.35	19.77	-	1.32	-
Yr 2	Vans	104.71	85.12	-	19.59	31.63	-	19.59	-	-	-	-	8.16	16.33	26.36	-	2.64	-
Yr 3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr 4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr 5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
TOTAL																		

**APPENDIX 13: Covid-19 Assessment (document reference EMG2-BWB-GEN-XX-RP-TR-00014\_S2-P1)**

---

PROJECT NAME	East Midlands Gateway Phase 2 – Covid-19 Assessment		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0014	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Paul Wilson	REVISION	P1
APPROVED	Matt Corner	DATE	07/01/25

## 1. INTRODUCTION

1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.

1.2 It has been agreed that the EMG2 development traffic is tested through the Pan Regional Transport Model (PRTM), a strategic highway assignment model managed by AECOM on behalf of Leicestershire County Council (LCC). The currently available version of PRTM has a base year of 2019, which pre-dates the Covid-19 pandemic. This Technical Note therefore reviews traffic data across the road network in the vicinity of the site to understand whether traffic flows have changed from 2019 to 2023. This will determine whether a sensitivity test is required that adjusts the base traffic flows in PRTM to account for changes since the Covid-19 pandemic and responds to advice contained in the Department for Transport 'TAG Unit M4 – Forecasting and Uncertainty' document, which states at Paragraph B.3.2:

*“where model rebasing is judged not to be practical, for analysts to assess the extent of the divergence of travel patterns and volumes from pre-pandemic projections, using the best available data and evidence. If it is clear COVID-19 has had an impact on travel, this should be represented using an appropriate change in travel demand across the trip matrix, considering trip purpose and patterns as appropriate, and apply this to produce an updated core forecast.”*

1.3 This Technical Note builds on previous information provided by AECOM in July 2024 (document ref: East Midlands Gateway Phase 2 – proposed approaches to COVID-19 strategic model forecast sensitivity tests). The traffic data presented in this Technical Note has been taken from the Webtris and LCC's 'C2' databases and has been reviewed by both AECOM and BWB.

## 2. TRAFFIC DATA ANALYSIS

### Counter Locations

2.1 Traffic data has been extracted from six permanent counters located on the A453 Ashby Road, A453 Remembrance Way, M1 and A42 for various months in 2019 and 2023. The locations of the six counters are shown at **Figure 1**, which include links on the road network in the vicinity of the site.



**Figure 1. Traffic Counter Locations**



### **AECOM Data Analysis**

2.2 AECOM has undertaken an assessment of the change in traffic at all six counter locations. Their assessment compared traffic during the months of April, May and June, which aligns with the months used to develop the PRTM 2019 base year model. The assessment identified neutral days in 2019 and 2023 by adopting the following filtering criteria:

- Fridays, Saturdays and Sundays;
- avoiding the week before and after easter;
- avoiding the Thursday before and all of the week of a bank holiday; and
- avoiding school holidays.

2.3 The data was converted to Passenger Car Units (PCUs) to provide an understanding of the change in both vehicle flows and types (i.e. the proportion of HGVs) which influences the capacity of junctions. The raw data is available in a separate Excel spreadsheet which has been issued to the authorities separately and can be provided upon request if required, whilst **Table 1** summarises the average peak hour and daily traffic data across all six counter locations.

**Table 1. AECOM Analysis (April, May & June 2019 vs 2023 PCU flows)**

Counter Location	2019 Flow	2023 Flow	Change (no.) (2023-2019)	Change (%) ((2023-2019)/2019)
AM peak hour (08:00-09:00)	29,107	28,429	-679	-2.3%
PM peak hour (17:00-18:00)	30,422	29,272	-1,150	-3.8%
Daily 24-hours (00:00-24:00)	448,565	442,725	-5,839	-1.3%

- 2.4 The data shows that average peak hour and daily PCU flows have reduced from 2019 to 2023 as an average across all six counter locations.

### **BWB Data Analysis**

- 2.5 BWB has undertaken a separate assessment of the change in traffic flows at the four Webtris counters on the M1, A453 and A42 (i.e. excluding the Ashby Road counters, which are unable to be accessed). The assessment compared traffic during the months of March and October, as neutral survey months. However, some counters did not record data for these months, so where this was the case, September data has been analysed instead.
- 2.6 The data compared total vehicles on a Tuesday, Wednesday and Thursday during the weeks commencing 04/03/19, 07/03/23 and 30/09/23, 09/10/23, unless otherwise stated. Again, the raw data is available in a separate Excel spreadsheet which has been issued to the authorities separately and can be provided upon request if required, whilst **Table 2** summarises the average peak hour and daily traffic flows across all four counter locations. It should be noted that there were a small number of anomalies identified in the traffic flow data, where flows appeared exceptionally low (possibly due to a collision or roadworks). These anomalies were excluded from the calculations and are highlighted in the Excel spreadsheet.

**Table 2. BWB Analysis (March & October 2019 vs 2023 total flows)**

Counter Location	2019 Flow	2023 Flow	Change (no.) (2023-2019)	Change (%) ((2023-2019)/2019)
AM peak hour (08:00-09:00)	18,877	18,691	-186	-1.0%
PM peak hour (17:00-18:00)	20,511	19,175	-1,336	-6.5%
Daily 24-hours (00:00-24:00)	333,639	326,897	-6,742	-2.0%

- 2.7 The data shows that similar to AECOMs analysis; average peak hour and daily vehicle flows reduced from 2019 to 2023 as an average across all four Webtris counter locations.

### **Covid Sensitivity Assessment**

- 2.8 The data analysed by both AECOM and BWB shows that 2023 traffic across all six counter locations on the road network is lower than what was recorded in 2019 (as both PCUs or total vehicles). The data shows the following range in the traffic flow changes:
- AM peak hour = -1.0% to -2.3% reduction in traffic
  - PM peak hour = -3.8% to -6.5% reduction in traffic
  - Daily 24-hour = -1.3% to -2.0% reduction in traffic
- 2.9 The evidence demonstrates how there has been an overall reduction in traffic flows from 2019 to 2023 across the road network in the vicinity of the site, even when accounting for HGVs proportions and PCU factors. The base flows within PRTM version 2019 should therefore provide a robust assessment of the forecast traffic levels meaning a sensitivity test that adjusts the background traffic to reflect changes since the Covid-19 pandemic should not be required and would result in reducing background traffic in the model.

## **3. SUMMARY**

- 3.1 BWB and AECOM have analysed traffic data at six counter locations on the road network in the vicinity of the East Midlands Gateway Phase 2 development to understand whether flows have changed from 2019 (base model year in PRTM) to 2023. This was to determine whether the strategic modelling being undertaken using the PRTM needs to include a Covid-19 sensitivity test to account for any increases in traffic since 2019.
- 3.2 The key conclusions from this Technical Note are as follows:
- The Webtris and Leicestershire 'C2' counter point locations confirm that peak hour and daily traffic flows are lower in 2023 compared to 2019.
  - The data shows that when applying PCU factors to the traffic data to account for HGV impacts, peak hour and daily PCU flows continue to remain lower in 2023 compared to 2019, hence there has been no significant increase in HGVs.
  - Therefore, the base model traffic data in PRTM 2019 version provides a robust assessment for testing the EMG2 impacts in the model.
- 3.3 Consequently, the Stage 1 modelling being undertaken in PRTM should provide a robust assessment of the overall forecast traffic levels and a separate Covid-19 sensitivity test is not required in PRTM.

**APPENDIX 14: Highway Safety Position Statement (document reference EMG2-BWB-  
GEN-XX-RP-TR-00015\_S2-P1)**

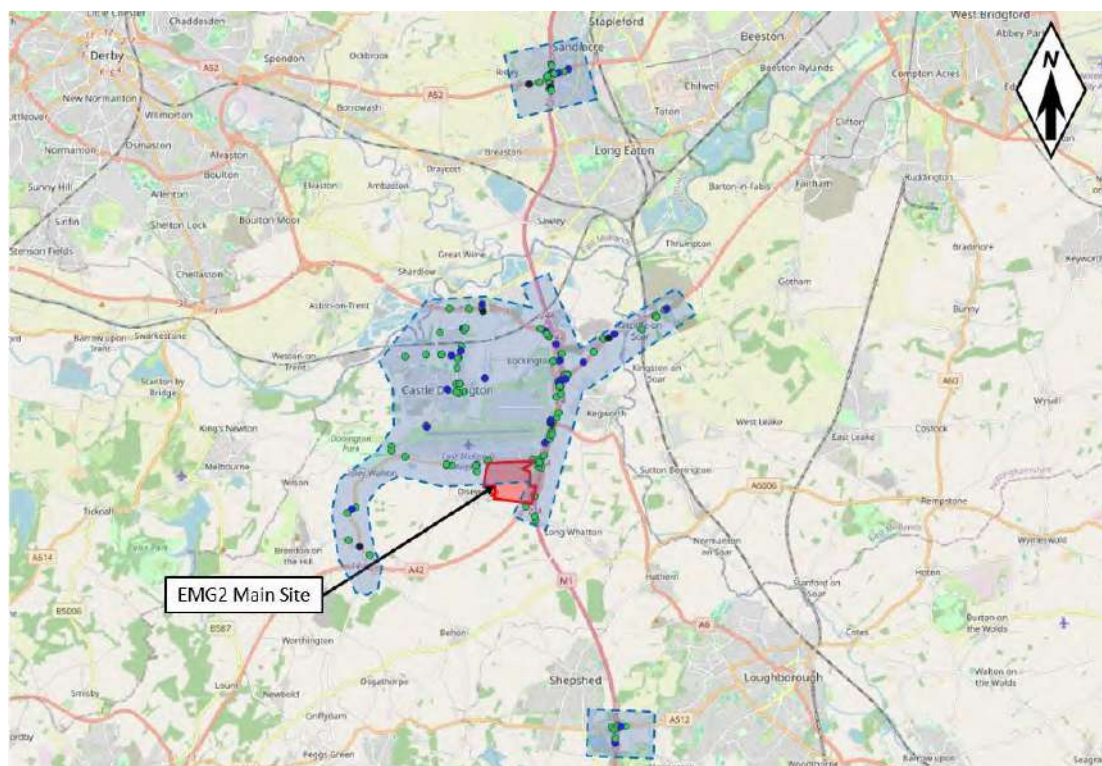
---

PROJECT NAME	East Midlands Gateway Phase 2 – Highway Safety & Road Casualty Position Statement		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0015	BWB REF	220500
AUTHOR	Fred Summerfield	STATUS	S2
CHECKED	Matt Corner	REVISION	P1
APPROVED	Paul Wilson	DATE	14/03/25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway employment development (EMG2). The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 As part of the Transport Assessment process, detailed Personal Injury Collision (PIC) data has been obtained from the relevant highway authorities of key junctions and links on the surrounding highway network which form the initial proposed study area. The PIC data has been analysed to identify whether there are any existing safety issues that could be unacceptably impacted by additional traffic from the proposed development and therefore whether any further assessment is required as part of the Transport Assessment.
- 1.3 The assessment seeks to provide an understanding of where safety issues are already present on the network, for the EMG2 development to consider from the outset when proposing highway mitigation to minimise and improve the risk of collisions and road casualties. It follows advice contained within the National Networks National Policy Statement (March 2024), and in particular Paragraphs 4.57 to 4.61 which relate to 'road safety' and are included at **Appendix 1**.
- 1.4 **Figure 1** shows the study area of the highway network, which includes roads on both the Strategic Road Network and local road network. PIC data has been obtained for the latest six-year period between 1 January 2019 and 23 October 2024. A total of 175 PICs were recorded within the study area, of which 125 were classified as slight, 42 as serious and 8 as fatal. The raw PIC data is included in the following appendices:
- **Appendix 2** – Leicestershire County Council network
  - **Appendix 3** – M1 Junction 25 (Derbyshire)
  - **Appendix 4** – A453 Remembrance Way (Nottinghamshire)

Figure 1. Personal Injury Collision Study Area



1.5 **Table 1** summarises the number of PICs that have occurred each year since 2019.

**Table 1. Number of Personal Injury Collisions by year**

	2019	2020	2021	2022	2023	2024
Slight	21	9	26	31	19	19
Serious	2	8	8	7	9	8
Fatal	0	2	0	0	3	3
<b>Total</b>	<b>23</b>	<b>19</b>	<b>34</b>	<b>38</b>	<b>31</b>	<b>30</b>

1.6 The details show that there has been a relatively consistent number of PICs during each of the years assessed, equating to 29 per annum. There was a slight reduction in PICs during 2020 possibly due to the Covid-19 Pandemic and significant reductions in traffic flows and journeys during that time.

1.7 Section 2 of this Technical Note analyses the PIC data individually at the following locations/junctions, seeking to understand whether there are any existing safety problems that need assessing in further detail within the Transport Assessment:

- Junctions 1 & 2) Site frontage and A453/Hunter Road Roundabout
- Junction 3) Finger Farm Roundabout
- Junction 4) A453/EMG1 access junction



- Junction 5) M1 Junction 24
- Junction 6) A453/East Midlands Airport Signal Junction
- Junction 7) A453/Grimes Gate Priority Junction
- Junction 8) A453/The Green Priority Junction
- Junction 9) A453/East Midlands Airport Roundabout
- Junction 10) A453/Walton Hill Signal Junction (Leicestershire)
- Junction 11) A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout
- Junction 12) M1 Junction 23
- Junction 13) A50 Junction 1
- Junction 14) M1 Junction 25
- Junction 15) Station Road/Broad Rushes Roundabout
- Junction 16) A453/Kegworth Road dumbbell Roundabouts
- Junction 17) A453/Barton Lane/West Leake dumbbell Roundabouts

## **2. PERSONAL INJURY COLLISION DATA ANALYSIS**

### **Junctions 1 & 2: Site Frontage and A453/Hunter Road Roundabout**

- 2.1 **Figure 2** shows an extract of the PIC records across the site frontage and at the A453/Hunter Road roundabout. The records confirm there have been no PICs within this location over the latest 6-year period. Therefore, it can be concluded that there are no existing safety problems at this location and no further assessment is required.

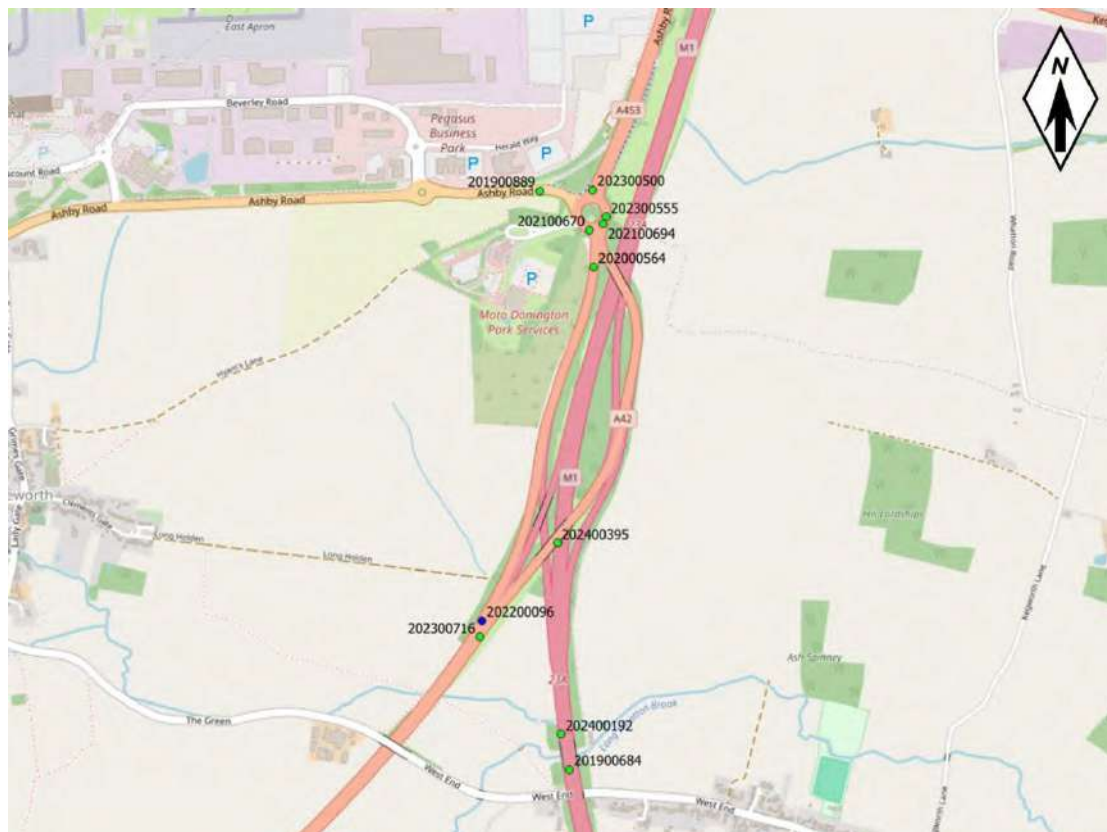
**Figure 2. Personal Injury Collisions at the site frontage and A453/Hunter Road Roundabout**



### J3 – Finger Farm Roundabout

- 2.2 **Figure 3** shows an extract of the PIC records at and in the vicinity of Finger Farm roundabout confirming that 11 PICs have been recorded over the latest 6-year period, 10 of which were classified as slight and one as serious. **Table 2** provides a summary of each recorded PIC.

**Figure 3. Personal Injury Collisions at Finger Farm Roundabout**



**Table 2. Personal Injury Collision Data Summary (Finger Farm Roundabout)**

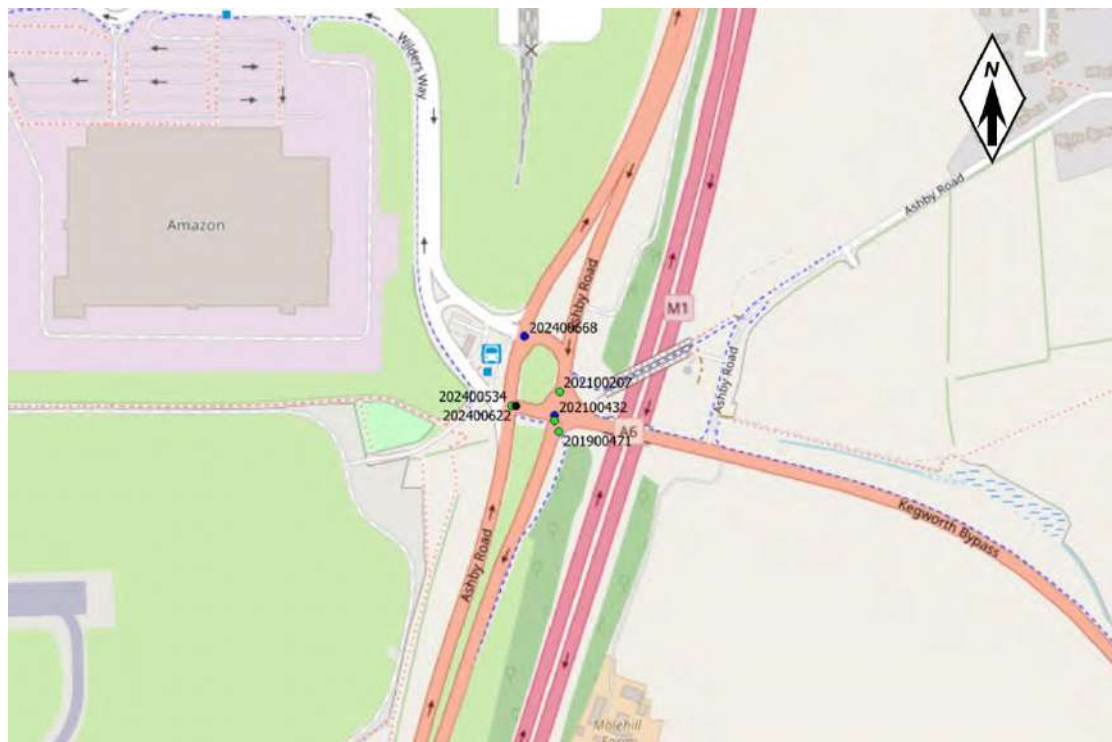
Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201900889	17/09/2019	Fine / Dry	Slight	V1, V3, V4, V5 and V6 were traveling westbound on the A453. V2 was traveling eastbound on the A453 causing rear end shunt collisions
201900684	29/06/2019	Fine / Dry	Slight	V1 was travelling ahead on the M1 northbound and V2 was changing lanes to the right
202000564	19/03/2020	Wet / Damp	Slight	V1 (car) was parked on the M1/A42 slip road and V2 (7.5T goods vehicle) was overtaking on the off/side
202100670	03/09/2021	Fine / Dry	Slight	V1 was entering the roundabout from the M1/A42 slip road heading towards the A453 westbound when it collided into the kerb. The collision occurred during hours of darkness, but no other vehicles were involved
202100694	10/09/2021	Wet / Damp	Slight	V1 was travelling on the roundabout circulatory from the A453 (west) to the A42 on-slip. V2 was travelling from the same direction towards Donington Park services and collided with V1 which was held up
202200096	30/01/2022	Fine / Dry	Serious	V2 was travelling northbound on the A42 off slip road to the A453. V1 was traveling in the same direction and collided with V2 when changing lanes to the left
202300500	09/06/2023	Fine / Dry	Slight	V1 was changing lane heading northbound on the A453 and collided with V2 which joined the roundabout from the A453 northbound entry
202300555	07/07/2023	Fine / Dry	Slight	V1 was travelling southbound to the A42 and collided with V2 which was changing lane and travelling in the same direction
202300716	16/08/2023	Fine / Dry	Slight	V2 and V3 were travelling southbound on the M1 J23A on slip. V1 was travelling in the same direction and collided when overtaking a vehicle on its offside
202400192	23/02/2024	Fine / Dry	Slight	V1 was travelling northbound on the M1 approaching J23A and V2 was travelling in the same direction and collided when overtaking a vehicle on its offside
202400395	06/05/2024	Fine / Dry	Slight	V1 was travelling northbound on the M1 and lost control

2.3 The details show that the 11 recorded PICs occurred at different locations of the roundabout and on approach to J23A from the M1 and M42. The PICs were caused due to a number of reasons (rear end shunts, overtaking, lane changing and driver error). There have been no clusters of PICs occur at any specific location of the roundabout or the network in the vicinity of M1 J23A and therefore given this is a junction on part of the Strategic Road Network that accommodates a high volume of traffic, it is considered that there are no significant safety problems at this location and no further assessment will be undertaken in the Transport Assessment.

#### J4 – A453/EMG1 Access Junction

- 2.4 **Figure 4** shows a detailed extract of the PIC records at the A453/EMG1 signal gyratory confirming there have been seven recorded PICs over the latest 6-year period. Of the seven recorded PICs, three were classified as slight, two were classified as serious and one was classified as fatal. **Table 3** provides a summary of each recorded PIC.

**Figure 4. Personal Injury Collisions at A453/EMG1 Access Junction**



**Table 3. Personal Injury Collision Data Summary (A453/EMG1 Access Junction)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201900471	13/05/2019	Fine / Dry	Slight	V1 and V2 were entering the roundabout from the A6 to the A453 north and V3 was mid roundabout travelling ahead from the A453 north to A453 south
202100207	08/04/2021	Fine / Dry	Slight	V1 was leaving the roundabout travelling from the A453 north to the A453 south, whilst V2 was leaving the roundabout turning right from EMG1 to the A453 south
202100432	16/06/2021	Fine / Dry	Serious	V1 was travelling ahead at the roundabout from the A453 north to the A453 south and V2 and V3 were entering the roundabout from the A6 to EMG1
202400038	13/01/2024	Fine / Dry	Slight	V1 was on the roundabout circulatory travelling south on the A453. V2 was also mid-junction on the roundabout travelling from the A6 to EMG1
202400534	12/06/2024	Fine / Dry	Slight	V1 was mid junction slowing down and travelling from the A453 south to A453 north. V2 was also mid junction travelling in the same direction from the A453 south to A453 north causing a rear end shunt collision,
202400622	05/07/2024	Fine / Dry	Fatal	V1 was travelling northbound on the A453 and collided with V2 which was travelling from the A6 to EMG1 but held up on the roundabout.
202400668	21/07/2024	Fine / Dry	Serious	V1 was entering the roundabout travelling from EMG1 to the A6. V2 was travelling from the A453 south to A453 north

- 2.5 The majority of the seven PICs were a result of a collision due to conflicting turning movements at the junction, one of which resulted in fatal injuries (accident number: 202400622). The majority of the PICs were due to turning movements between drivers travelling ahead on the A453 and others travelling from EMG1 or the A6, with a higher number of PICs occurring on the gyratory circulatory close to the A6 entry. With this in mind and given one of the PICs resulted in fatal injuries, further analysis of this junction, and in particular the movement from the A6 to EMG1, will be undertaken in the Transport Assessment. This will provide a greater understanding as to whether there is an issue with visibility to the signals or the intergreen time, as the movements causing collisions should be operating under different phases.
- 2.6 The proposed highway works include for some changes to the layout of the junction by providing two right turning lanes from the A453 southbound into EMG1. These works present an opportunity to make changes to the traffic signals to improve safety of the junction and the further analysis within the Transport Assessment discussed above will inform this work.



## J5 – M1 J24

- 2.7 **Figure 5** shows a detailed extract of the PIC records at M1 Junction 24 confirming there have been 16 recorded PICs over the latest 6-year period. Of the 22 recorded PICs, 16 were classified as slight and 6 were classified as serious, with no fatal collisions. **Table 4** summarises each of the recorded PICs in further detail.

**Figure 5. Personal Injury Collisions at M1 Junction 24**



**Table 4. Personal Injury Collision Data Summary (M1 J24)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201900204	06/02/2019	Wet / Damp	Slight	V1, V2 and V4 were approaching the junction from the M1 northbound exit slip. V3 was leaving the motorway from the same direction causing a rear end shunt collision
201901163	22/10/2019	Fine / Dry	Slight	V1 was leaving the roundabout travelling to the A50. V2 was also leaving the roundabout to the A50 but changed lanes causing a collision
201901523	23/02/2019	Fine / Dry	Slight	V1 and V2 were travelling southbound on the M1 mainline away from the junction and collided
201901591	22/10/2019	Fine / Dry	Slight	V1 and V2 were travelling from the A453 south to the A453 north and collided (exact location unknown when collision occurred)



# HIGHWAY SAFETY & ROAD CASUALTY POSITION STATEMENT

## EAST MIDLANDS GATEWAY PHASE 2



202000596	05/08/2020	Fine / Dry	Serious	V1 was approaching the junction on the M1 northbound exit slip. V2, V3 and V4 were approaching the junction from the same direction but held up causing a rear end shunt collision
202100191	12/04/2021	Fine / Dry	Slight	V1 was leaving the roundabout turning left from M1 southbound off-slip to the A453 Remembrance Way when a collision occurred. This was the only vehicle involved
202100673	03/09/2021	Fine / Dry	Serious	V1 and V2 were approaching the junction on the M1 mainline heading southbound. V3 was also approaching the junction from the same direction and changing lane when a collision occurred
202100682	06/09/2021	Fine / Dry	Serious	V1 and V2 were going ahead on the M1 southbound approaching junction 24 when a collision occurred
202100699	11/09/2021	Fine / Dry	Slight	V1 and V2 were leaving the M1 on the northbound off-slip. The exact reason for the collision is unknown but it occurred away from the roundabout
202200028	15/01/2022	Frost / Ice	Slight	V1 and V2 were going ahead south to northwest on A50 northbound slip road when a collision occurred
202200766	28/06/2022	Fine / Dry	Slight	V2 was going ahead and V2 was overtaking going westbound on the A50 when a collision occurred
202300142	18/02/2023	Fine / Dry	Slight	V1 was leaving the roundabout travelling to the A453 Remembrance Way. There was no other vehicle involved
202300386	25/05/2023	Fine / Dry	Serious	V1 and V2 were both travelling northbound on the M1 mainline away from the junction
202300565	10/07/2023	Wet / Damp	Slight	V1 (goods vehicle) was travelling northbound on the A50 and was changing lanes to the left and collided with V2 (car) travelling in the same direction
202300910	25/09/2023	Fine / Dry	Slight	V1 was leaving the roundabout travelling from the M1 southbound off-slip to the A453 Remembrance Way. V2 was travelling in the same direction and changed lane causing a collision
202300941	04/10/2023	Fine / Dry	Slight	V1 and V2 were both travelling northwestbound on Derby Road approaching the junction from a distance.
202300964	06/10/2023	Wet / Damp	Slight	V1 and V2 were travelling on the northbound off-slip towards the roundabout
202301020	22/10/2023	Fine / Dry	Serious	V1 was on the roundabout travelling to the A50. V2 (Motorcycle) was entering the roundabout, travelling ahead from the A453 south to the M1 northbound
202301272	22/12/2023	Wet / Damp	Slight	V1 was traveling on the A50 slip road to the M1 southbound when a collision occurred

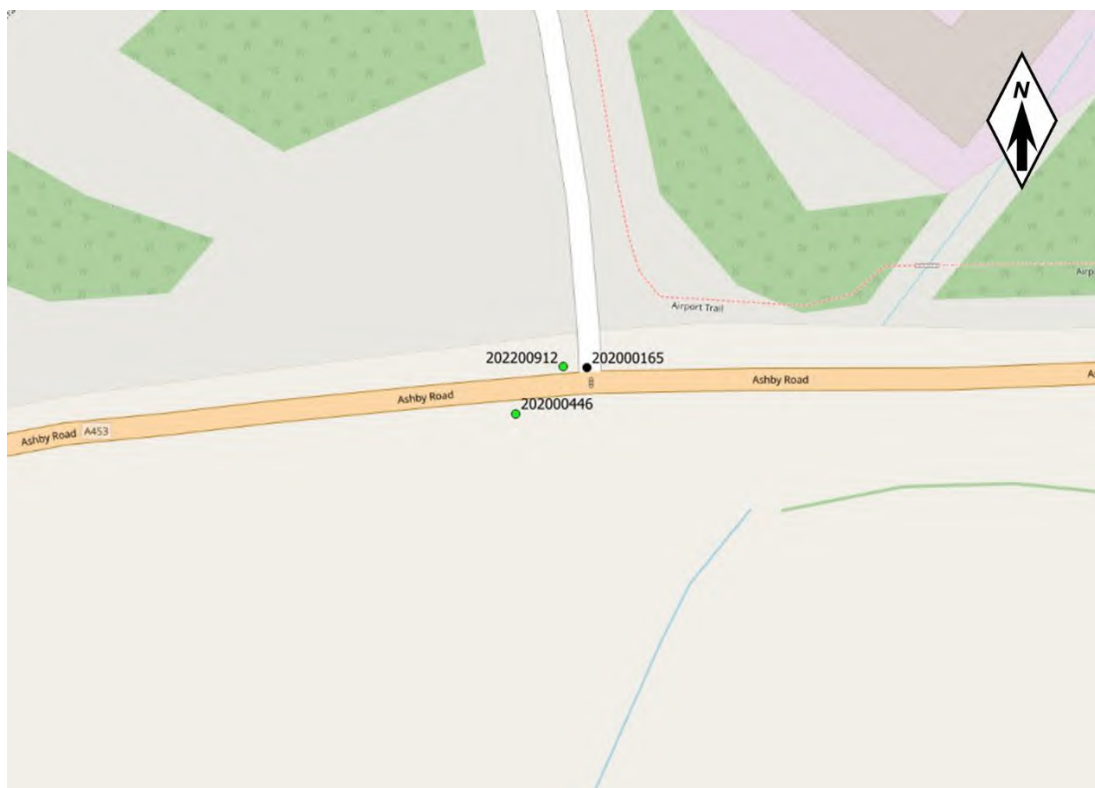
202400129	29/01/2024	Fine / Dry	Slight	V1 and V2 were approaching the junction from the M1 northbound off-slip. V1 was held up causing a rear end shunt collision with V1
202400696	31/07/2024	Fine / Dry	Serious	V1 was leaving the roundabout travelling to the M1 southbound. V2 was turning right from the M1 southbound to the A453 Remembrance Way but collided with V1 that was changing lanes.
202400994	18/10/2024	Fine / Dry	Slight	V1 was going ahead and V2 was changing lanes to the right on the A50 M1 slip road when a collision occurred

- 2.8 The details show that a cluster of PICs has formed along the M1 northbound off-slip. There appear to be no other locations where clusters of PICs have occurred. A total of six PICs have occurred on the M1 northbound off-slip, which were predominantly due rear end shunt type collisions. Whilst the majority of EMG2 development traffic travelling northbound on the M1 is likely to exit at Junction 23a at Finger Farm given this is the quickest route, further assessment of highway safety on this arm will be undertaken in the Transport Assessment for completeness.
- 2.9 The scheme is proposing a significant improvement to M1 junction 24 by providing a free-flow link from the M1 northbound to A50 westbound. This is forecast to improve capacity and remove queuing from the M1 mainline and will transfer a significant number of vehicles away from the current slip road onto the new link, thus reducing queuing on the slip road. This work clearly has the potential to positively improve safety of the strategic road network.
- 2.10 Furthermore, during the Public Consultation events, comments were raised regarding potential safety issues on the A50 northbound weaving from Junction 24. The PIC records confirm that there has been a single isolated PIC occur on this section of the network during the study period, which was classified as slight. Whilst this was a result of a goods vehicle changing lanes, it shows that the number of PICs recorded on this part of the network are low and there are no on-going issues or clusters of PICs that suggest there are any significant safety problems at this location.

#### **J6 – A453/East Midlands Airport Signal-Controlled Junction**

- 2.11 **Figure 6** shows a detailed extract of the PICs that have been recorded at the A453/East Midlands Airport signal-controlled junction confirming there has been three recorded PIC over the latest 6-year period. Two of the PICs were classified as slight and the remaining PIC was classified as fatal. **Table 5** provides a summary of the recorded PICs.

**Figure 6. Personal Injury Collisions at A453/East Midlands Airport Junction**



**Table 5. Personal Injury Collision Data Summary (A453/East Midlands Airport Signal-Controlled Junction)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202000165	21/01/2020	Wet / Damp	Fatal	V1 was turning right from the A453 into the airport and V2 was travelling eastbound on A453
202000446	25/07/2020	Fine / Dry	Slight	V1 was travelling westbound on the A453 and V2 was changing lanes travelling in the same direction
202200912	26/10/2022	Wet / Damp	Slight	V1 was turning right from the A453 into the airport and V2 was travelling eastbound on the A453.

2.12 The details show that of the three PICs, two were due to a vehicle turning right from the A453 into the airport colliding with an eastbound travelling vehicle. The right turn into the airport operates from a separately signalled green phase, with eastbound drivers held on a red signal in the same stage. As the junction is signal controlled and these movements occur in different stages, right turning vehicles are not required to give way to eastbound traffic. It therefore appears that one of the drivers has contravened a red signal causing the collision.

2.13 Whilst one of these PICs was fatal, it occurred during wet conditions and involved a heavy goods vehicle. When considering there have only been two PICs occur due to

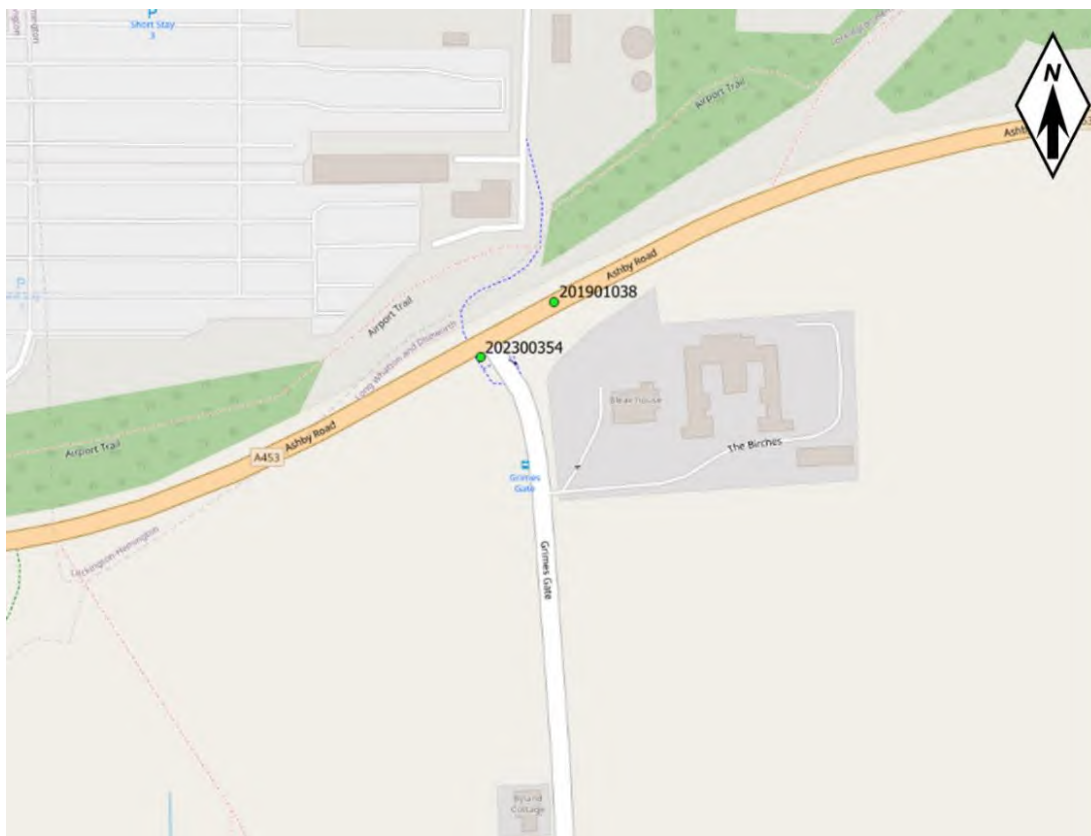
this manoeuvre over a 6-year period, both during wet weather conditions, it is considered that there are no significant safety problems at this junction that warrant further consideration in the Transport Assessment.

- 2.14 In addition, whilst there are no existing safety problems, the proposals involve installing a new pedestrian crossing at the junction and therefore further assessment of the location and type of crossing from an operational and safety perspective will be undertaken in the Transport Assessment.

### **J7 – A453/Grimes Gate Priority-Controlled Junction**

- 2.15 **Figure 7** shows a detailed extract of the PIC records at the A453/Grimes Gate junction confirming there have been two recorded PICs over the latest 6-year period. Both the PICs were classified as slight. **Table 6** provides a summary of the recorded PICs.

**Figure 7. Personal Injury Collisions at A453/Grimes Gate Junction**



**Table 6. Personal Injury Collision Data Summary (A453/Grimes Gate Priority-Controlled Junction)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201901038	17/11/2019	Wet / Damp	Slight	V1 and V2 were travelling northeastbound on the A453. V1 attempted to overtake V2 causing a collision
202300354	15/05/2023	Fine / Dry	Slight	V1 (Motorcycle) was travelling northeastbound on the A453. V2 was travelling in the same direction resulting in a rear end shunt

- 2.16 The details show that there have been two recorded PICs, although only one was at the junction itself. With this and given both PICs were classified as slight and appear to be isolated incidents occurring 3.5 years apart, it is considered that there are no significant safety problems at this junction and no further assessment of highway safety will be undertaken within the Transport Assessment.

#### **J8 – A453/The Green Priority-Controlled Junction**

- 2.17 **Figure 8** shows a detailed extract of the PIC records at the A453/The Green junction confirming there have been four recorded PICs over the latest 6-year period. All the four PICs were classified as slight. **Table 7** provides a summary of the recorded PICs.

**Figure 8. Personal Injury Collisions at A453/The Green Junction**



**Table 7. Personal Injury Collision Data Summary (A453/The Green Junction)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201901277	27/06/2019	Fine / Dry	Slight	V1 was turning right from the A453 into The Green. V2 was travelling westbound on the A453 and V3 was waiting to turn right from The Green to the A453 east
202200634	02/08/2022	Wet / Damp	Slight	V1 was attempting to stop when travelling eastbound on the A453. V2 and V3 were travelling in the same direction and collided with V1.
202200862	10/10/2022	Wet / Damp	Slight	V1 (Goods 7.5 Tonnes MGW) was travelling eastbound on the A453. V2 was waiting to turn right from the A453 into The Green
202400733	13/08/2024	Fine / Dry	Slight	V1 was turning right from the A453 into The Green. V2 was travelling westbound on the A453 and collided into the rear

- 2.18 The details show all four PICs were due to right turning movements from the A453 into The Green either through side on collisions with opposing vehicles or rear end shunts. All four collisions were classified as slight and occurred in daylight conditions, meaning there appear to be no issues caused during hours of darkness. Two of the four PICs



occurred during wet conditions. The junction is located within a dip on the A453 with approaching vehicles travelling downhill from both sides. Looking at historic Google Street View records, the tourist sign to the 'Queen's Head' highlighting a left turn into The Green from the east was obstructed by overgrown vegetation until 2023 and since then there have been no PICs occurring through westbound travelling vehicles. There appear to have been improvements to the warning signs for eastbound vehicles between 2017 and 2020. Whilst improvements to signage and visibility have occurred over the last 5 years, given that four PICs have occurred due to right turning movements, further assessment of highway safety will be undertaken in the Transport Assessment at this location.

### **J9 – A453/East Midlands Airport Roundabout**

- 2.19 **Figure 9** shows a detailed extract of the PIC records at the A453/East Midlands Airport roundabout confirming there has been a single recorded PIC over the latest 6-year period, which was classified as slight. **Table 8** provides a summary of the recorded PIC.

**Figure 9. Personal Injury Collisions at A453/East Midlands Airport Junction**



**Table 8. Personal Injury Collision Data Summary (A453/East Midlands Airport Roundabout)**

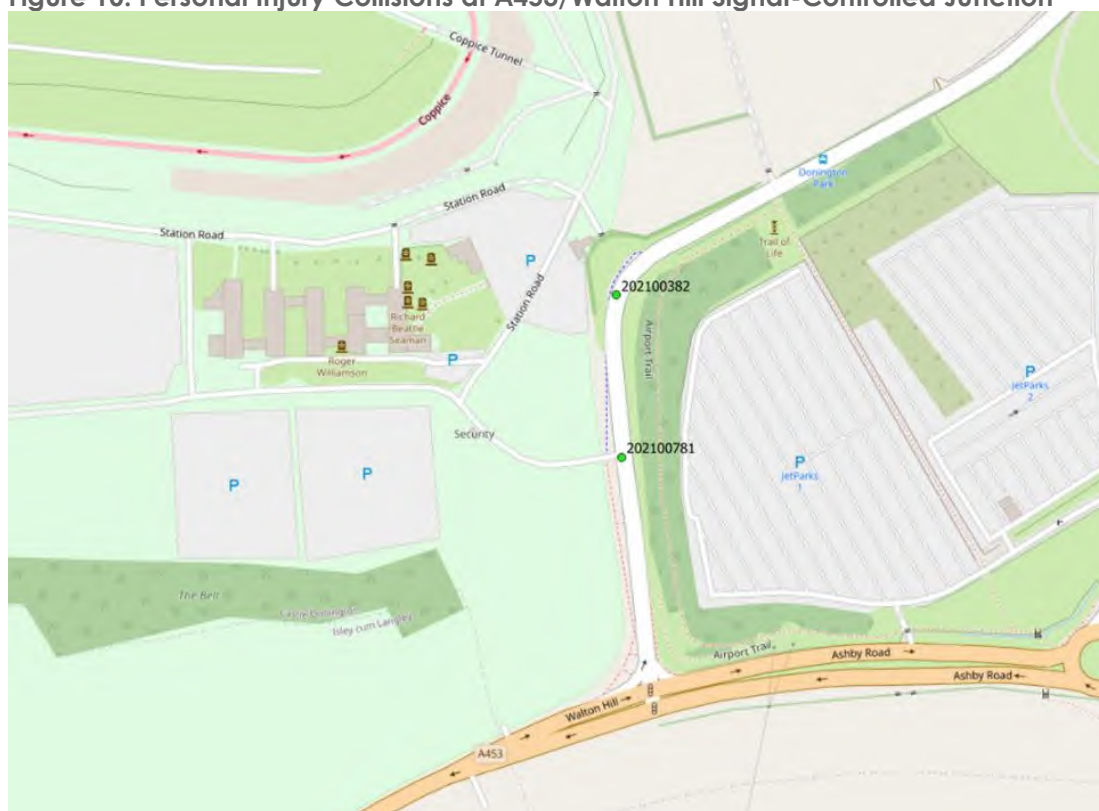
Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202200609	25/07/2022	Wet / Damp	Slight	V1 was leaving the roundabout travelling eastbound on A453 and lost control

- 2.20 The details show that there has only been one recorded PIC at the A453/East Midlands Airport roundabout and involved a single vehicle that lost control. The PIC was classified as slight. With the low number of PICs at the junction, it is considered that there are no significant highway safety impacts and no further assessment will be undertaken within the Transport Assessment.

### **J10 – A453/Walton Hill Signal-Controlled Junction**

- 2.21 **Figure 10** shows a detailed extract of the PIC records across the A453/Walton Hill signal-controlled junction confirming there have been two recorded PICs over the latest 6-year period both of which were classified as slight. **Table 9** provides a summary of the recorded PICs.

**Figure 10. Personal Injury Collisions at A453/Walton Hill Signal-Controlled Junction**



**Table 9. Personal Injury Collision Data Summary (A453/Walton Hill Signal-Controlled Junction)**

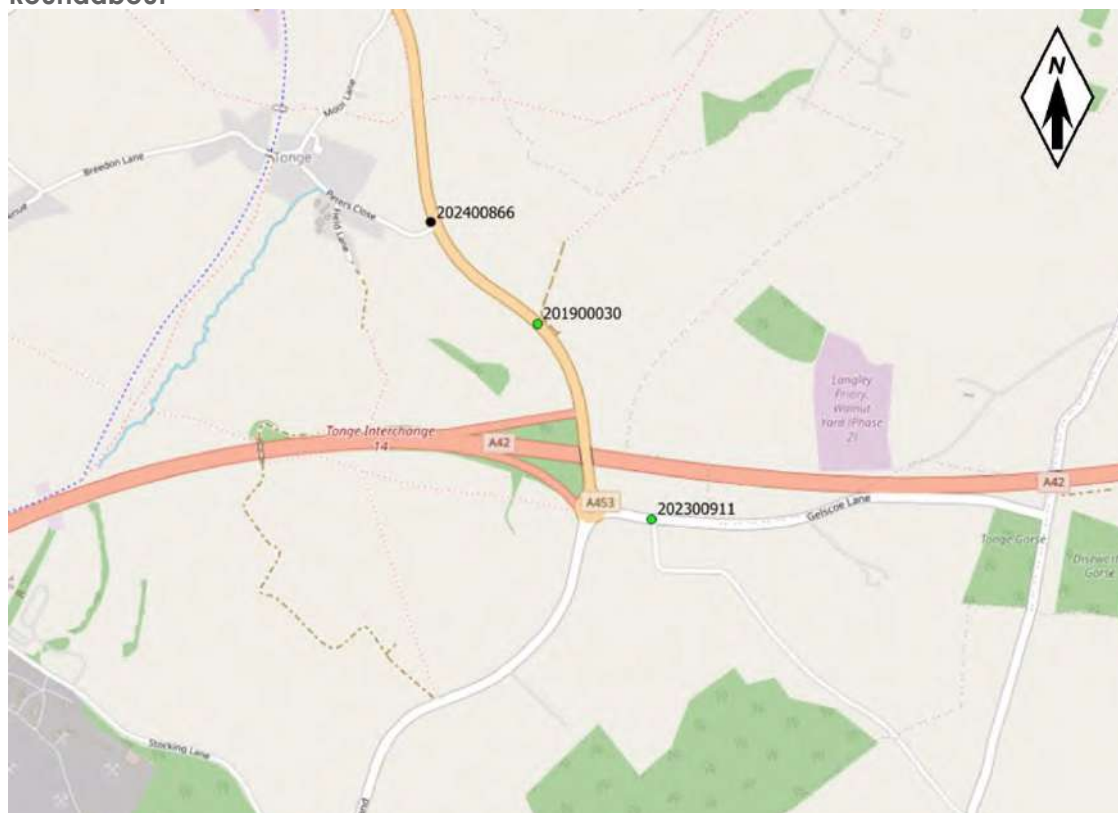
Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202100382	02/06/2021	Fine / Dry	Slight	V1 and V3 were travelling southbound around a left hand bend and collided with V2 which was travelling northbound
202100781	03/10/2021	Fine / Dry	Slight	V1 was turning right from Walton Hill into the SuperBike Factory and collided with V2 which was turning right from the SuperBike Factory onto Walton Hill

- 2.22 The details show that there have only been two recorded PICs at the A453/Walton Hill junction both of which were classified as slight. The causation of the PICs was due to turning movements from different arms. With this and given the low number of PICs at the junction over a 6-year period, it is considered that there are no significant highway safety impacts, and no further assessment will be undertaken within the Transport Assessment.

#### **J11 – A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout**

- 2.23 **Figure 11** shows a detailed extract of the PIC records at the A42 Junction 14 on-slip/Top Brand/Gelscoe Lane roundabout and on approach from the A453. It confirms there have been three recorded PICs over the latest 6-year period with two PICs being slight and one as fatal in severity. **Table 10** provides a summary of the recorded PICs

**Figure 11. Personal Injury Collisions at A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout**



**Table 10. Personal Injury Collision Data Summary (A453/Walton Hill Signal-Controlled Junction)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201900030	16/01/2019	Wet / Damp	Slight	V1 was travelling northbound on the A453 around the left-hand bend and collided with V2 which was travelling southbound on the A453
202300911	29/09/2023	Fine / Dry	Slight	V2 was joining Gelscoe Lane after travelling through the roundabout in the eastbound direction and collided with V1 which was turning left at the roundabout from Top Brand to the A42
202400866	17/09/2024	Fine / Dry	Fatal	V1 was travelling northbound on the A453 and lost control. No other vehicles were involved

2.24 The details show that there have been three recorded PICs on the network in the vicinity of the A42/Top Brand/Gelscoe Lane junction. All three was isolated incidents with two classified as slight. There has been a single fatality occur on 17/09/24 which involved a single vehicle travelling northbound on the A453 and appears to be due to loss of control. Whilst regrettable, this is the only PIC that has occurred at this location during the 6-year period and so it is considered in isolated incident. Consequently, there are

## J12 – M1 Junction 23

### Figure 12. Personal Injury Collisions at M1 Junction 23





**Table 11. Personal Injury Collision Data Summary (M1 Junction 23)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202000492	09/02/2020	Wet / Damp	Slight	V1 and V2 were approaching the junction from Ashby Road East and collided whilst stopping at the junction
202000881	10/11/2020	Fine / Dry	Slight	V1 and V2 collided when attempting to decelerate when approaching the roundabout from the A512
202100046	25/01/2021	Frost / Ice	Slight	V1 and V2 collided when decelerating on approach to the junction from the M1 northbound off-slip
202100568	30/07/2021	Wet / Damp	Slight	V1 was travelling eastbound on the A512 away from the roundabout and lost control. No other vehicle was involved.
202200748	06/09/2022	Wet / Damp	Slight	V1 was changing lane on the M1 northbound off-slip and collided with V2 travelling in the same direction.
202201031	20/11/2022	Fine / Dry	Slight	V1 was changing lane on the roundabout travelling to the A512 and collided with V2 which was travelling in the same direction
202400235	15/03/2024	Fine / Dry	Serious	V1 was changing lanes on the M1 northbound off-slip and collided with V2 travelling in the same direction
202400297	04/04/2024	Fine / Dry	Slight	V1 was exiting the M1 onto the northbound off-slip and collided with V2 travelling in the same direction
202400698	01/08/2024	Fine / Dry	Serious	V1 (goods vehicle over 3.5T) was held up approaching the roundabout travelling from the A512 to Ashby Road East and collided with V2 entering the roundabout from north to south

- 2.26 The details show that of the nine recorded PICs, three were recorded at the A512 (albeit one was travelling away from the junction), four PICs were recorded on the M1 northbound off slip, whilst the remaining three PICs occurred on the circulatory and Ashby Road East arm. Two of the PICs were due to vehicles changing lanes on the M1 northbound off-slip, however this arm would not be impacted by the proposed development. Overall, there is no specific location where a cluster of PICs have occurred and the details show a mix of causes with no specific trends. On this basis and given this is a junction on the Strategic Road Network that carries a significant volume of traffic, it is considered that there are no on-going highway safety issues at this junction and no further assessment will be undertaken in the Transport Assessment.

### **J13 – A50 Junction 1**

- 2.27 **Figure 13** shows a detailed extract of the PIC records at A50 Junction 1 confirming there have been five recorded PICs over the latest 6-year period, three of which were classified as slight, one as serious and one as fatal. **Table 12** summarises each of the recorded PICs in further detail.



Figure 13. Personal Injury Collisions at A50 Junction 1



Table 12. Personal Injury Collision Data Summary (A50 Junction 1)

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201900573	19/03/2019	Fine / Dry	Slight	V1 was moving into the left/nearside lane travelling eastbound on the A50 mainline. No other vehicles were involved
201901521	18/02/2019	Fine / Dry	Slight	V1 and V2 collided when travelling north on the roundabout circulatory
202300023	09/01/2023	Fine / Dry	Fatal	V1 was travelling to the A50 westbound on-slip and collided with V2 which was joining the roundabout from Trent Lane
202400699	30/07/2024	Fine / Dry	Slight	V1 was travelling eastbound on the A50 main line away from the junction. No other vehicles were involved
202400967	15/10/2024	Fine / Dry	Serious	V1 was changing lane when approaching the roundabout from London Road and collided with V2 travelling in the same direction

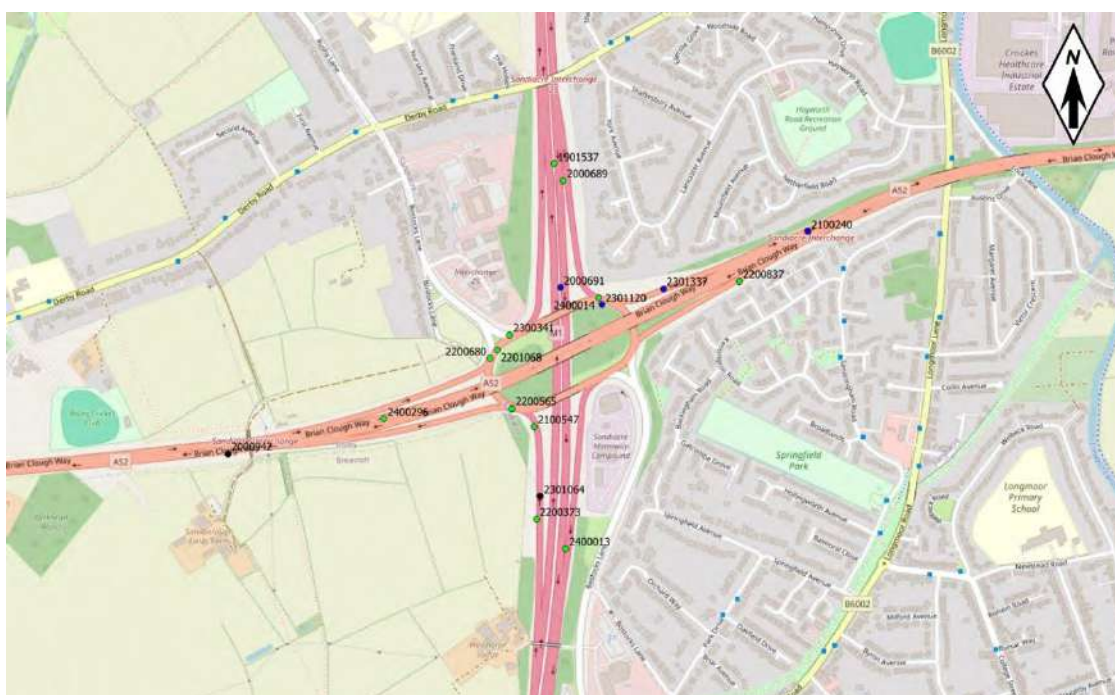
2.28 The details show that all five PICs occurred at different parts of the junction, or on the A50 mainline. A number of the PICs occurred through driver error when changing lanes. Whilst there has been a single fatal collision close to the Trent Lane entry to the roundabout, this appears to be an isolated incident. Furthermore, there is an approved scheme to signalise this arm of the junction, which would negate the need for drivers to give-way at this location and therefore remove conflicting movements. Overall, it is

considered that there are no significant safety issues and therefore no further assessment will be undertaken at this junction within the Transport Assessment.

### J14 – M1 Junction 25

- 2.29 **Figure 14** shows a detailed extract of the PIC records at M1 Junction 25 confirming there have been 18 recorded PICs over the latest 6-year period, 12 of which were classified as slight, four were classified as serious and two fatal. **Table 13** summarises each of the recorded PICs in further detail.

**Figure 14. Personal Injury Collisions at M1 Junction 25**



**Table 13. Personal Injury Collision Data Summary (M1 J25)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
1901537	02/10/2019	Fine / Dry	Slight	V1 was changing lanes travelling on the A52 northbound on-slip and collided with V2 travelling in the same direction
2000689	20/05/2020	Fine / Dry	Slight	V1 attempts to move from lane 2 into lane 1 to leave the motorway and between two HGVs, misses the exit and collides with the barrier
2000691	18/06/2020	Wet / Damp	Serious	V1 was travelling on the M1 southbound mainline and lost control in lane 4 and collided with the central reservation causing it veer across the motorway and into V2
2000942	22/08/2020	Fine / Dry	Fatal	V1 was travelling westbound on the A52 at 16:55 and veered to nearside for unknown reasons, lost control and collided with a tree

# HIGHWAY SAFETY & ROAD CASUALTY POSITION STATEMENT

## EAST MIDLANDS GATEWAY PHASE 2

2100240	24/10/2020	Raining / Flood	Serious	V2 was merging onto the A52 eastbound. V1 was travelling eastbound on the A52 mainline. V2 and collides with a nearside barrier and rebounds into the carriageway. V1 collides with rear of V2
2100547	29/03/2021	Fine / Dry	Slight	V2 was stationary at the traffic lights in lane 2 on M1 northbound off-slip. V1 moved into lane 2 colliding with rear of V2
2200373	01/03/2022	Fine / Dry	Slight	V2 was travelling on the M1 northbound off-slip to join the A52 and was held up in queuing traffic. V1 approached from the rear and collided with V2
2200565	03/04/2022	Fine / Dry	Slight	V2 was on the roundabout circulatory and missed the exit and proceeded to travel around roundabout for second time. V1 was in the wrong lane and cut across the path of V2
2200680	23/04/2022	Fine / Dry	Slight	V2 was travelling to Bostocks Lane north in the inside lane, V1 entered the roundabout heading to the A52 eastbound and collided with V2
2200837	19/05/2022	Fine / Dry	Slight	V1 was approaching the A52 westbound off-slip and fails to see V2 and V3 already stationary due to build up of traffic on exit slip. V1 collides with the rear of V2, which is pushed forward into rear of V3.
2201068	24/06/2022	Fine / Dry	Slight	V2 was on the roundabout circulatory and started to move on a green signal. V1 overtook V2 and changed lanes; proceeded then to change lanes again and then collided with V2.
2300341	26/02/2023	Fine / Dry	Slight	V1 was travelling southbound from Bostocks Lane north towards the roundabout when V2 collided with the rear of V1.
2301064	28/04/2023	Raining / Wet	Fatal	Unknown vehicle has collided with a male pedestrian in the early hours (04:42am) on the M1 northbound off-slip.
231120	22/07/2023	Raining / Wet	Serious	V1 was travelling from Bostock Lane north to Bostock Lane south at excessive speed and failed to stop at the junction and collides with furniture and trees
2301337	27/08/2023	Fine / Dry	Serious	V1 was going ahead southwest to northeast when it was cut up by V2 causing V1 to take evasive action, leaving the carriageway nearside and rolled.
2400013	05/11/2023	Fine / Dry	Slight	V1 was travelling southbound on the M1 mainline and collided with V2 which was changing lanes
2400014	22/11/2023	Fine / Dry	Slight	V1 was held turning left from the M1 north to the A52 eastbound. V2 was travelling in the same direction and collided with the rear of V1. The collision occurred during hours of darkness

2400296	22/02/2024	Wet / Damp	Slight	V1 was travelling eastbound on the A52 mainline and collided with the rear of V2 in slow moving traffic.
---------	------------	------------	--------	--

- 2.30 The details show that whilst there has been a total of 18 recorded PICs, there are no specific locations where clusters of PICs have occurred. Whilst two fatal PICs have occurred, one involved a single driver losing control for unknown reasons, whilst the second involved a pedestrian walking on the slip road during hours of darkness. The fatal PICs therefore appear to be isolated incidents and not related to any physical defects of the junction. The remaining PICs are spread across all areas of the junction, with three PICs at the Bostocks Lane (N) arm, all of which were classified as slight and were a result of rear end shunt, changing lanes and turning movements on the circulatory and therefore show no patterns. With this and given the junction forms part of the Strategic Road Network, with the M1 and accommodates a significant amount of traffic, it is considered that there are no significant safety problems and no further assessment into highway safety will be undertaken as part of the Transport Assessment.

### J15 – Station Road/Broad Rushes Roundabout

- 2.31 **Figure 15** shows a detailed extract of the PIC records at Station Road/Broad Rushes roundabout in Castle Donington confirming there have been three recorded PICs over the latest 6-year period, two of which were classified as slight and one as serious. **Table 14** summarises each of the recorded PICs in further detail.

**Figure 15. Personal Injury Collisions at Station Road/Broad Rushes Roundabout**



**Table 14. Personal Injury Collision Data Summary (Station Road/Broad Rushes Roundabout)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202000342	23/06/2020	Fine / Dry	Serious	V1 (goods vehicle) collided with V2 (pedal cyclist) when attempting to overtake on Broad Rushes travelling east towards the roundabout
202100640	21/08/2021	Other / Dry	Slight	V1 was on the circulatory exiting at Broad Rushes and decided to change lane to the right and collided with V2 (motorcycle) that was travelling in the same direction
202200803	26/09/2022	Wet / Damp	Slight	V1 (motorcycle) was travelling towards the roundabout from Station Road N and collided with V2 (car) travelling north on Station Road N

- 2.32 The details show that there have been three recorded PICs at the Station Road/Broad Rushes roundabout, all of which occurred at different locations. Whilst they all involve pedal cyclists or motorcyclists, there are no trends and were due to overtaking, and movements on the circulatory. There appear to be no trends behind the PICs or any specific locations where clusters of PICs have formed. On this basis it is considered that there are no on-going highway safety problems at this location and no further assessment will be undertaken within the Transport Assessment.

#### **J16 – A453/Kegworth Road Dumbbell Roundabouts**

- 2.33 **Figure 16** shows a detailed extract of the PIC records near the A453/Kegworth Road dumbbell roundabouts confirming there have been five recorded PICs over the latest 6-year period, four of which were classified as slight and one as serious. **Table 15** summarises each of the recorded PICs in further detail.



Figure 16. Personal Injury Collisions at A453/Kegworth Road Dumbbell Roundabouts

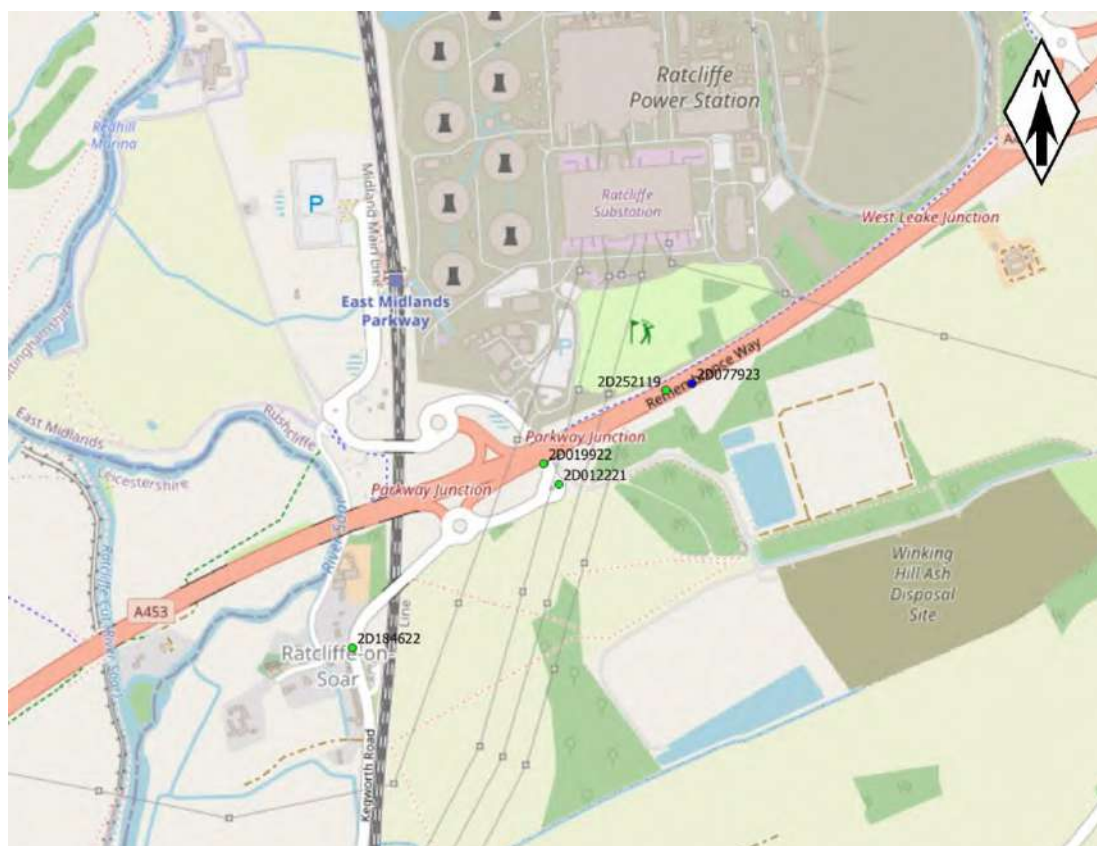


Table 15. Personal Injury Collision Data Summary (A453/Kegworth Road Dumbbell Roundabouts)

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
2D184622	07/10/2022	Fine / Dry	Slight	V1 was travelling northbound on Kegworth Road and lost control when negotiating the right-hand bend at its junction With Main Street
2D012221	24/01/2021	Snow	Slight	V1 was turning right at the roundabout from the north to Kegworth Road to the west and lost control
2D019922	06/02/2022	Fine / Dry	Slight	V2 was travelling southbound on the access road from Ratcliffe on Soar and collided with V2 travelling northbound on the same road
2D252119	19/12/2019	Fine / Dry	Slight	V1 was travelling northeastbound on the A453 and V2 was travelling in the same direction and collided with the rear of V1.
2D077923	28/05/2023	Fine, Dry	Serious	V1 was traveling northeastbound on A453 lost control, left the road and skidded.

2.34 The details show that of five recorded PICs, only one occurred at the roundabouts themselves, two were on the A453 mainline, one on Kegworth Road, and another on the Ratcliffe Power Station access road. Four PICs were classified as slight and another



as serious. There are no patterns or locations where a cluster of PICs have occurred and on this basis, it is considered that there are no significant safety problems at the junction and no further assessment will be undertaken as part of the Transport Assessment.

#### **J17 – A453/Barton Lane/West Leake Dumbbell Roundabouts**

- 2.35 **Figure 17** shows a detailed extract of the PIC records across the A453/Barton Lane/West Leake Dumbbell roundabouts confirming there have been no recorded PICs over the latest 6-year period. It can therefore be concluded that there are no safety problems at this location and no further assessment will be undertaken within the Transport Assessment.

**Figure 17. Personal Injury Collisions at A453/Barton Lane/West Leake Lane Roundabouts**

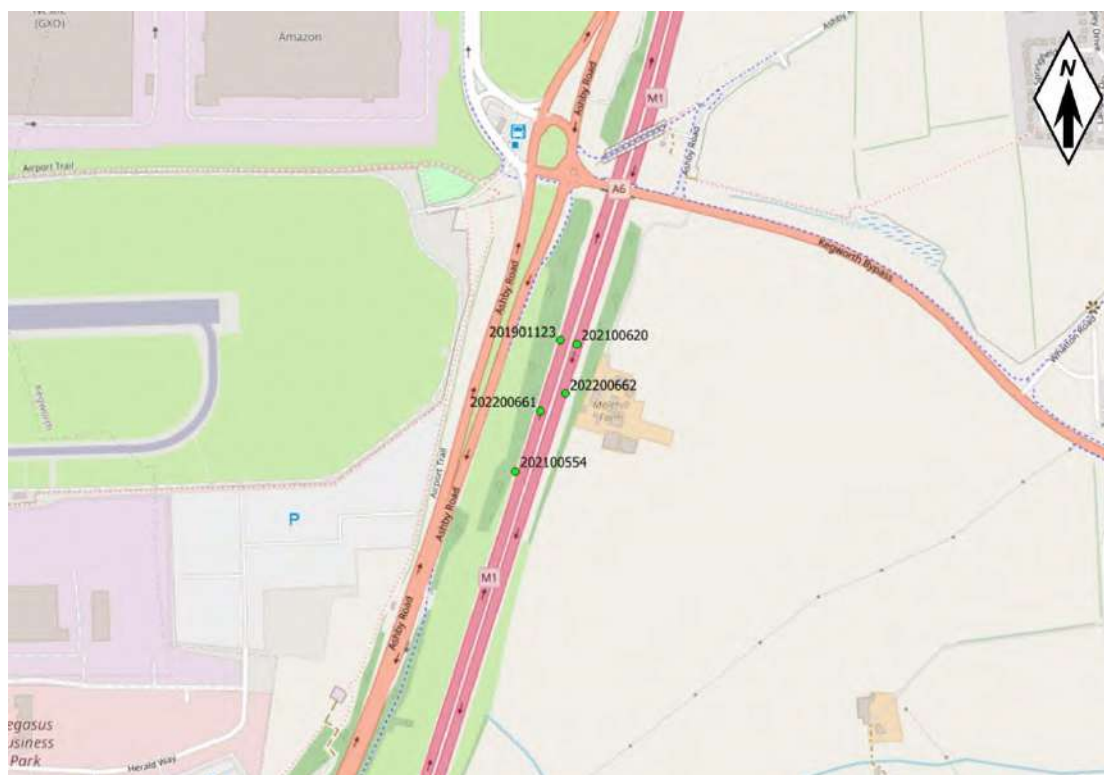


#### **Other Locations of Personal Injury Collision Clusters**

##### M1 Mainline between Junctions 23A and 24

- 2.36 **Figure 18** shows a detailed extract of the PIC records on the M1 mainline between Junction 23A and Junction 24 confirming there have been five recorded PICs over the latest 6-year period, all of which were classified as slight. **Table 16** summarises each of the recorded PICs in further detail.

**Figure 18. Personal Injury Collisions on M1 Mainline**



**Table 16. Personal Injury Collision Data Summary (M1 Mainline)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
201901123	24/12/2019	Wet / Damp	Slight	V1 was travelling northbound on the M1 and lost control. No other vehicles were involved
202100554	27/07/2021	Wet / Damp	Slight	V1 and V2 were travelling northbound on the M1 and collided when V1 was changing lanes to the left
202100620	16/08/2021	Fine / Dry	Slight	V1 was travelling southbound on the M1 and collided with the rear of V2 which was being held up travelling in the same direction
202200661	11/08/2022	Fine / Dry	Slight	V1, V2, V3 and V4 were travelling northbound and collided with rear end shunts
202200662	11/08/2022	Fine / Dry	Slight	V1 was travelling southbound on the M1 and collided with V2 travelling in the same direction when changing lanes to the right

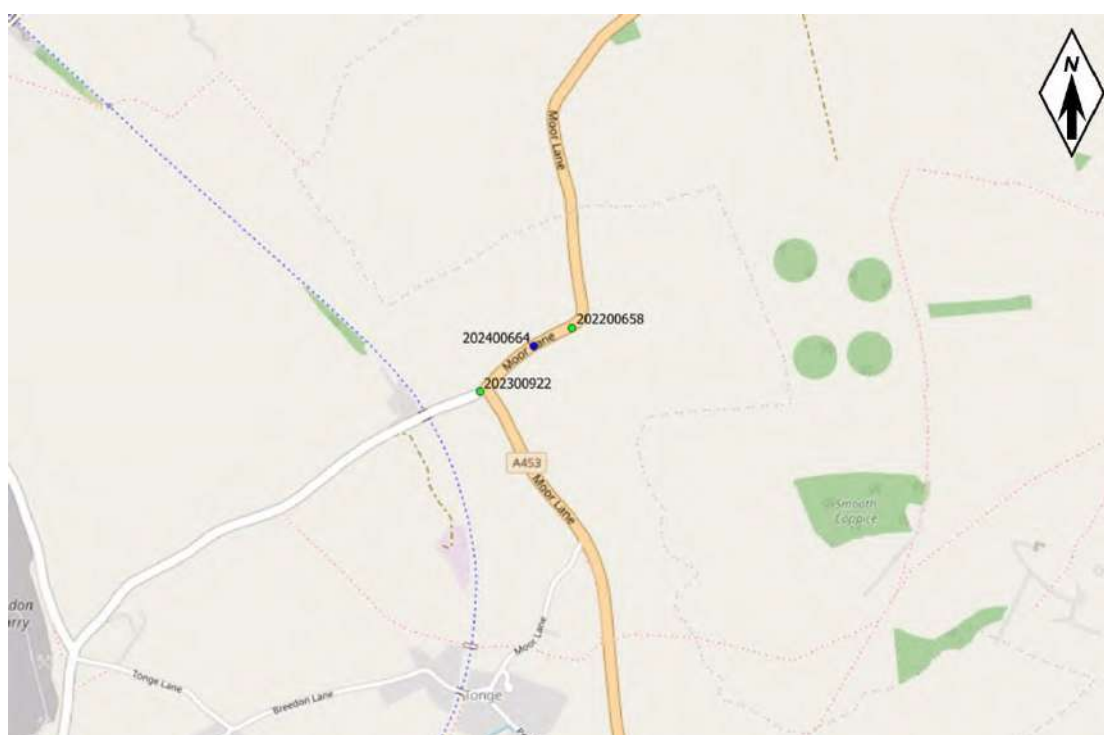
2.37 The details show that all five recorded PICs were classified as slight and caused due to a mixture of lane changing, rear end shunts and loss of control. The PICs were also balanced across the northbound and southbound carriageways. As such, there appear to be no common causal factors behind the PICs with the latest occurring in August 2022 and since then there has not been a single recorded PIC on this part of the network. On this basis, it is considered that there are no significant safety problems on this part of

the M1 mainline and no further assessment will be undertaken as part of the Transport Assessment.

#### A453/Moor Lane

- 2.38 **Figure 19** shows a detailed extract of the PIC records at the A453/Moor Lane confirming there have been three recorded PICs over the latest 6-year period, two of which were classified as slight and one serious. **Table 17** summarises each of the recorded PICs in further detail.

**Figure 19. Personal Injury Collisions at A453/Moor Lane**



**Table 17. Personal Injury Collision Data Summary (A453/Moor Lane)**

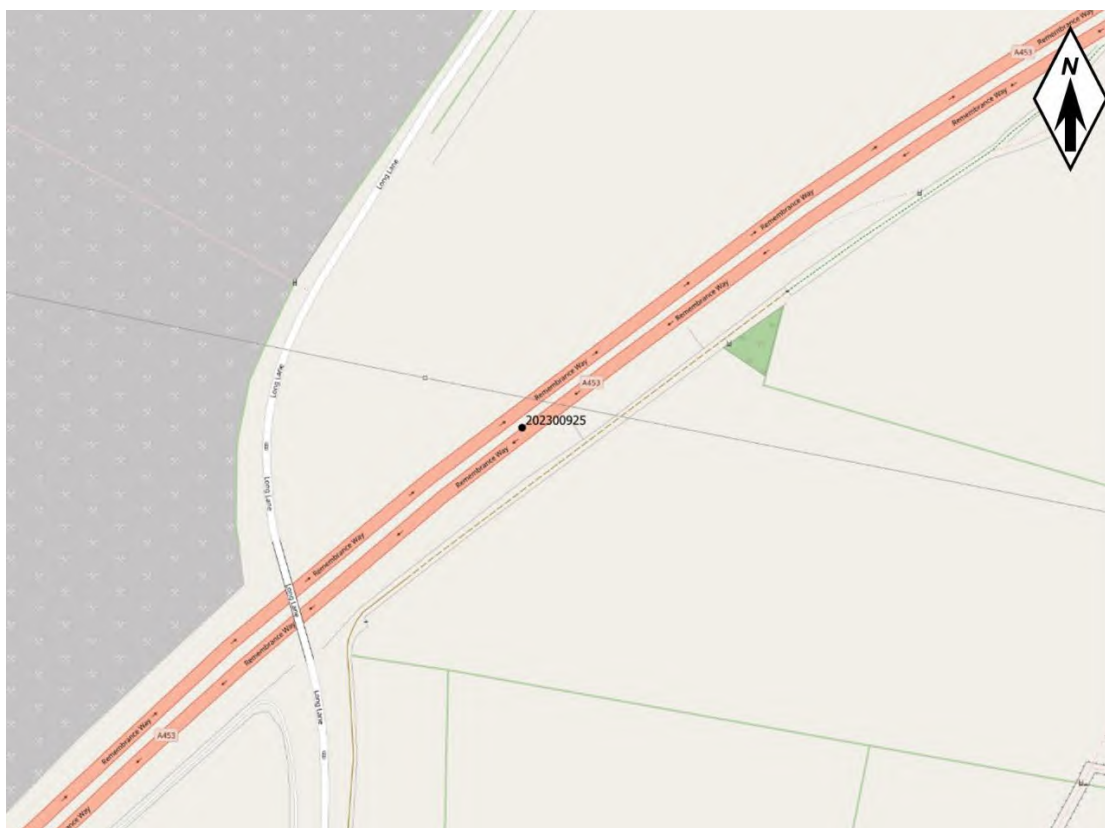
Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202200658	10/08/2022	Fine / Dry	Slight	V1 was travelling southbound on the A453 around a right-hand bend losing control. The driver was a motorcyclist
202300922	01/10/2023	Wet / Damp	Slight	V1 and V2 were traveling eastbound on the A453 approaching the junction and collided due to a rear end shunt
202400664	19/07/2024	Fine / Dry	Serious	V1 was travelling southbound on the A453 and collided with V2 travelling northbound on the A453. The PIC was located away from the junction with Moor Lane

2.39 The details show that all three PICs were located on different parts of the network. One of the PICs was due to a motorcyclist losing control, whilst another was due to a rear end shunt between two cars and a third due to a head on collision. There are no patterns behind the PICs and consequently they appear to be isolated incidents. On this basis, it is considered that there are no significant safety problems on this part of the network and no further assessment will be undertaken as part of the Transport Assessment.

#### A453 Remembrance Way

2.40 **Figure 20** shows a detailed extract of the PIC records on the A453 Remembrance Way confirming there has been one fatal PIC recorded approximately 1.5km to the east of M1 Junction 24. **Table 18** summarises this PICs in further detail.

**Figure 20. Personal Injury Collisions on Remembrance Way**



**Table 18. Personal Injury Collision Data Summary (Remembrance Way)**

Accident Number	Day/ Date	Weather / Road Surface	Severity	Description
202300925	01/10/2023	Wet / Damp	Fatal	V1 was travelling southwestbound on the A453 but held up and collided with V2 which was travelling in the same direction to the rear

- 2.41 The details show that this PIC occurred due to a rear end shunt collision on the A453 as a vehicle was held up approaching Junction 24. Whilst this resulted in fatal injuries, it appears to be an isolated incident with no other PICs occurring on this part of the network during the 6-year period. Therefore, whilst regrettable it is considered that there are no significant safety problems on this part of the network so whilst no further assessment of the highway safety will be undertaken at this location within the Transport Assessment consideration will be given to capacity improvements at Junction 24.

### **3. SUMMARY AND NEXT STEPS**

- 3.1 This Highway Safety and Road Casualty Position Statement has reviewed Personal Injury Collision (PIC) data across the Strategic Road Network and local highway network in the vicinity of the East Midlands Gateway 2 development to understand whether there are any existing safety problems that could be exacerbated by the proposed development and hence require further consideration within the Transport Assessment. The PIC data was obtained from the relevant highway authorities for the latest 6-year period between 2019 and 2024.
- 3.2 It follows advice contained within the National Networks National Policy Statement (March 2024), and in particular Paragraphs 4.57 to 4.61 which relate to 'road safety'.
- 3.3 The PIC analysis has identified the following key locations where there could potentially be existing safety issues that require further consideration in the Transport Assessment:
- **EMG1 access junction** – a cluster of PICs have been recorded due to turning movements from the A6 to EMG1 colliding with drivers travelling southbound on the A453. One of the PICs was fatal.
  - **M1 Junction 24** – a cluster of PICs have been recorded on the M1 northbound off-slip on approach to the roundabout. There are no known existing safety issues with the A50 northbound weaving section from Junction 24 as alluded to during the Public Consultation events.
  - **A453/The Green** – a cluster of PICs have been recorded due to right turning movements from the A453 west into The Green. This appears to be due to the location of the junction within a dip in the carriageway and potential lack of signage or warnings.
- 3.4 The Transport Assessment will review these three locations in further detail to understand whether the proposed development is likely to generate traffic increases that could exacerbate any issues. Where traffic increases are expected, mitigation will be proposed to address any highway safety issues and ensure the proposed development would have no unacceptable impacts in accordance with the requirements of the National Planning Policy Framework and National Networks National Policy Statement.
- 3.5 The following proposals are being considered and proposed by the proposed development which should have a benefit from a highway safety perspective on the three key locations:



- Provision of a new free flow link between the M1 northbound and A50, which should reduce traffic on the M1 northbound off-slip and the level of congestion approaching the junction.
  - Works to the EMG1 access junction by providing two lanes into EMG1 for vehicles travelling southbound on the A453. This presents an opportunity to make changes to the traffic signals to improve safety of the junction.
  - Whilst not formally included in the proposed mitigation package at this stage of the process, further consideration of the A453/The Green junction will be undertaken such as the provision of additional signage and/or carriageway surfacing markings to improve the safety associated with right turning vehicles.
- 3.6 The remaining junctions and links across the study area appear to have no significant safety problems that should not be materially impacted by the proposed development, however highway safety will be considered as part of any new infrastructure improvements being proposed.
- 3.7 From a highway safety perspective, the details in this report will be taken and considered further in the following stages of work:
- Further analysis in the Transport Assessment
  - Stage 1 Road Safety Audit
  - Safety risk assessments to GG 104 for departures from standard on the Strategic Road Network
  - Stages 2, 3 and 4 Road Safety Audits
  - Walking, Cycling and Horse-Riding Assessments and Reviews
- 3.8 It therefore forms the first stage in an on-going process to consider and improve highway safety and road casualties on the surrounding network that could be impacted by the proposed development.



**HIGHWAY SAFETY & ROAD CASUALTY  
POSITION STATEMENT**  
EAST MIDLANDS GATEWAY PHASE 2



**Appendix 1. National Networks National Policy Statement Road Safety Extracts**



Department  
for Transport

# National Networks National Policy Statement



March 2024

added would make that development unacceptable, particularly in relation to statutory environmental quality limits

- 4.52 The Secretary of State should not refuse consent because of pollution impacts unless there is good reason to believe that any relevant necessary operational pollution control permits or licences, or other consents would not be granted.

## **Common law nuisance and statutory nuisance**

- 4.53 Section 158 of the Planning Act 2008 provides a defence of statutory authority in civil or criminal proceedings for nuisance. Such a defence is also available in respect of anything else authorised by an order granting development consent. This would include a defence for proceedings for nuisance under Part III of the Environmental Protection Act 1990 ("the 1990 Act") (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised.
- 4.54 The defence does not extinguish the local authority's duties under Part III of the 1990 Act to inspect its area and take reasonable steps to investigate complaints of statutory nuisance, and to serve an abatement notice where satisfied of its existence, likely occurrence or recurrence.
- 4.55 It is very important that, during the examination of a nationally significant infrastructure project, possible sources of nuisance under section 79(1) of the 1990 Act, and how they may be mitigated or limited, are considered by the Examining Authority so they can recommend appropriate requirements that the Secretary of State might include in any subsequent order granting development consent. More information on the consideration of possible sources of nuisance is at paragraphs 5.117 to 5.125.
- 4.56 When considering whether to include exceptions to the defence in an order granting development consent (section 158(3) of the Planning Act 2008), the Secretary of State should have regard to whether any nuisance is an inevitable consequence of the development.

## **Safety**

### **Road Safety**

- 4.57 Highways developments provide an opportunity to make significant safety improvements and significant incident reduction benefits when they are well designed. Some developments may have safety as a key objective, but even where safety is not the main aim of a development, the opportunity should be taken to improve safety, including introducing the most modern and effective safety measures where proportionate. Consideration should also be given to wider transport objectives, including expanding active travel, and creating safe and pleasant walking, wheeling and cycling environments. In developing roads schemes the applicant should have due regard to the needs of drivers and riders and the imperative to ensure road user safety. Schemes should be developed with a mindset that accounts for the need for motorists to rest, particularly Heavy Goods Vehicle drivers who need safe and secure roadside

facilities that also cater for their welfare needs including the appropriate provision of high-quality washrooms, a catering offer and access to alternative fuel and digital infrastructure.

- 4.58 The applicant should undertake an objective assessment of the impact of the proposed development on safety including the impact of any mitigation measures. This should use the methodology outlined in the guidance from Department for Transport's Transport Analysis Guidance and from National Highways. They should also put in place arrangements for undertaking the road safety audit process and ensuring their implementation. Road safety audits are a mandatory requirement for highway improvement schemes in the UK (including motorways). Road safety audits are intended to ensure that operational road safety experience is applied during the design and construction process so that the number and severity of collisions is as low as is reasonably practicable.
- 4.59 The applicant should be able to demonstrate that their scheme is consistent with government Road Safety policy and with the National Highways Safety Framework for the Strategic Road Network. Applicants must show that they have taken all steps that are reasonably required to minimise the risk of death and injury arising from their development, including:
- contributing to an overall reduction in road casualties
  - contributing to an overall reduction in the number of unplanned incidents
  - contributing to improvements in road safety for pedestrians and cyclists<sup>95</sup>
- 4.60 The applicant must also demonstrate that:
- they have considered the safety implications of their project from the outset
  - they are putting in place rigorous processes for monitoring and evaluating safety
- 4.61 The Secretary of State should not grant development consent unless satisfied that all reasonable steps have been taken and will be taken to:
- minimise the risk of road casualties arising from the scheme
  - contribute to improvements in the safety of the strategic road network

## **Rail Safety**

- 4.62 It is the government's policy, supported by legislation, to ensure that the risks of passenger and workforce accidents are reduced so far as reasonably practicable. Rail schemes should take account of this and seek to further improve safety at every opportunity and where there is value for money in doing so.
- 4.63 The rail industry is required by law to consider the impact on safety of any proposed changes to the rail network through rigorous risk assessment. The principle of "so far as is reasonably practicable" is applied through the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) which are enforced by the Office of Rail and Road<sup>96</sup>. The rail industry is also required by legislation to comply with applicable Common Safety Methods. This

**HIGHWAY SAFETY & ROAD CASUALTY  
POSITION STATEMENT**  
EAST MIDLANDS GATEWAY PHASE 2



**Appendix 2. Personal Injury Collision Data (Leicestershire County Council network)**

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900030	16/01/2019	442450	322838	Other	Wet/Damp	Darkness: no street lighting	Slight
Location:		A453 BREEDON ON THE HILL APPROX 250 NORTH WEST JW A42					

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	S	NW
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900204	06/02/2019	447466	328064	Fine without high winds	Wet/Damp	Daylight	Slight
Location: M1 LOCKINGTON-HEMINGTON JW M1 NORTHBOUND ON-SLIP JUNCTION 24							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Going ahead other	S	N
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Going ahead other	S	N
Goods 7.5 tonnes mgw and over	Entering from slip road	Going ahead left bend	S	N
Car	Jct Approach	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900471	13/05/2019	447300	326389	Fine without high winds	Dry	Daylight	Slight

Location: A453 ASHBY ROAD KEGWORTH ROUNDABOUT JW KEGWORTH BYPASS

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering roundabout	Starting	E	NE
Car	Entering roundabout	Starting	E	NE
Goods 7.5 tonnes mgw and over	Mid Junction - on roundabout or main road	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900573	19/03/2019	445040	329440	Fine without high winds	Dry	Daylight	Slight

Location: A50 EASTBOUND CASTLE DONINGTON AT JUNCTION 1 SLIPROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods over 3.5 tonnes and under 7.5 tonnes mgw	Mid Junction - on roundabout or main road	Changing lane to left	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900684	29/06/2019	446885	323821	Fine without high winds	Dry	Darkness: no street lighting	Slight

Location: M1 NORTHBOUND LONG WHATTON & DISEWORTH MARKER POST 181/4A

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to right	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900692	23/07/2019	444777	328130	Fine without high winds	Dry	Daylight	Slight

Location: C8214 STATION ROAD CASTLE DONINGTON JW TRENT LANE

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	NW	N

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900725	23/07/2019	444590	328170	Fine without high winds	Dry	Daylight	Serious

Location: TRENT LANE CASTLE DONINGTON JW WILLOW ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	E	N
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900830	28/08/2019	448900	319585	Other	Wet/Damp	Darkness: street lights present and lit	Serious

Location: M1 NORTHBOUND SHEPSHED AT MARKER 176/7.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900889	17/09/2019	446785	325441	Fine without high winds	Dry	Daylight	Slight
Location: A453 ASHBY ROAD LONG WHATTON AND DISEWORTH 500M EAST OF BEVERLEY ROAD JUNCTION							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	E	W
Car	Not at, or within 20M of Jct	Going ahead other	W	E
Taxi/Private hire car	Not at, or within 20M of Jct	Going ahead but held up	E	W
Car	Not at, or within 20M of Jct	Going ahead but held up	E	W
Other vehicle - specify	Not at, or within 20M of Jct	Going ahead but held up	E	W
Other vehicle - specify	Not at, or within 20M of Jct	Going ahead but held up	E	W

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901038	17/11/2019	445284	325302	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: A453 ASHBY ROAD CASTLE DONINGTON 30 METRES NORTH EAST OF C8204 GRIMES GATE

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	SW	NE
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901123	24/12/2019	447291	326175	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: M1 NORTHBOUND KEGWORTH MARKER POST 183/8A

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901126	27/12/2019	447019	325205	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND MARKER POST 182/8B

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Stopping	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901163	22/10/2019	447445	327510	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH INTERCHANGE KEGWORTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	E	W
Goods 7.5 tonnes mgw and over	Leaving roundabout	Changing lane to left	E	W

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901190	13/11/2019	443367	328149	Fine without high winds	Dry	Darkness: street lighting unknown	Slight

Location: ARUNDEL AVENUE CASTLE DONINGTON EXACT LOCATION UNKNOWN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	E	W
Car	Not at, or within 20M of Jct	Stopping	E	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901200	13/11/2019	446680	323740	Fine without high winds	Wet/Damp	Daylight	Slight

Location: C8214 WEST END LONG WHATTON 50M W LONG MEADOW LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	NW	E
Car	Not at, or within 20M of Jct	Going ahead right bend	E	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901277	27/06/2019	444495	325270	Fine without high winds	Dry	Daylight	Slight

Location: A453 ASHBY ROAD CASTLE DONINGTON JW ROAD TO DISEWORTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	W	S
Car	Mid Junction - on roundabout or main road	Going ahead other	E	W
Car	Jct Approach	Waiting to turn right	S	E

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901521	18/02/2019	445400	329430	Fine without high winds	Dry	Daylight	Slight

Location: A50 ROUNDABOUT LOCKINGTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901523	23/02/2019	447530	327555	Fine without high winds	Dry	Darkness: street lighting unknown	Slight

Location: M1 KEGWORTH NR JUNCTION 24. EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901547	28/04/2019	444640	325250	Fine without high winds	Dry	Daylight	Slight

Location: A453 CASTLE DONINGTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	E	W
Car	Not at, or within 20M of Jct	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901566	13/07/2019	448645	328665	Fine without high winds	Dry	Daylight	Slight

Location: LONG LANE KEGWORTH EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Pedal Cycle (Including pedal assisted electric bicycles)	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901591	22/10/2019	447725	327725	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH NR M1. EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	SW	NE
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000018	17/01/2020	448125	328034	Fine without high winds	Dry	Darkness: no street lighting	Serious

Location: A453 GREEN LANE 90 METRES SOUTH WEST OF DOWELL'S BARN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods over 3.5 tonnes and under 7.5 tonnes mgw	Not at, or within 20M of Jct	Parked	Parked	Parked
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	NE	SW
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Serious



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000165	21/01/2020	445595	325390	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Fatal

Location: A453 ASHBY ROAD LONG WHATTON AT ENTRANCE TO AIRPORT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	E	N
Agricultural vehicle	Mid Junction - on roundabout or main road	Going ahead other	W	E

Casualties:

Class	Severity
Vehicle	Fatal
Passenger	
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000342	23/06/2020	444875	328915	Fine without high winds	Dry	Daylight	Serious

Location: BROAD RUSHES CASTLE DONINTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	W	E
Pedal Cycle (Including pedal assisted electric bicycles)	Not at, or within 20M of Jct	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000434	22/07/2020	444770	328105	Fine without high winds	Dry	Daylight	Serious

Location: C8214 STATION ROAD CASTLE DONINGTON JW TRENT LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	N	Parked
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000446	25/07/2020	445580	325380	Fine without high winds	Dry	Daylight	Slight

Location: A453 LONG WHATTON AT ENTRANCE TO AIRPORT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	E	W
Car	Cleared junction or waiting/parked at junction exit	Changing lane to left	E	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000492	09/02/2020	448975	318305	Raining with high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: A512 ASHBY ROAD EAST SHEPSHED AT JUNCTION 23 ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Stopping	W	E
Car	Jct Approach	Stopping	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000564	19/03/2020	446940	325230	Fine without high winds	Wet/Damp	Darkness: street lighting unknown	Slight

Location: A42 NORTHBOUND EXIT SLIPROAD FROM JUNCTION 23A.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Overtaking stat vehicle O/S	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000589	09/08/2020	448225	327082	Fine without high winds	Dry	Daylight	Slight

Location: A6 DERBY ROAD KEGWORTH EXACT LOCATION NOT GIVEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000596	05/08/2020	447495	327455	Fine without high winds	Dry	Daylight	Serious

Location: M1 NORTHBOUND KEGWORTH AT J24 OFFSLIP.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Jct Approach	Stopping	S	N
Car	Jct Approach	Going ahead but held up	S	N
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Going ahead but held up	S	N
Goods 7.5 tonnes mgw and over	Jct Approach	Going ahead but held up	S	N

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Serious
Passenger	
Vehicle	Slight
Passenger	
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000627	20/08/2020	445290	325090	Fine without high winds	Dry	Daylight	Slight

Location: C8204 GRIMES GATE DISEWORTH AT ENTRANCE TO BYLANDS COTTAGE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Reversing	W	E
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000881	10/11/2020	449195	318315	Fine without high winds	Dry	Darkness: street lights present but unlit	Slight

Location: A512 ASHBY ROAD LOUGHBOROUGH JW M1 JUNCTION 23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering roundabout	Stopping	E	W
Car	Entering roundabout	Stopping	E	W

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202001164	14/10/2020	444300	328215	Fine without high winds	Dry	Daylight	Serious

Location: TRENT LANE CASTLE DONINGTON EXACT LOCATION & DIRECTIONS UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	E	W

Casualties:

Class	Severity
Pedestrian	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202001233	04/12/2020	447100	328845	Fine without high winds	Dry	Daylight	Serious

Location: MAIN STREET LOCKINGTON JW WARREN LANE EXACT LOCATION & DIRECTION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	SE	NW

Casualties:

Class	Severity
Vehicle Passenger	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202001238	10/12/2020	444745	327865	Fine without high winds	Dry	Darkness: street lighting unknown	Slight

Location: C8214 STATION ROAD CASTLE DONINGTON EXACT LOCATION & DIRECTIONS UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 50 cc and up to 125cc	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202001249	17/12/2020	444855	328425	Fine without high winds	Dry	Daylight	Slight

Location: C8214 STATION ROAD CASTLE DONINGTON EXACT LOCATION & DIRECTIONS UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Pedal Cycle (Including pedal assisted electric bicycles)	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100046	25/01/2021	449035	318250	Other	Frost/Ice	Daylight	Slight
Location:	M1 NORTHBOUND EXIT SLIPROAD SHEPSHED AT JUNCTION 23 ROUNDABOUT.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Stopping	S	N
Car	Jct Approach	Stopping	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100116	08/03/2021	446820	330620	Fine without high winds	Dry	Darkness: no street lighting	Slight
Location:	B6540 TAMWORTH ROAD LOCKINGTON-HEMINGTON EXACT LOCATION & DIRECTIONS UNKNOWN.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100148	23/03/2021	448250	326730	Fine without high winds	Dry	Daylight	Slight

Location: C8211 ASHBY ROAD KEGWORTH NEXT TO NUMBER 22.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Leaving main road	Reversing	S	N

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100163	31/03/2021	447430	326555	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND KEGWORTH AT MARLER 184/2.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	N	S
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100191	12/04/2021	447650	327705	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: A453 REMEMBRANCE WAY KEGWORTH AT EXIT FROM M1 JUNCTION 24 ROUNDABOUT

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Turning left	N	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100207	08/04/2021	447300	326430	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: A453 KEGWORTH ON ROUNDABOUT WITH KEGWORTH BY-PASS

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	N	S
Car	Leaving roundabout	Turning right	W	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100249	25/04/2021	448965	319387	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND SHEPSHED AT MARKER 176/5.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Taxi/Private hire car	Not at, or within 20M of Jct	Changing lane to right	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	Parked	Parked
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100259	29/04/2021	444775	328105	Fine without high winds	Dry	Daylight	Slight

Location: C8214 STATION ROAD CASTLE DONINGTON JW TRENT LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning right	W	S
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100273	05/05/2021	444285	328805	Fine without high winds	Wet/Damp	Daylight	Slight

Location: BROAD RUSHES CASTLE DONINGTON JW BACK LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	SW	NE

Casualties:

Class	Severity
Pedestrian	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100299	12/05/2021	446365	330255	Fine without high winds	Wet/Damp	Daylight	Serious

Location: B6540 TAMWORTH ROAD LOCKINGTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	NE	SW
Pedal Cycle (Including pedal assisted electric bicycles)	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100303	12/05/2021	447410	327110	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH APPROACHING JW A50.EXACT LOCATION NOT PROVIDED.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 50 cc and up to 125cc	Not at, or within 20M of Jct	Going ahead left bend	S	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100367	28/05/2021	447515	327190	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND KEGWORTH AT MP185/0.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Changing lane to right	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100382	02/06/2021	443010	325745	Fine without high winds	Dry	Daylight	Slight

Location: C8214 HILL TOP CASTLE DONINGTON OUTSIDE ENTRANCE TO RACE TRACK.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	NE	S
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Motorcycle over 500cc	Not at, or within 20M of Jct	Going ahead left bend	NE	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100407	10/06/2021	447760	322145	Fine without high winds	Dry	Daylight	Serious

Location: M1 SOUTHBOUND LONG WHATTON AT MARKER 179/5

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Not at, or within 20M of Jct	Going ahead other	NW	SE
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Changing lane to right	NW	SE

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100432	16/06/2021	447295	326405	Fine without high winds	Dry	Daylight	Serious

Location: A453 KEGWORTH JW KEGWORTH BY-PASS.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	N	S
Car	Entering roundabout	Starting	E	W
Car	Entering roundabout	Starting	E	W

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100476	27/06/2021	447475	326690	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND KEGWORTH EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking nearside	N	S
Car	Not at, or within 20M of Jct	Parked	Parked	Parked

Casualties:

Class	Severity
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100554	27/07/2021	447230	325990	Raining without high winds	Wet/Damp	Daylight	Slight

Location: M1 NORTHBOUND KEGWORTH APPROX 1 MILE S JUNCTION 24.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to left	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100568	30/07/2021	449350	318345	Fine without high winds	Wet/Damp	Daylight	Slight

Location: A512 ASHBY ROAD LOUGHBOROUGH APPROX 150M E M1.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	W	E

Casualties:

Class	Severity
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100620	16/08/2021	447315	326170	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND KEGWORTH AT MARKER 183/8.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead but held up	N	S

Casualties:

Class	Severity
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100635	21/08/2021	448650	326885	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: BOROUGH STREET KEGWORTH EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	NE	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100640	21/08/2021	444925	328865	Other	Dry	Daylight	Slight
Location:	C8214 STATION ROAD CASTLE DONINGTON JW BROAD RUSHES.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Changing lane to right	N	W
Motorcycle over 500cc	Leaving roundabout	Turning right	N	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100670	03/09/2021	446927	325332	Fine without high winds	Dry	Darkness: street lights present and lit	Slight
Location:	A453 FINGER FARM ROUNDABOUT LONG WHATTON AT EXIT FROM A42.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering roundabout	Going ahead left bend	S	NW

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100673	03/09/2021	447490	328075	Fine without high winds	Dry	Daylight	Serious

Location: M1 SOUTHBOUND LOCKINGTON NR J24 SLIPROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 125 cc and up to 500cc	Jct Approach	Going ahead other	N	S
Motor Cycle over 125 cc and up to 500cc	Jct Approach	Going ahead other	N	S
Car	Jct Approach	Changing lane to right	N	S

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100682	06/09/2021	447385	328500	Fine without high winds	Dry	Daylight	Serious

Location: M1 SOUTHBOUND KEGWORTH APPROACHING J24.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Motorcycle over 500cc	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100694	10/09/2021	446965	325350	Fine without high winds	Wet/Damp	Daylight	Slight

Location: A453 JUNCTION 23A ROUNDABOUT LONG WHATTON.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead but held up	NW	S
Car	Leaving roundabout	Starting	NW	SW

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100699	11/09/2021	447505	327350	Fine without high winds	Dry	Daylight	Slight

Location: M1 JUNCTION 24 NORTHBOUND OFF SLIPROAD KEGWORTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead but held up	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100773	28/09/2021	444505	327285	Fine without high winds	Dry	Daylight	Serious

Location: MARKET STREET CASTLE DONINGTON JW BONDGATE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning left	N	E

Casualties:

Class	Severity
Pedestrian	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100781	03/10/2021	443015	325625	Fine without high winds	Dry	Daylight	Slight
Location: C8214 HILL TOP CASTLE DONINGTON AT ENTRANCE TO DONINGTON PARK.							

Vehicles:				
Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	N	W
Motorcycle over 500cc	Leaving main road	Turning right	W	S

Casualties:	
Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100812	13/10/2021	447120	331070	Fine without high winds	Dry	Darkness: street lights present and lit	Slight
Location: B6540 TAMWORTH ROAD LOCKINGTON-HEMINGTON AT RIVER BRIDGE.							

Vehicles:				
Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:	
Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100872	29/10/2021	445490	327580	Fine without high winds	Wet/Damp	Darkness: no street lighting	Serious

Location: C9204 HEMINGTON HILL HEMINGTON ON BEND E OF NUMBER 11.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead right bend	NE	W
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead left bend	W	NE

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202101522	26/03/2021	449000	319225	Fine without high winds	Dry	Darkness: street lighting unknown	Serious

Location: M1 SHEPSHED BETWEEN J22 & J23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Serious
Driver / Rider	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200028	15/01/2022	447190	328740	Fog or mist	Frost/Ice	Darkness: street lights present and lit	Slight

Location: A50 NORTHBOUND SLIPROAD LOCKINGTON-HEMINGTON EXACT LOCATION NOT GIVEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	S	NW
Car	Not at, or within 20M of Jct	Going ahead left bend	S	NW

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200046	18/01/2022	447995	321770	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: M1 SOUTHBOUND LOCKINGTON-HEMINGTON AT MARKER 179/0

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	NW	SE
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200063	21/01/2022	448720	320160	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND SHEPSHED AT MARKER 177/3

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200072	24/01/2022	448805	326635	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: A50 LONDON ROAD KEGWORTH JW NOTTINGHAM ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning left	N	S
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead left bend	S	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200093	29/01/2022	447115	325880	Raining without high winds	Wet/Damp	Darkness: no street lighting	Serious

Location: A453 SOUTHBOUND KEGWORTH APPROX 500M N JUNCTION 23A ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200096	30/01/2022	446635	324235	Fine without high winds	Dry	Darkness: street lights present and lit	Serious

Location: A42 NORTHBOUND LONG WHATTON ON SLIPROAD FOR A453.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to left	SW	NE
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Serious
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200193	05/03/2022	446940	330740	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: B6540 TAMWORTH ROAD LOCKINGTON JW WARREN LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	U-turn	SW	SW
Car	Mid Junction - on roundabout or main road	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200202	08/03/2022	443940	326310	Fine without high winds	Frost/Ice	Darkness: no street lighting	Slight

Location: C8214 HILL TOP CASTLE DONINGTON OUTSIDE HILL TOP FARM.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Turning left	W	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200264	29/03/2022	448540	326865	Fine without high winds	Dry	Daylight	Serious

Location: A6 DERBY ROAD KEGWORTH OUTSIDE NUMBER 52.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Pedestrian	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200286	06/04/2022	446370	330260	Fine without high winds	Dry	Daylight	Slight

Location: B6540 TAMWORTH ROAD LOCKINGTON APPROX 200M SW NETHERFIELD LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	U-turn	SW	SW
Motor Cycle over 125 cc and up to 500cc	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200346	30/04/2022	443945	326280	Fine without high winds	Dry	Daylight	Serious

Location: C8214 HILL TOP CASTLE DONINGTON AT ROUNDABOUT NR ENTRANCE TO AEROPARK.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Leaving roundabout	Turning right	N	W

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200400	16/05/2022	447100	325540	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND KEGWORTH APPROX 1500M S JUNCTION 24.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Changing lane to left	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200447	02/06/2022	444725	327435	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: BOROUGH STREET CASTLE DONINGTON OPPOSITE NUMBER 46

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	SW	NE
Car	Entering main road	Turning left	NW	NE
Car	Cleared junction or waiting/parked at junction exit	Parked	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200477	14/06/2022	448160	327127	Fine without high winds	Dry	Daylight	Slight

Location: A6 DERBY ROAD KEGWORTH JW SIDE LEY.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	NW	SE
Car	Entering main road	Turning right	NE	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200609	25/07/2022	443395	325480	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: A453 CASTLE DONINGTON AT DHL ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200623	30/07/2022	448930	328790	Fine without high winds	Wet/Damp	Daylight	Serious

Location: A453 SOUTHBOUND KEGWORTH APPROX 250M SW RIVER BRIDGE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	NE	SW

Casualties:

Class	Severity
Driver / Rider	Serious
Vehicle	Serious
Passenger	

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200634	02/08/2022	444485	325280	Other	Wet/Damp	Daylight	Slight

Location: A453 ASHBY ROAD CASTLE DONINGTON JW THE GREEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Jct Approach	Stopping	W	E
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Going ahead but held up	W	E
Car	Mid Junction - on roundabout or main road	Waiting to turn right	W	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200658	10/08/2022	442060	324115	Fine without high winds	Dry	Daylight	Slight

Location: A453 BREEDON ON THE HILL APPROX 250M NE MOOR LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Not at, or within 20M of Jct	Going ahead right bend	N	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200661	11/08/2022	447265	326075	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND KEGWORTH AT MARKER 183/7.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200662	11/08/2022	447300	326100	Fine without high winds	Dry	Daylight	Slight

Location: M1 SOUTHBOUND KEGWORTH EXACT LOCATION NOT GIVEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to right	N	S
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200748	06/09/2022	449080	317910	Raining without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: M1 NORTHBOUND SHEPSHED AT EXIT SLIPROAD FOR JUNCTION 23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Changing lane to right	S	N
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200766	28/06/2022	447125	328790	Fine without high winds	Dry	Daylight	Slight

Location: A50 WESTBOUND LOCKINGTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 50 cc and up to 125cc	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	SE	NW
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200803	26/09/2022	444960	328925	Raining without high winds	Wet/Damp	Daylight	Slight

Location: STATION ROAD CASTLE DONINGTON JW BROAD RUSHES.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 125 cc and up to 500cc	Jct Approach	Going ahead other	N	S
Car	Leaving roundabout	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200830	04/10/2022	448330	327135	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: C8207 SIDE LEY KEGWORTH OUTSIDE NUMBER 87.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Reversing	S	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200835	23/09/2022	448965	319290	Fine without high winds	Dry	Daylight	Serious

Location: M1 NORTHBOUND SHEPSHED AT MP 176/4.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200862	10/10/2022	444490	325278	Fine without high winds	Wet/Damp	Daylight	Slight

Location: A453 ASHBY ROAD CASTLE DONINGTON JW THE GREEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Jct Approach	Going ahead other	W	E
Car	Mid Junction - on roundabout or main road	Waiting to turn right	W	S

Casualties:

Class	Severity
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200912	26/10/2022	445590	325390	Fine without high winds	Wet/Damp	Daylight	Slight

Location: A453 ASHBY ROAD LONG WHATTON AT ENTRANCE TO EAST MIDLANDS AIRPORT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	E	N
Goods vehicle - unknown weight	Mid Junction - on roundabout or main road	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200926	31/10/2022	443920	328195	Raining without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: ARUNDEL AVENUE CASTLE DONINGTON EXACT LOCATION NOT GIVEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead right bend	NE	W
Car	Not at, or within 20M of Jct	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200985	11/11/2022	444920	327200	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: EASTWAY CASTLE DONINGTON NR NUMBER 30.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 50 cc and up to 125cc	Not at, or within 20M of Jct	Going ahead other	W	E
Car	Not at, or within 20M of Jct	Parked	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202201031	20/11/2022	449150	318368	Fine without high winds	Dry	Daylight	Slight

Location: A512 ASHBY ROAD SHEPSHED ON M1 ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Changing lane to right	W	E
Car	Mid Junction - on roundabout or main road	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202201105	20/12/2022	444830	328315	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Serious

Location: C8214 STATION ROAD CASTLE DONINGTON AT ENTRANCE TO PETROL STATION.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Waiting to turn right	S	E
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300023	09/01/2023	445430	329365	Fine without high winds	Dry	Darkness: street lights present and lit	Fatal
Location: A50 ROUNDABOUT LOCKINGTON-HEMINGTON JW TRENT LANE.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	E	W
Car	Entering roundabout	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Fatal

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300142	18/02/2023	447625	327715	Fine without high winds	Dry	Darkness: street lights present and lit	Slight
Location: M1 JUNCTION 24 ROUNDABOUT KEGWORTH NR EXIT FOR A453 TO NOTTINGHAM.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300354	15/05/2023	445255	325280	Fine without high winds	Dry	Daylight	Slight

Location: A453 ASHBY ROAD LONG WHATTON JW GRIMES GATE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	SW	NE
Car	Mid Junction - on roundabout or main road	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300386	25/05/2023	447530	327570	Fine without high winds	Dry	Daylight	Serious

Location: M1 NORTHBOUND KEGWORTH NR JUNCTION 24

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300409	25/05/2023	448670	320300	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND BETWEEN J23 & 23A. EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Stopping	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300500	09/06/2023	446935	325445	Fine without high winds	Dry	Daylight	Slight

Location: A453 NORTHBOUND KEGWORTH AT EXIT FROM DONINGTON SERVICES ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Cleared junction or waiting/parked at junction exit	Changing lane to left	S	N
Goods vehicle - unknown weight	Cleared junction or waiting/parked at junction exit	Starting	S	N

Casualties:

Class	Severity
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300546	08/06/2023	447095	330925	Fine without high winds	Dry	Daylight	Serious

Location: B6540 TAMWORTH ROAD LOCKINGTON S OF MARINA BRIDGE.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Pedestrian	Serious



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300555	07/07/2023	446975	325370	Fine without high winds	Dry	Daylight	Slight

Location: A453 FINGER FARM ROUNDABOUT KEGWORTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	N	S
Motor Cycle over 50 cc and up to 125cc	Mid Junction - on roundabout or main road	Changing lane to right	N	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300565	10/07/2023	447305	328065	Raining without high winds	Wet/Damp	Daylight	Slight

Location: A50 NORTHBOUND LOCKINGTON APPROX 150M N CHURCH STREET.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Changing lane to left	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300587	18/03/2023	444810	327445	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight
Location: C9204 CLAPGUN STREET CASTLE DONINGTON JW THE HOLLOW.							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Entering main road	Turning right	NW	SW

Casualties:

Class	Severity
Pedestrian	Slight
Pedestrian	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300716	16/08/2023	446630	324190	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: M1 SOUTHBOUND LONG WHATTON NR J23 ON SLIP.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	NE	SW
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300893	25/09/2023	448055	321620	Fine without high winds	Dry	Darkness: street lighting unknown	Slight

Location: M1 NORTHBOUND LONG WHATTON AT MP 178/9.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to left	SE	NW
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300910	25/09/2023	447660	327700	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH INTERCHANGE AT EXIT FOR REMEMBRANCE WAY.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Going ahead other	N	E
Van / Goods 3.5 tonnes mgw and under	Leaving roundabout	Changing lane to left	N	E

Casualties:

Class	Severity
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300911	29/09/2023	442730	322370	Fine without high winds	Dry	Daylight	Slight

Location: GELSCOE LANE.BREEDON ON THE HILL EXACT LOCATION UNKNOWN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning left	S	W
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300922	01/10/2023	441840	323960	Fine without high winds	Wet/Damp	Daylight	Slight

Location: A453 BREEDON ON THE HILL JW MOOR LANE

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Going ahead other	SW	NE
Car	Jct Approach	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300925	01/10/2023	448790	328690	Fine without high winds	Wet/Damp	Daylight	Fatal

Location: A453 REMEBRANCE WAY KEGWORTH APPROX 150M NE LONG LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead but held up	NE	SW
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Fatal

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300941	04/10/2023	447810	327465	Fine without high winds	Dry	Daylight	Slight

Location: A6 DERBY ROAD KEGWORTH AT ENTRANCE TO PAINTBALL CENTRE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	SE	NW
Car	Entering main road	Turning right	NE	NW

Casualties:

Class	Severity
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300964	06/10/2023	447500	327440	Raining without high winds	Wet/Damp	Daylight	Slight

Location: M1 NORTHBOUND EXIT SLIPROAD FOR JUNCTION 24.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead but held up	S	N
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300979	27/09/2023	449470	324550	Fine without high winds	Dry	Daylight	Serious

Location: A6 LONDON ROAD LONG WHATTON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Stopping	S	N
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301020	22/10/2023	447480	327490	Fine without high winds	Dry	Daylight	Serious

Location: A453 JUNCTION 24 ROUNDABOUT KEGWORTH AT EXIT FROM M1 NORTHBOUND.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	E	W
Motorcycle over 500cc	Entering roundabout	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301106	04/11/2023	447490	322555	Raining without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: M1 SOUTHBOUND LONG WHATTON AT MP 180/0.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301253	15/12/2023	448865	326120	Fine without high winds	Dry	Darkness: street lights present but unlit	Serious

Location: A6 KEGWORTH AT ROUNDABOUT WITH KEGWORTH BY-PASS.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering roundabout	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301262	18/12/2023	444580	322660	Fine without high winds	Wet/Damp	Daylight	Serious

Location: A42 NORTHBOUND LONG WHATTON NR MP 84/5.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Starting	SW	NE
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months  
Selection: Notes:  
; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202301272	22/12/2023	446965	328940	Raining without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: A50 LOCKINGTON ON SLIPROAD TO M1 SOUTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400009	04/01/2024	444815	327445	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: C9402 CLAPGUN STREET CASTLE DONINGTON JW THE HOLLOW.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	W	S

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400038	13/01/2024	447295	326400	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH INTERCHANGE KEGWORTH.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Starting	N	S
Car	Mid Junction - on roundabout or main road	Starting	E	W

Casualties:

Class	Severity
Vehicle	Slight
Passenger	

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400129	29/01/2024	447500	327380	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: M1 NORTHBOUND KEGWORTH APPROACHING J24 EXIT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead but held up	S	N
Car	Not at, or within 20M of Jct	Going ahead	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400144	09/02/2024	448715	327155	Raining without high winds	Wet/Damp	Daylight	Slight

Location: C8207 STATION ROAD KEGWORTH JW LONG LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead	E	W
Car	Entering main road	Going ahead	S	N

Casualties:

Class	Severity
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400163	16/02/2024	445260	322965	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: A42 NORTHBOUND LONG WHATTON & DIESWORTH NE OF LONGMERE LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	SW	NE
Goods 7.5 tonnes mgw and over	Not at, or within 20M of Jct	Going ahead	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400192	23/02/2024	446860	323920	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND LONG WHATTON APPROACHING J23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	S	N
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400235	15/03/2024	449080	317880	Fine without high winds	Dry	Daylight	Less serious

Location: M1 NORTHBOUND LOUGHBOROUGH APPROACHING J23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Changing lane to left	S	N
Car	Not at, or within 20M of Jct	Going ahead	S	N

Casualties:

Class	Severity
Driver / Rider	Less serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400243	17/03/2024	448380	328325	Raining without high winds	Wet/Damp	Daylight	Slight

Location: A453 NORTHBOUND KEGWORTH APPROX 400M SW LONG LANE BRIDGE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400297	04/04/2024	449070	318005	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND SHEPSHED ON SLIPROAD TO J23.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Going ahead	S	N
Car	Leaving main road	Going ahead	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400337	18/04/2024	444785	327193	Fine without high winds	Dry	Daylight	Slight

Location: EASTWAY CASTLE DONINGTON OUTSIDE SCHOOL.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning right	S	E
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400395	06/05/2024	446845	324455	Fine without high winds	Dry	Daylight	Slight

Location: M1 NORTHBOUND LONG WHATTON.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400439	14/05/2024	449040	319030	Fine without high winds	Dry	Daylight	Less serious

Location: M1 SOUTHBOUND SHEPSHED EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	N	S
Goods vehicle - unknown weight	Not at, or within 20M of Jct	Going ahead	N	S

Casualties:

Class	Severity
Vehicle	Less serious
Passenger	
Driver / Rider	Less serious



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400534	12/06/2024	447250	326415	Fine without high winds	Dry	Daylight	Slight

Location: A453 KEGWORTH INTERCHANGE JW WILDERS WAY.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Mid Junction - on roundabout or main road	Stopping	S	N
Car	Mid Junction - on roundabout or main road	Going ahead	S	N
Car	Mid Junction - on roundabout or main road	Starting	E	W

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400611	27/06/2024	444770	328110	Fine without high winds	Dry	Daylight	Slight

Location: C8214 STATION ROAD CASTLE DONINGTON JW TRENT LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Mid Junction - on roundabout or main road	Starting	S	N
Car	Entering main road	Starting	W	E

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400622	05/07/2024	447255	326415	Fine without high winds	Dry	Daylight	Fatal

Location: A453 KEGWORTH INTERCHANGE JW WILDERS WAY.

Vehicles:

Type	Junct_Locn	Manvres	Movet	Movet
Car	Mid Junction - on roundabout or main road	Going ahead	S	N
Goods vehicle - unknown weight	Mid Junction - on roundabout or main road	Going ahead but held up	E	W

Casualties:

Class	Severity
Driver / Rider	Very serious
Vehicle	Moderately serious
Passenger	Fatal
Vehicle	Fatal
Passenger	
Vehicle	Slight
Passenger	
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400664	19/07/2024	441970	324070	Fine without high winds	Dry	Darkness: no street lighting	Moderately serious

Location: A453 BREEDON ON THE HILL BETWEEN TONGE & ISLEY WALTON.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	N	S
Car	Not at, or within 20M of Jct	Going ahead	S	N

Casualties:

Class	Severity
Vehicle Passenger	Less serious
Vehicle Passenger	Moderately serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400668	21/07/2024	447263	326487	Fine without high winds	Dry	Daylight	Less serious

Location: A453 KEGWORTH INTERCHANGE JW WILDERS WAY.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering roundabout	Going ahead	W	E
Car	Mid Junction - on roundabout or main road	Going ahead	S	N

Casualties:

Class	Severity
Driver / Rider	Less serious
Driver / Rider	Less serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400696	31/07/2024	447650	327580	Fine without high winds	Dry	Daylight	Less serious

Location: M1 JUNCTION 24 ROUNDABOUT KEGOWORTH. EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving roundabout	Changing lane to left	N	S
Motorcycle over 500cc	Mid Junction - on roundabout or main road	Turning right	N	W

Casualties:

Class	Severity
Driver / Rider	Less serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400698	01/08/2024	449220	318330	Fine without high winds	Dry	Daylight	Less serious

Location: A512 ASHBY ROAD EAST SHEPSHED AT J23 ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Going ahead but held up	E	W
Car	Entering roundabout	Going ahead	N	S

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight
Driver / Rider	Less serious
Vehicle Passenger	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400699	30/07/2024	444535	329425	Fine without high winds	Dry	Daylight	Slight

Location: A50 CASTLE DONINGTON APPROX 500M E COUNTY BOUNDARY.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	W	E

Casualties:

Class	Severity
Vehicle Passenger	Slight
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400700	01/08/2024	449765	323875	Fine without high winds	Dry	Daylight	Fatal

Location: A6 SOUTHBOUND LONG WHATTON APPROX 250M S SOUTH LODGE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	N	S
Pedal Cycle (Including pedal assisted electric bicycles)	Not at, or within 20M of Jct	Starting	E	W

Casualties:

Class	Severity
Driver / Rider	Fatal

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400733	13/08/2024	444480	325280	Fine without high winds	Dry	Daylight	Slight

Location: A453 ASHBY ROAD CASTLE DONINGTON JW THE GREEN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Going ahead	W	E
Car	Leaving main road	Turning right	W	S

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400838	12/09/2024	448485	318280	Raining without high winds	Wet/Damp	Daylight	Less serious

Location: A512 ASHBY ROAD EAST SHEPSHED AT EXIT FROM TRUCK STOP.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning left	N	E
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead	E	W

Casualties:

Class	Severity
Driver / Rider	Less serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400866	17/09/2024	442190	323080	Fine without high winds	Dry	Daylight	Fatal

Location: A453 BREEDON ON THE HILL JW MOOR LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead	SE	N

Casualties:

Class	Severity
Driver / Rider	Fatal



Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400916	27/09/2024	444730	327215	Fine without high winds	Dry	Daylight	Slight

Location: EASTWAY CASTLE DONINGTON OUTSIDE SCHOOL.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead	NW	SE

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400917	03/10/2024	444345	328210	Fine without high winds	Dry	Daylight	Slight

Location: TRENT LANE CASTLE DONINGTON JW MAPLE ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead	W	E
Car	Leaving main road	Turning right	E	N

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400930	05/10/2024	441870	323250	Fine without high winds	Dry	Darkness: no street lighting	Slight

Location: MOOR LANE TONGE (BREEDON ON THE HILL) JW DOVECOTE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead	SE	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400967	15/10/2024	445410	329572	Fine without high winds	Dry	Darkness: street lights present and lit	Less serious

Location: LONDON ROAD LOCKINGTON-HEMINGTON AT A50 ROUNDABOUT.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Changing lane to left	NW	SE
Car	Not at, or within 20M of Jct	Going ahead	NW	SE

Casualties:

Class	Severity
Driver / Rider	Less serious

Accidents between dates 01/01/2019 and 23/10/2024 (70) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data  
Requests 2024 ("BWB East Midlands Airport 17.12.2024")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202400994	18/10/2024	447535	328260	Fine without high winds	Dry	Daylight	Slight

Location: A50 SOUTHBOUND LOCKINGTON AT M1 SLIPROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead	N	S
Car	Mid Junction - on roundabout or main road	Changing lane to right	N	S

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle	Slight
Passenger	

Number of records in selection: 151

**HIGHWAY SAFETY & ROAD CASUALTY  
POSITION STATEMENT**  
EAST MIDLANDS GATEWAY PHASE 2



**Appendix 3. Personal Injury Collision Data (M1 Junction 25 Derbyshire)**

Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.  Road No. 2nd Road No. Grid Ref.	Day  Date  Time  D/L  R.S.C  Weather  Speed   Account of Accident	Location Description	Vehicles					Casualties	
			Veh No / Type / Manv / Dir / Class					Sev	

1901537 Wednesday SANDIACRE, M1, A52 SLIP ROAD - Veh 1 Goods > 7.5t Change lane to right S to N  
02/10/2019 (IPQA) Veh 2 Car Going ahead S to N Dri Slight  
R1: M 1 0715hrs  
Daylight:street lights present  
E 447,178 Dry  
N 335,964 Fine without high winds  
70 mph

V1 MOVES LANE AND COLLIDES WITH V2 - (IPQA).

2000689 Wednesday SANDIACRE - M1 split with exit slip Veh 1 Car Change lane to left N to S Dri Slight  
20/05/2020 road, S/B Jnc 25. (2022) 1655hrs  
R1: M 1 Daylight:street lights present  
R2: M 1 Dry  
E 447,195 Fine without high winds  
N 335,933 70 mph

V1 ATTEMPTS TO GO FROM LN 2/3 INTO LN 1/3 TO LEAVE THE M/WAY. V1 CHANGING LANES FROM 2/3, BETWEEN TWO HGV'S IN LN 1/3 MISSES THE EXIT AND COLLIDES INTO ARMCO BARRIER BETWEEN M/WAY AND EXIT SLIP ON THE N/SIDE (2022)

2000691 Thursday SANDIACRE-M1 M/WAY S/B J25 Veh 1 Car Going ahead N to S Dri Slight  
18/06/2020 (5894) Veh 2 Car Going ahead N to S FSP Serious  
R1: M 1 1247hrs  
Daylight:street lights present  
E 447,192 Wet/Damp  
N 335,738 Raining without high winds  
70 mph

V1 LOSES CONTROL IN LANE 4 IN WET ROAD CONDITIONS AND COLLIDES WITH CENTRAL RESERVATION CAUSING IT VEER ACROSS THE M/WAY INTO LANE 1 AND DURING THIS COLLIDES WITH V2 (5894)

Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2000942 Saturday Long Eaton - A52 (IPQA) Veh 1 Car Going ahead E to W Dri Fatal  
22/08/2020 Veh 1 Car Going ahead E to W FSP Fatal  
R1: A 52 1655hrs  
Daylight:street lights present  
E 446,584 Dry  
N 335,428 Fine without high winds  
70 mph

V1 TRAV WESTBOUND VEERS TO NEARSIDE FOR UNKNOWN REASONS AND GOES OFF ROAD INTO TREES BEFORE DEFLECTED BACK INTO ROAD. BOTH OCCS FATAL AT SCENE (16779)

2100240 Saturday SANDIACRE - A52e J/W M1 R/B J25 Veh 1 Car Going ahead SW to NE Dri Slight  
24/10/2020 Slip (2022) Veh 2 Car Change lane to right SW to NE Dri Serious  
R1: A 52 1414hrs Veh 2 Car Change lane to right SW to NE FSP Slight  
R2: A 52 Daylight:street lights present  
E 447,645 Flood  
N 335,845 Raining without high winds  
70 mph

V2 S'ROAD MERGING A52 INTO L2. V1 AT SPEED A52 L2. V2 PANICKS,STEERS TO L1 & AQUAPLANES. V1 HITS N/S/BARRIER,REBOUNDS TO L2. V1 FNT COLLIDES REAR V2,V2 COLLIDES CNTRL BARRIER,VEERING TO N/S/BARRIER (2022)

2100547 Monday SANDIACRE-M1 N/B EXIT SLIP RD Veh 1 Car Change lane to right SE to NW  
29/03/2021 J25 (5894) Veh 2 Car Wait go ahead held SE to NW Dri Slight  
R1: M 1 1230hrs  
Daylight:street lights present  
E 447,147 Dry  
N 335,483 Fine without high winds  
60 mph

V2 WAS STATIONARY AT T/LIGHTS IN LANE 2 ON N/B EXIT SLIP RD WHEN V1 MOVED INTO LANE 2 COLLIDING WITH R/N/S/ OF V2 (5894)

Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2200373 Tuesday LONG EATON- SLIP ROAD NR TO  
01/03/2022 MPOST,M1,A,193.1,J25 ASIDE (17706) Veh 1 Car Going ahead SE to NW  
R1: M 1 1630hrs Veh 2 Car Wait go ahead held SE to NW Dri Slight  
Daylight:street lights present  
E 447,152 Dry  
N 335,314 Fine without high winds  
60 mph

V2 LEFT M1 TO JOIN A52, QUEUING TRAFFIC. V1 HAS APPROACHED FROM REAR AND HIT V2 ON THE REAR CAUSING DAMAGE AND MINOR INJURY TO DRIVER OF V2(17706)

2200565 Sunday SANDIACRE-R/ABOUT JCT 25 M1 J/W Veh 1 Minibus Change lane to left SE to SW  
03/04/2022 A52(17706) Veh 2 Car Going ahead SE to NE Dri Slight  
R1: A 52 1800hrs  
R2: A 52 Daylight:street lights present  
E 447,105 Dry  
N 335,516 Fine without high winds  
60 mph

V2 MISSED TURN AND PROCEEDED TO GO AROUND R/ABOUT FOR SECOND TIME; V1 WAS IN WRONG LANE, CUT ACROSS THE PATH OF V2 AND COLLIDED WITH SAME (17706)

2200680 Saturday SANDIACRE-R/ABOUT A52 J/W Veh 1 Car Going ahead SE to NW  
23/04/2022 BOSTOCKS LANE (17706) Veh 2 Car Going ahead SW to NE Dri Slight  
R1: A 52 1304hrs  
R2: C Daylight:street lights present  
E 447,064 Dry  
N 335,607 Fine without high winds  
60 mph

V2 IN THE INSIDE LANE , V1 CAME OUT OF NO WHERE ON R/H SIDE STRAIGHT INTO V2, CUTTING ACROSS THE PATH OF V2; V2 LEFT THE SCENE WITHOUT STOPPING (17706)

Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2200837 Thursday DERBY- A52 EXIT SLIP RD  
19/05/2022 WESTBOUND TO M1 JCT 25 (17706)  
R1: A 52 1622hrs  
R2: A 52 Daylight:street lights present  
E 447,521 Dry  
N 335,753 Fine without high winds  
70 mph

Veh 1	Car	Going ahead	NE to SW	
Veh 2	Car	Stopping	NE to SW	Dri Slight
Veh 2	Car	Stopping	NE to SW	FSP Slight
Veh 3	Car	Stopping	NE to SW	

V1 APPROACHING EXIT SLIP TO J25. FAILS TO SEE V2 AND V3 ALREADY STATIONARY DUE TO BUILD UP OF TRAFFIC ON EXIT SLIP  
V1 COLLIDES WITH REAR OF V 2, WHICH IS PUSHED FORWARD INTO REAR OF V3(17706)

2201068 Friday SANDIACRE-A52 R/ABOUT J/W  
24/06/2022 BOSTOCK'S LANE (17706)  
R1: A 52 1600hrs  
R2: C Daylight:street lights present  
E 447,077 Dry  
N 335,622 Fine without high winds  
60 mph

Veh 1	Car	Change lane to left	SW to NE	
Veh 2	Taxi	Going ahead	SW to NE	Dri Slight
Veh 2	Taxi	Going ahead	SW to NE	FSP Slight

V2 ON R/ABOUT AND MOVED OFF FROM GREEN T/LIGHTS WHEN V1 OVERTOOK V2 AND CHANGED LANES; PROCEEDED THEN TO  
CHANGE LANES AGAIN AND THEN COLLIDED WITH V2; V1 FAILED TO STOP AND EXCHANGE DETAILS(17706)

2300341 Sunday SANDIACRE-A52 R/ABOUT J/W  
26/02/2023 BOSTOCK'S LANE (17706)  
R1: A 52 1220hrs  
R2: U Daylight:street lights present  
E 447,100 Dry  
N 335,650 Fine without high winds  
60 mph

Veh 1	Car	Going ahead	NWto NE	Dri Slight
Veh 1	Car	Going ahead	NWto NE	FSP Slight
Veh 2	Car	Going ahead	NWto NE	

V1 WAS TRAVELLING DOWN BOSTOCKS LANE TO J/W R/ABOUT WHEN V2 COLLIDED WITH THE REAR OF V1 CAUSING SLIGHT  
INJURY/DAMAGE(17706)



Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2301064 Friday SANDIACRE - M1 EXIT SLIP ROAD Veh 1 Car Going ahead S to N Ped Fatal  
28/04/2023 (DQ)  
0442hrs  
Darkness: street lights present a  
Wet/Damp  
Raining without high winds  
70 mph

R1: M 1  
E 447,159  
N 335,356

UNKNOWN VEHICLE HAS COLLIDED WITH MALE PEDESTRIAN IN UNKNOWN CIRCUMSTANCES EARLY AM, ON THE NORTHBOUND EXIT SLIP ROAD IN LANE 2. (INVESTIGATION RETAINED BY NOTTS POLICE (DQ))

2301120 Saturday SANDIACRE- M1 EXIT SLIP RD J/W Veh 1 Car Going ahead NWto SE FSP Serious  
22/07/2023 A52 (18144) Veh 1 Car Going ahead NWto SE Dri Serious  
0400hrs  
Darkness: street lights present a  
Wet/Damp  
Raining without high winds  
70 mph

R1: A 52  
R2: M 1  
E 447,268  
N 335,707

V1 TRAVELLING AT EXCESSIVE SPEED FAILS TO STOP AT JUNCTION AND COLLIDES WITH FURNITURE AND TREES CAUSING SERIOUS INJURIES (18144).

2301337 Sunday SANDIACRE - A52 (E) ENTRY S/RD - Veh 1 Car Going ahead SW to NE Dri Serious  
27/08/2023 APPROX 1M N/E L/POST EL1465 - Veh 2 Car Going ahead SW to NE  
1150hrs W3W ///JAWS.SPARKLES.MODEST  
Daylight:street lights present  
Dry  
Fine without high winds  
70 mph

R1: A 52  
R2: A 52  
E 447,381  
N 335,738

DRIVER OF V1 REPORTS BEING CUT UP BY V2 CAUSING HIM TO TAKE EVASIVE ACTION - LEFT C/WAY N/SIDE AND ROLLED (5869) K

Details of Personal Injury Accidents for Period - 01/08/2019 to 31/07/2024 (60) months

Selection: Notes:  
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2400013 Sunday SANDIACRE - M1 J/W M1 STH ENTRY Veh 1 Car Going ahead N to S Dri Slight  
05/11/2023 S/RD (5869) Veh 2 Goods Unknown Change lane to left N to S  
R1: M 1 1410hrs  
R2: M 1 Daylight:street lights present  
E 447,206 Dry  
N 335,261 Fine without high winds  
70 mph

VEHICLE 1 MOVED INTO LANE 1 ON THE MOTORWAY AND COLLIDED WITH VEHICLE 2

2400014 Wednesday SANDIACRE - M1 S/RD J/W M1/A52 Veh 1 Car Wait go ahead held N to SE Dri Slight  
22/11/2023 R/BT JCTN 25 (5869) Veh 2 Car Going ahead N to SE  
R1: A 52 2030hrs  
R2: M 1 Darkness: street lighting unkno  
E 447,262 Dry  
N 335,719 Unknown  
60 mph

V2 COLLIDED WITH REAR OF V1

2400296 Thursday RISLEY- BRIAN CLOUGH WAY Veh 1 Car Going ahead W to E Dri Slight  
22/02/2024 EASTBOUND NR TO EXIT JCT 25 M1 Veh 2 Car Stopping W to E  
R1: A 52 1645hrs (18144)  
Darkness: street lights present a  
E 446,870 Wet/Damp  
N 335,495 Fine without high winds  
70 mph

V1 COLLIDED WITH THE REAR OF V2 IN SLOW MOVING TRAFFIC CAUSING SLIGHT INJURIES (18144).

**HIGHWAY SAFETY & ROAD CASUALTY  
POSITION STATEMENT**  
EAST MIDLANDS GATEWAY PHASE 2



**Appendix 4. Personal Injury Collision Data (A453 Remembrance Way Nottinghamshire)**



## Accident Details Report

---

Total number of reports = 7

Total number of pages (including this page) = 8

### **ROAD TRAFFIC INJURY ACCIDENT RECORDS - DISCLAIMER**

These details are a record of the personal injury accidents reported to the Police. Every endeavour is made to ensure the accuracy and completeness of these records, which have been transcribed from the original Police Reports. The data is then entered and held on computer.

Occasions may arise when information from the Police, relevant to a particular accident, may not be available for several months and will therefore not be included.

No. 1	District Rushcliffe	Accident Details		VRUs	Grid Reference 449645 / 328936
SEVERITY SLIGHT	Ref.No 2D184622			Police Officer Attend: Yes	
Date 07/10/2022 Day Friday	ROAD U	LOCATION U/C KEGWORTH ROAD, at its Junction with U/C MAIN STREET, RATCLIFFE-ON-SOAR			
Time 20:51					
Weather Fine					
Road Surface Dry					
Street Lighting Dark/no lights					
Speed Limit 30 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS None			
Carriageway Single c'way					
Lane markings Centre/hazard line	CARRIAGEWAY HAZARDS None				
Junction Detail T or Staggered junction					
Junction Control Give way sign or uncontrolled					
2nd Road Number U					
Pedestrian Facilities No Human control within 50m and No crossing facility within 50m					
VEHICLES INVOLVED 1		CASUALTIES INVOLVED 1			
Veh.No. 1 Vehicle type Car		Cas No 1 Cas Class Driver or Rider Veh ref No 1			
Manoeuvre Going ahead right hand bend		Severity SLIGHT Age 59 yrs Sex Male			
Direction from South west to North east Towing? No		Car Passenger? No PSV Passenger? No			
Skidded Yes		Ped Movement Not a pedestrian			
Veh location at impact (restricted lane) On main carriageway		Ped location Not a pedestrian			
Junct. location of veh. at 1st impact Mid junction		Ped Direction to Not a pedestrian			
Veh left carriageway? Left c'way Offside		School Pupil Other			
Hit object in c'way? None		Roadworker injured No			
Hit object off c'way? Tree					
First point of impact Front					
Drivers age 59 yrs Sex Male Other veh.hit (ref.) 0 Hit and run No					
Foreign vehicle Not foreign Breath test Positive					
Journey purpose					

No. 2	District Rushcliffe	Accident Details	VRUs	Grid Reference 450026 / 329311
SEVERITY SLIGHT	Ref.No 2D019922		Police Officer Attend: Yes	
Date 06/02/2022 Day Sunday	ROAD U	LOCATION U/C GREEN LANE, 0 metres from A453T REMEMBRANCE WAY (OVERBRIDGE), 260 Meters west of KEGWORTH ROAD RBT, RATCLIFFE ON SOAR		
Time 20:03				
Weather Fine				
Road Surface Dry				
Street Lighting Dark/lights lit				
Speed Limit 30 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS		
Carriageway Single c'way				
Lane markings Centre/hazard line		CARRIAGEWAY HAZARDS		
Junction Detail Not at or within 20m of junction				
Junction Control				
2nd Road Number	None			
Pedestrian Facilities and No Human control within 50m No crossing facility within 50m				
VEHICLES INVOLVED 2		CASUALTIES INVOLVED 1		
Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Direction from North west to South east Towing? No Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Did not leave c'way Hit object in c'way? None Hit object off c'way? None First point of impact Front Drivers age 23 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No Foreign vehicle Not foreign Breath test Not requested Journey purpose Other/Not known		Cas No 1 Cas Class Driver or Rider Veh ref No 2		
		Severity SLIGHT Age 26 yrs Sex Male		
		Car Passenger? No PSV Passenger? No		
		Ped Movement Not a pedestrian		
		Ped location Not a pedestrian		
		Ped Direction to Not a pedestrian		
		School Pupil Other		
		Roadworker injured No		
Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Direction from South east to North west Towing? No Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Did not leave c'way Hit object in c'way? None Hit object off c'way? None First point of impact Offside Drivers age 26 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No Foreign vehicle Not foreign Breath test Not requested Journey purpose Other/Not known				

Full Details

16-December-2024

Accident Ref.No 2D019922

Page 3 of 8

No. 3	District Rushcliffe	Accident Details		VRUs	Grid Reference 450057 / 329270
SEVERITY SLIGHT	Ref.No 2D012221			Police Officer Attend: Yes	
Date 24/01/2021 Day Sunday	ROAD U	LOCATION U/C KEGWORTH ROAD RBT, at its Junction with U/C KEGWORTH ROAD, RATCLIFFE-ON-SOAR, NOTTINGHAMSHIRE			
Time 13:58					
Weather Snow					
Road Surface Snow					
Street Lighting Daylight					
Speed Limit 30 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS			
Carriageway Roundabout		None			
Lane markings Centre/hazard line	CARRIAGEWAY HAZARDS	None			
Junction Detail Roundabout					
Junction Control Give way sign or uncontrolled					
2nd Road Number U					
Pedestrian Facilities No Human control within 50m					
and No crossing facility within 50m					
VEHICLES INVOLVED 1			CASUALTIES INVOLVED 1		
Veh.No. 1 Vehicle type Car	Towing? No Skidded Yes Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Entering roundabout Veh left carriageway? Left c'way near-side Hit object in c'way? None Hit object off c'way? Lamp post First point of impact Front Drivers age 22 yrs Sex Male Other veh.hit (ref.) 0 Hit and run No Foreign vehicle Not foreign Breath test Not requested Journey purpose Commuting to/from work		Cas No 1 Cas Class Driver or Rider Veh ref No 1		
Manoeuvre Turning right			Severity SLIGHT Age 22 yrs Sex Male		
Direction from North to West			Car Passenger? No PSV Passenger? No		
			Ped Movement Not a pedestrian		
			Ped location Not a pedestrian		
			Ped Direction to Not a pedestrian		
			School Pupil Other		
			Roadworker injured No		

No. 4	District Rushcliffe	Accident Details		VRUs	Grid Reference 450271 / 329460
SEVERITY SLIGHT	Ref.No 2D252119			Police Officer Attend: Yes	
Date 19/12/2019 Day Thursday	ROAD A453	LOCATION A453 REMEMBRANCE WAY, 1230 metres northeast of RATCLIFFE LANE, RATCLIFFE ON SOAR			
Time 03:23					
Weather Fine					
Road Surface Dry					
Street Lighting Dark/lights lit					
Speed Limit 70 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS None			
Carriageway Dual c'way					
Lane markings Centre/hazard line	CARRIAGEWAY HAZARDS	None			
Junction Detail Not at or within 20m of junction					
Junction Control					
2nd Road Number					
Pedestrian Facilities and No Human control within 50m No crossing facility within 50m					
VEHICLES INVOLVED 2		CASUALTIES INVOLVED 1			
Veh.No. 1 Vehicle type Goods > 7.5t Manoeuvre O/T moving vehicle on its O/S Direction from South west to North east Towing? Articulated veh. Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Did not leave c'way Hit object in c'way? None Hit object off c'way? None First point of impact Nearside Drivers age 30 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No Foreign vehicle Not foreign Breath test Negative Journey purpose Journey as part of work		Cas No 1 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 58 yrs Sex Female Car Passenger? No PSV Passenger? No Ped Movement Not a pedestrian Ped location Not a pedestrian Ped Direction to Not a pedestrian School Pupil Other Roadworker injured No			
Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Direction from South west to North east Towing? No Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Left c'way near-side Hit object in c'way? None Hit object off c'way? Central crash barrier First point of impact Offside Drivers age 58 yrs Sex Female Other veh.hit (ref.) 1 Hit and run No Foreign vehicle Not foreign Breath test Negative Journey purpose Commuting to/from work					
Full Details		16-December-2024		Accident Ref.No 2D252119	
				Page 5 of 8	



No. 5	District Rushcliffe	Accident Details		VRUs Motorcycle	Grid Reference 450324 / 329474
SEVERITY SERIOUS	Ref.No 2D077923			Police Officer Attend: Yes	
Date 28/05/2023 Day Sunday	ROAD A453	LOCATION A453 REMEBRANCE WAY, 1000 metres southwest of WEST LEAKE LANE (UNDERPASS), RATCLIFFE ON SOAR			
Time 19:30					
Weather Fine					
Road Surface Dry					
Street Lighting Daylight					
Speed Limit 70 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS			
Carriageway Dual c'way		None			
Lane markings Centre/hazard line	CARRIAGEWAY HAZARDS	None			
Junction Detail Not at or within 20m of junction					
Junction Control					
2nd Road Number					
Pedestrian Facilities No Human control within 50m					
and No crossing facility within 50m					
VEHICLES INVOLVED 1		CASUALTIES INVOLVED 1			
Veh.No. 1 Vehicle type M/cycle > 500cc		Cas No 1 Cas Class Driver or Rider Veh ref No 1			
Manoeuvre Going ahead other		Severity SERIOUS Age 20 yrs Sex Male			
Direction from North east to South west Towing? No		Car Passenger? No PSV Passenger? No			
Skidded Yes		Ped Movement Not a pedestrian			
Veh location at impact (restricted lane) On main carriageway		Ped location Not a pedestrian			
Junct. location of veh. at 1st impact Not at junction		Ped Direction to Not a pedestrian			
Veh left carriageway? Left c'way near-side		School Pupil Other			
Hit object in c'way? None		Roadworker injured No			
Hit object off c'way? None					
First point of impact Front					
Drivers age 20 yrs Sex Male Other veh.hit (ref.) 0 Hit and run No					
Foreign vehicle Not foreign Breath test Not requested					
Journey purpose					

No. 6	District Rushcliffe	Accident Details		VRUs Motorcycle	Grid Reference 451179 / 330154
SEVERITY FATAL	Ref.No 2D016022			Police Officer Attend: Yes	
Date 04/05/2022 Day Wednesday	ROAD A453	LOCATION A453 REMEMBRANCE WAY, 90 metres northeast of WEST LEAK LANE (UNDERBRIDGE), THRUMPTON			
Time 04:48					
Weather Fine					
Road Surface Dry					
Street Lighting Dark/no lights					
Speed Limit 50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS None			
Carriageway Dual c'way					
Lane markings Centre/hazard line	CARRIAGEWAY HAZARDS None				
Junction Detail Not at or within 20m of junction					
Junction Control					
2nd Road Number					
Pedestrian Facilities No Human control within 50m and No crossing facility within 50m					
VEHICLES INVOLVED 2		CASUALTIES INVOLVED 1			
Veh.No. 1 Vehicle type Car		Cas No 1 Cas Class Driver or Rider Veh ref No 2			
Manoeuvre Going ahead other		Severity FATAL Age 62 yrs Sex Male			
Direction from South west to North east Towing? No		Car Passenger? No PSV Passenger? No			
Skidded No		Ped Movement Not a pedestrian			
Veh location at impact (restricted lane) On main carriageway		Ped location Not a pedestrian			
Junct. location of veh. at 1st impact Not at junction		Ped Direction to Not a pedestrian			
Veh left carriageway? Did not leave c'way		School Pupil Other			
Hit object in c'way? None		Roadworker injured No			
Hit object off c'way? None					
First point of impact Front					
Drivers age 20 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No					
Foreign vehicle Not foreign Breath test Negative					
Journey purpose Commuting to/from work					
Veh.No. 2 Vehicle type M/cycle 50 - 125cc					
Manoeuvre Going ahead other					
Direction from South west to North east Towing? No					
Skidded No					
Veh location at impact (restricted lane) On main carriageway					
Junct. location of veh. at 1st impact Not at junction					
Veh left carriageway? Did not leave c'way					
Hit object in c'way? None					
Hit object off c'way? None					
First point of impact Back					
Drivers age 62 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No					
Foreign vehicle Not foreign Breath test Not provided					
Journey purpose Commuting to/from work					

Full Details

16-December-2024

Accident Ref.No 2D016022

Page 7 of 8

No. 7	District Rushcliffe	Accident Details		VRUs	Grid Reference 451586 / 330854
SEVERITY SLIGHT	Ref.No 2D069821			Police Officer Attend: Yes	
Date 13/06/2021 Day Sunday	ROAD U	LOCATION U/C BARTON LANE, 115 metres southwest of CHURCH LANE, THRUMPTON			
Time 10:57					
Weather Fine					
Road Surface Dry					
Street Lighting Daylight					
Speed Limit 30 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS None			
Carriageway Single c'way					
Lane markings None	CARRIAGEWAY HAZARDS None				
Junction Detail Not at or within 20m of junction					
Junction Control					
2nd Road Number					
Pedestrian Facilities No Human control within 50m and No crossing facility within 50m					
VEHICLES INVOLVED 2			CASUALTIES INVOLVED 1		
Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Direction from South west to North east Towing? No Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Did not leave c'way Hit object in c'way? None Hit object off c'way? None First point of impact Back Drivers age 86 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No Foreign vehicle Not foreign Breath test Not requested Journey purpose Other/Not known			Cas No 1 Cas Class Driver or Rider Veh ref No 1		
			Severity SLIGHT Age 86 yrs Sex Male		
			Car Passenger? No PSV Passenger? No		
			Ped Movement Not a pedestrian		
			Ped location Not a pedestrian		
			Ped Direction to Not a pedestrian		
			School Pupil Other		
			Roadworker injured No		
Veh.No. 2 Vehicle type Agric Veh Manoeuvre Waiting to go ahead but held up Direction from North east to South west Towing? No Skidded No Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Not at junction Veh left carriageway? Did not leave c'way Hit object in c'way? None Hit object off c'way? None First point of impact Offside Drivers age 50 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No Foreign vehicle Not foreign Breath test Negative Journey purpose Journey as part of work					
Full Details			16-December-2024		
Accident Ref.No 2D069821			Page 8 of 8		

**APPENDIX 15: HGV Route Plan (document reference EMG2-BWB-GEN-XX-RP-TR-00016\_S2-P3)**

---

PROJECT NAME	East Midlands Gateway Phase 2 – HGV Route Plan		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0016	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Paul Wilson	REVISION	P3
APPROVED	Matt Corner	DATE	14/05/25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development, located to the south of East Midlands Airport near the village of Diseworth, Leicestershire. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 The site is located near the Strategic Road Network (SRN), in close proximity to M1 Junctions 23a and 24 and therefore suitably located for access to the M1, A453, A50, A6 and A42. This Technical Note presents the HGV Route Plan and sets out the permitted route options for HGVs travelling to/from the site, with the aim of promoting and managing the desirable routes for all HGVs during the operational phase of the development. The details in this HGV Route Plan will be taken on board by all occupiers of EMG2.
- 1.3 As part of the Transport Assessment, a scheme to mitigate the impacts of the EMG2 development are being identified, with a scheme at M1J24 identified for EMG2 and is currently in the process of being finalised through traffic modelling work. The initial scheme has been designed using outputs from the Pan Regional Transport Model (PRTM), which is a strategic highway assignment model that distributes HGVs to the road network based on an in-built gravity model, considering desirable routes, congestion levels and road weight restrictions. The details within this HGV Routing Plan align with the principles of the PRTM, wider traffic assessment work and mitigation strategy.

## 2. EXISTING CONDITIONS

### Site Details

- 2.1 The main site is located to the south of the A453 and East Midlands Airport to the east of the village of Diseworth within the administrative area of North West Leicestershire. It has an area of approximately 250 acres, comprising arable farmland and is located approximately 15 kilometres to the northwest of Loughborough, 25 kilometres to the southeast of Derby and 25 kilometres to the southwest of Nottingham. The proposals also involve delivering a smaller unit on Plot 16 of EMG1 to the north of East Midlands Airport.
- 2.2 The site is bound to the north by the A453, which connects to the Strategic Road Network via Junction 23a of the M1 (at Finger Farm roundabout) to the east of the site. Beyond this to the north is East Midlands Airport and north of the Airport is Segro's EMG Phase 1 development. Donington Park services is located immediately adjacent to the

northeast corner of the site. The site is bisected by Hyam's Lane which is a Public Footpath that extends from Diseworth Village to the southwest to the western boundary of the Donington Park services to the northeast. **Figure 1** shows the site location.

**Figure 1. Site Location**

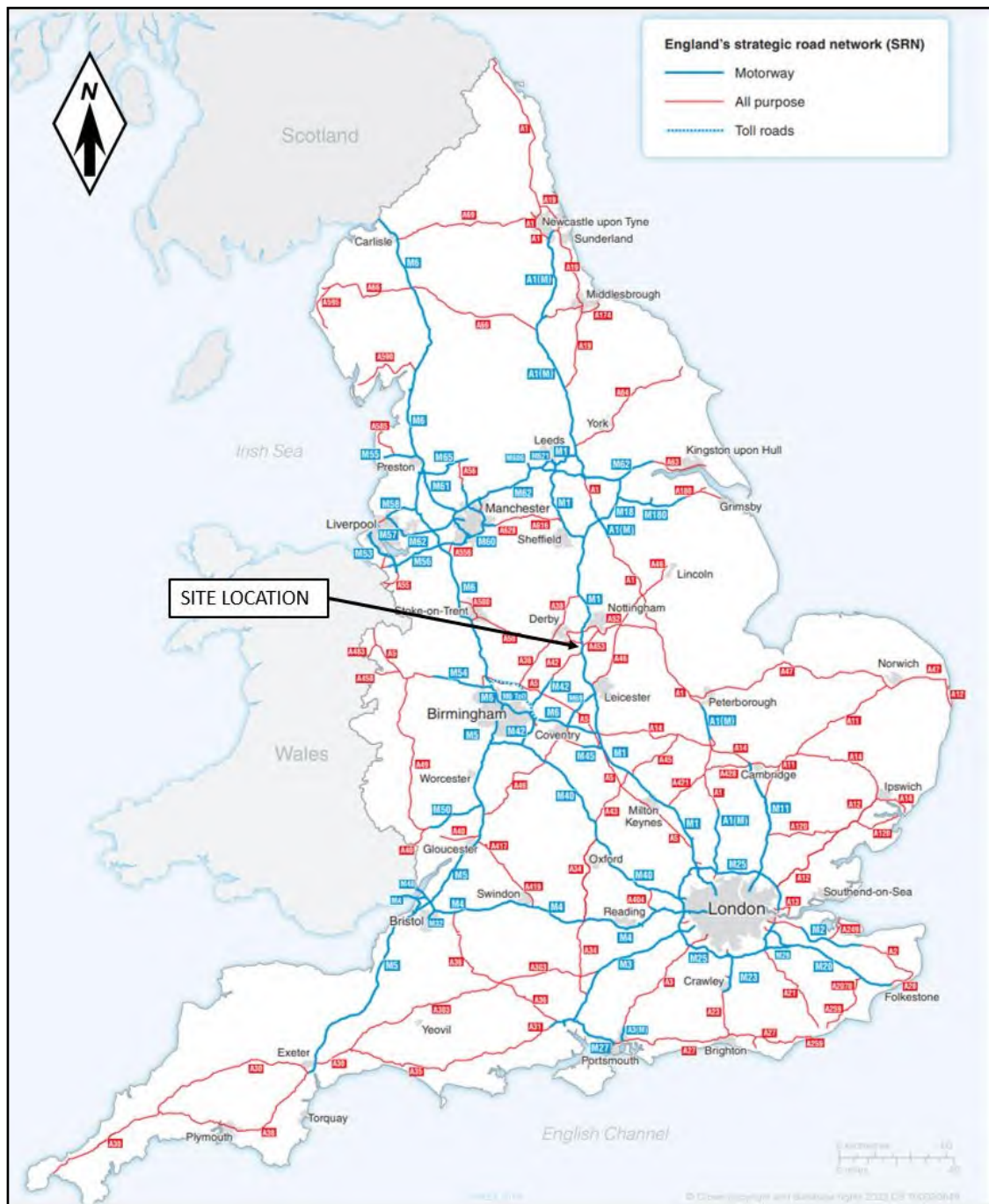


### Highway Network

- 2.3 The site location in relation to the SRN is shown at **Figure 2**. The central location of the site within the UK and its proximity to M1 Junction 23a and M1 Junction 24 provides excellent connections with the rest of the country via the M1, A453, A50, A6 and A42.



Figure 2. Strategic Road Network



### M1 Motorway

- 2.4 The M1 Motorway is a strategic route for local, regional and international traffic and plays an important role in connecting major settlements within the north and south of the UK. In 2019, the section of the motorway between Junctions 23a and 25 was upgraded as part of the Smart Motorways Programme to provide four lanes in either direction by converting the hard shoulders into running lanes.

Junction 24 of the M1

- 2.5 Junction 24 of the M1 is a large grade separated, partially signal-controlled roundabout, providing all movements to and from the motorway, as well as connections to the A453 and A50. The A453, which links the motorway with Nottingham via Clifton, joins from the northeast, with the A453 link towards the site joining from the southwest, which also extends towards Junction 23a of the M1 and the A42. The A50, which links the motorway with Derby joins from the northwest. The A453 arm from the southwest features a segregated left turn towards the A50.

A453 between M1 Junction 24 and J23a

- 2.6 The A453 to the southwest of M1 Junction 24 extends north to south and parallel to the M1 Motorway, forming a signal-controlled junction with the EMG1 signal-controlled gyratory before continuing south to Finger Farm roundabout at M1 Junction 23a, providing access to the M1 southbound and A42. Along this section, the A453 comprises a dual carriageway with two lanes in either direction and provides an alternative route choice for drivers travelling towards the A6, A50 and A453 eastbound, as well as providing a shorter route to the A453 westbound towards the site.

M1 Junction 23a, Finger Farm Roundabout

- 2.7 The Finger Farm junction is a large 4-arm priority-controlled roundabout. The A453 arms join from the north and west, whilst slip roads to the A42 and M1 join to the south. It also provides an access to the Donington Park Services to the southwest. As part of an approved planning application 18/02227/FULM, referred to as 'East Midlands Point', a fifth arm is being created at the eastern side of Finger Farm Roundabout to serve an employment development.

A453/A6 Kegworth Road Bypass Signal-Controlled Gyratory

- 2.8 The A453/A6 Kegworth Bypass is a large signal-controlled gyratory that provides access into EMG1. The A453 (south) arm provides two ahead lanes towards M1 Junction 24 and a single right turn lane to the A6 Kegworth Bypass that operate under the same green signal, along with a separately signalled left turn lane into EMG1. The A453 (north) arm provides three lanes approaching the gyratory, whilst the EMG1 arm provides two lanes turning left towards M1 Junction 24 (single lane with short flare) and two lanes for movements ahead onto the circulatory, again comprising a single lane with short flare. The A6 Kegworth Bypass arm provides a single lane approach widening into a short left/ahead flare at the stop line.

A50

- 2.9 The A50 is a dual carriageway extending to the northwest from M1 Junction 24. Traffic travelling southbound on the M1 can also join the A50 at Junction 24a slightly further north. The A50 continues west from M1 Junction 24 as a dual carriageway extending west towards Derby, whilst also providing access to the A38 in both directions at A50 Junction 4.



A42

- 2.10 The A42 extends to the southwest from M1 Junction 23a connecting with the M42 before continuing towards Birmingham. In the vicinity of M1 Junction 23a, the A42 comprises a dual carriageway providing two lanes in either direction.

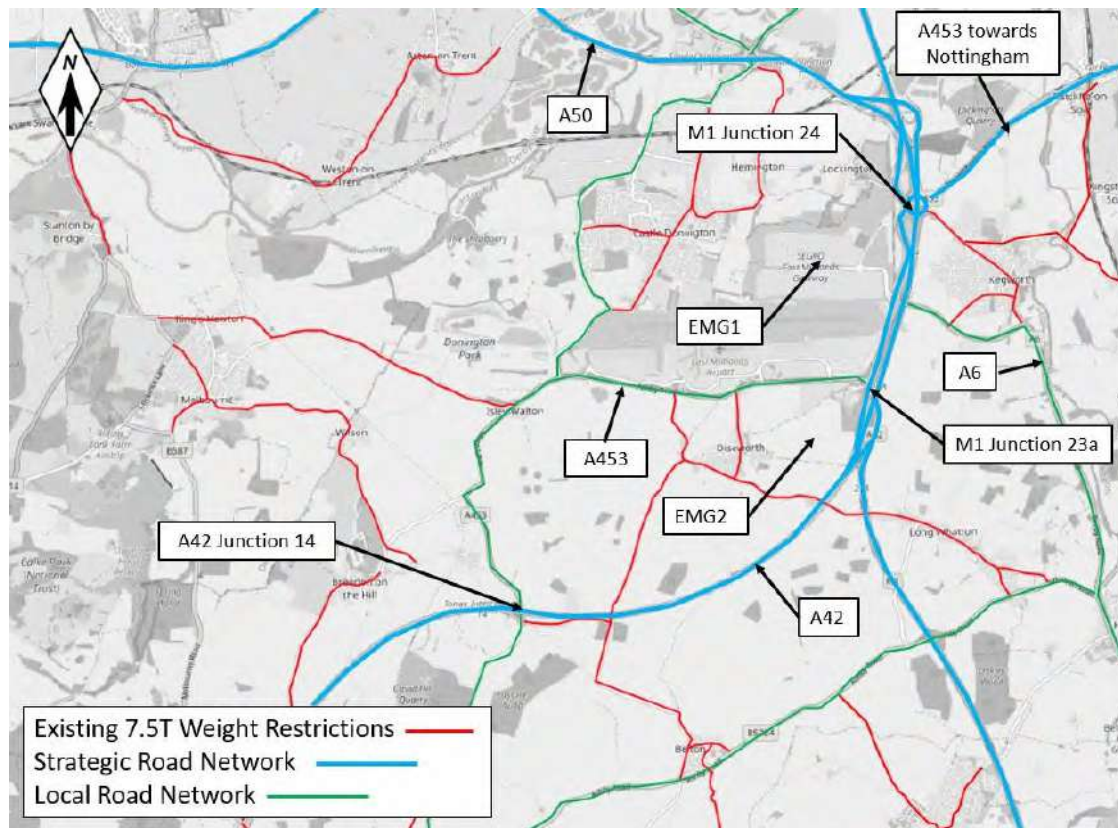
A453 towards Nottingham

- 2.11 The A453 link between M1 Junction 24 and the A52 near Nottingham was upgraded in 2015 to provide an 11.5-kilometre section of dual carriageway that replaced the former single carriageway road. The purpose was to alleviate congestion and highway safety issues. Various junctions along the route between M1 Junction 24 and Mill Hill Roundabout near the Clifton South Park and Ride were also upgraded to split level to facilitate free flowing traffic. This route now acts as a main distributor road between Nottingham and the M1, A50 and A42.

**Existing Weight Restrictions / Permitted Routes**

- 2.12 Many of the roads leading into villages surrounding the site feature 7.5T weight restrictions, including the following (**Figure 3** shows the road locations):
- Hill Top & High Street, Castle Donington
  - Grimes Gate & The Green, Diseworth, leading to Long Whatton
  - Derby Road, Kegworth
  - Melbourne Road, Melbourne
  - Kegworth Road, Ratcliffe on Soar

**Figure 3. Existing Weight Restrictions**



- 2.13 The benefit of the existing weight restrictions is that future HGV movements generated by the EMG2 development will naturally be forced to use the more strategic roads, meaning there should be limited impacts within local villages from additional HGV movements.
- 2.14 The roads shown in blue and green in **Figure 3** represent the routes that operational HGVs associated with EMG2 would be permitted to use (except in the needs of access). This will be enforced through the existing weight restrictions. Segro's management team at EMG1 have only been contacted on two occasions with complaints of HGVs travelling on roads with weight restrictions, one that was legitimate and another that was not. On this basis, it is evident that there are no existing issues with HGVs associated with EMG1.

### 3. PROPOSED DEVELOPMENT

#### Scale and Layout

- 3.1 The EMG2 development seeks outline planning permission for a 430,000sqm B2/B8 industrial development, comprising 300,000sqm of ground floorspace and 100,000sqm of mezzanine floorspace at EMG2 plus 30,000sqm of B8 development at EMG1. The EMG2 development would be served a fourth arm from the existing A453/Hunter Road roundabout located to the west of Finger Farm roundabout, to the south of East Midlands Airport.

#### Parking

- 3.2 HGV parking for all units will be provided in accordance with LCC Highways Design Guide for both B2 and B8 uses. This requires one space per 400sqm of B2/B8 floorspace. The parking standards for various vehicle types is provided in **Table 1**.

**Table 1. Leicestershire Parking Standards**

Cars	Disabled	HGV	Motorcycles	Bicycle	Electric Vehicles
B2 Land Use					
One space for every 150sqm	Six bays plus 2% of total parking spaces (when total over 200 spaces)	One lorry space for every 400sqm	One space, plus an additional space for every 10 car parking spaces	One space for every 400sqm	Not specified
B8 Land Use					
One space for every 55sqm	Six bays plus 2% of total parking spaces (when total over 200 spaces)	One lorry space for every 400sqm	One space, plus an additional space for every 10 car parking spaces	One space for every 400sqm	Not specified

#### Trip Generation and Distribution

- 3.3 The agreed trip generation for the EMG2 development is set out in **Table 2**. The calculations are based on original trip rates adopted as part of the EMG1 planning application and separate movements by light vehicles and HGVs.

**Table 2. Proposed Development Traffic Generation**

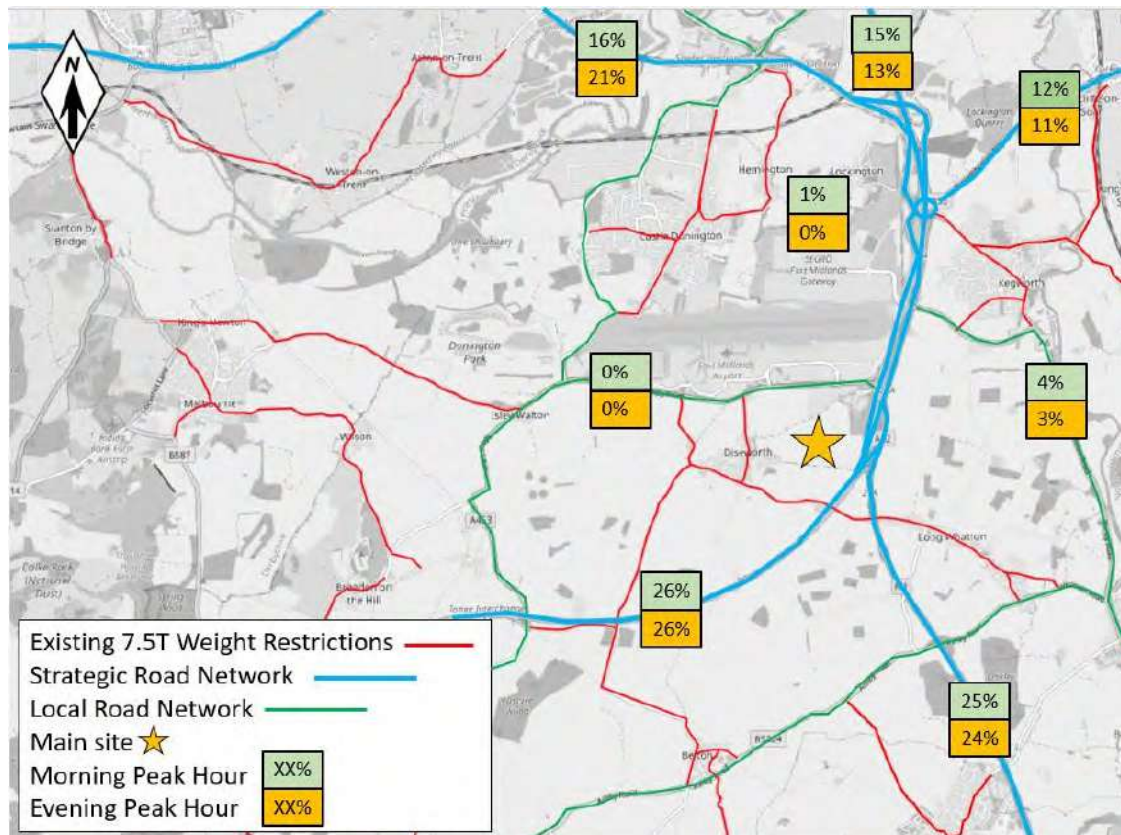
	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
340,000sqm B8 development at EMG2						
Total	476	122	598	221	527	748
<b>HGVs</b>	<b>65</b>	<b>78</b>	<b>143</b>	<b>85</b>	<b>51</b>	<b>136</b>
30,000sqm B8 development at Plot 16 of EMG1						
Total	42	11	53	20	47	67
<b>HGVs</b>	<b>6</b>	<b>7</b>	<b>13</b>	<b>8</b>	<b>5</b>	<b>13</b>
60,000sqm B2 development at EMG2						
Total	235	43	278	30	222	252
<b>HGVs</b>	<b>10</b>	<b>8</b>	<b>18</b>	<b>2</b>	<b>4</b>	<b>6</b>
Total 430,000sqm development						
Total	753	176	929	270	795	1,065
<b>HGVs</b>	<b>81</b>	<b>93</b>	<b>174</b>	<b>95</b>	<b>60</b>	<b>155</b>

- 3.4 The calculations show that the development in its entirety is expected to generate 174 HGVs in the morning peak hour and 155 HGVs in the evening peak hour.
- 3.5 The PRTM has been used to assess the strategic highway impacts of the proposed development. HGV movements have been assigned to the network based on the in-built gravity model within the PRTM, which takes account of desirable routes and the existing weight restrictions in the local area, shown on **Figure 3**. **Table 3** shows the HGV traffic distribution from PRTM, which is visually depicted on **Figure 4**.

**Table 3. Development HGV Distribution Pattern**

	AM Peak Hour	PM Peak Hour
A50	16%	21%
M1 (N)	15%	13%
A453 (E) towards Nottingham	12%	11%
A6 Kegworth Bypass	4%	3%
M1 (S)	25%	24%
A42	26%	26%
A453 west of site	0%	0%
EMG1	1%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Figure 4. HGV Distribution Pattern



- 3.6 The details show that HGV movements within PRTM are assigned along the strategic highway routes and avoid travelling through local villages. There are no HGVs expected to route to the west of the site along the A453, even when accounting for the new alignment proposed as part of the Isley Woodhouse development. Whilst the A453 is considered suitable in accommodating HGVs, as a route to the A42, this will limit the impacts of HGV movements around the Isley Woodhouse settlement.

## 4. HGV ROUTING STRATEGY

### Permitted Routes

- 4.1 The permitted routes for HGVs associated with the EMG2 development are set out below. These follow the SRN and take into consideration existing weight restrictions in the local area.

#### To the north

- A453 (E), M1 northbound
- A453 (E), A453 eastbound towards Nottingham

To the east

- A453 (E), A6

To the south

- A453 (E), M1 southbound
- A453 (E), A42
- A453 (W), A42 via Junction 14 (albeit PRTM does not assign HGVs in this direction)

To the west

- A453 (E), A50 westbound
- A453 (W), Castle Donington western bypass, A50 westbound via Junction 1 (albeit PRTM does not assign HGVs in this direction)

- 4.2 All HGV drivers associated with EMG2 will be required to use the above routes for all journeys, with the exception of access requirements to local villages. These routes are shown on **Figure 3** and denoted by those in blue and green.

**Diversion Routes**

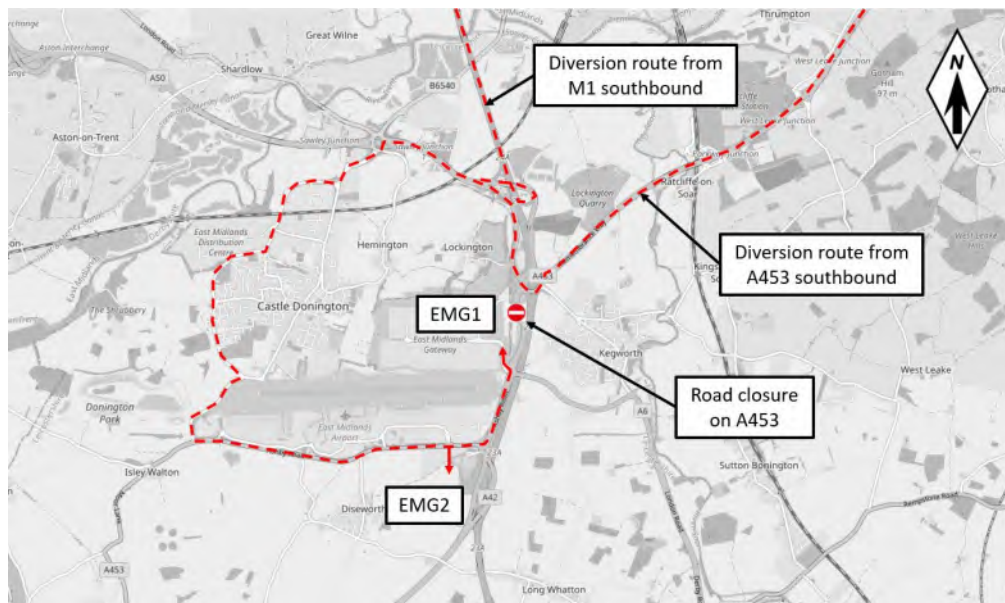
- 4.3 In the event that various parts of the Strategic Road Network are temporarily closed, then HGVs would have alternative route choices to reach the site, which is supported by the A453 that extends parallel to the M1 Motorway between M1 Junction 23a and M1 Junction 24, alongside other strategic connections to the A50 and A6. Details of the HGV diversion routes are provided below.

Closures on the A453 at M1 Junction 24

- 4.4 Should the A453 southbound arm between M1 Junction 24 and J23a be closed, then HGVs travelling along the M1 southbound or A453 from Nottingham would divert along the A50 from M1 Junctions 24/24A to A50 Junction 1 and then south around the Castle Donington bypass to reach the site. The direct route for HGVs travelling from all other directions would remain unchanged. **Figure 5** shows the diversion route.



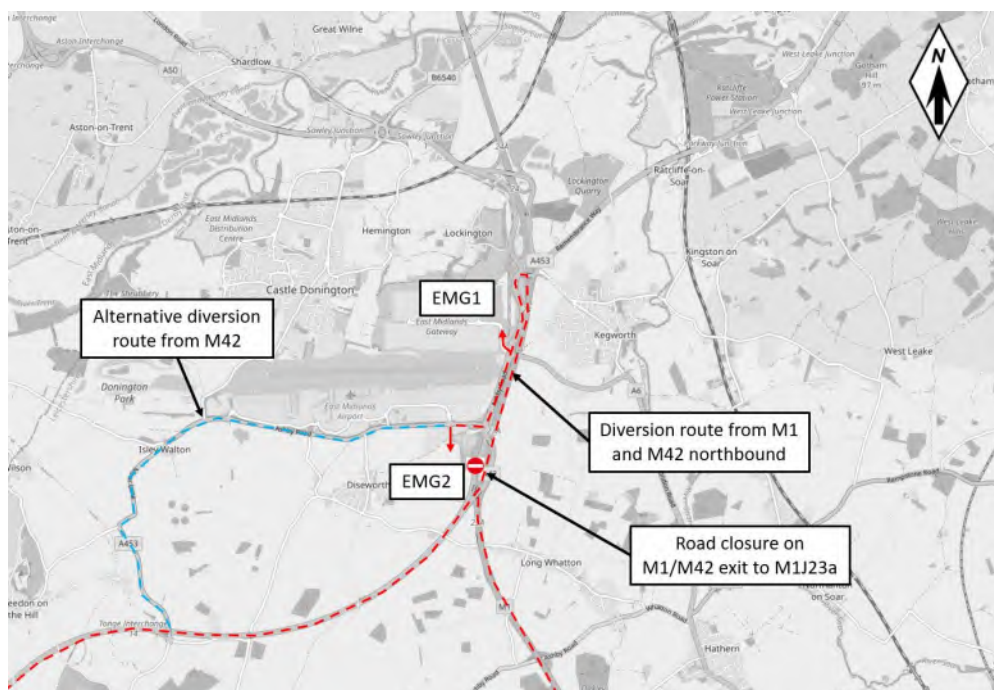
**Figure 5. HGV Diversion Route (A453 southbound closure between M1 J24 and J23a)**



Closures on the A42 & M1 slip roads at M1 Junction 23a

- 4.5 Should the A42 and M1 exit slip roads at M1 Junction 23a be closed, then HGVs travelling along the M1 or A42 northbound would divert to M1 Junction 24 and then south along the A453 to reach the site. Alternatively, HGVs travelling along the A42 could exit at A42 Junction 14 and travel along the A453 to reach the site. **Figure 6** shows the diversion route.

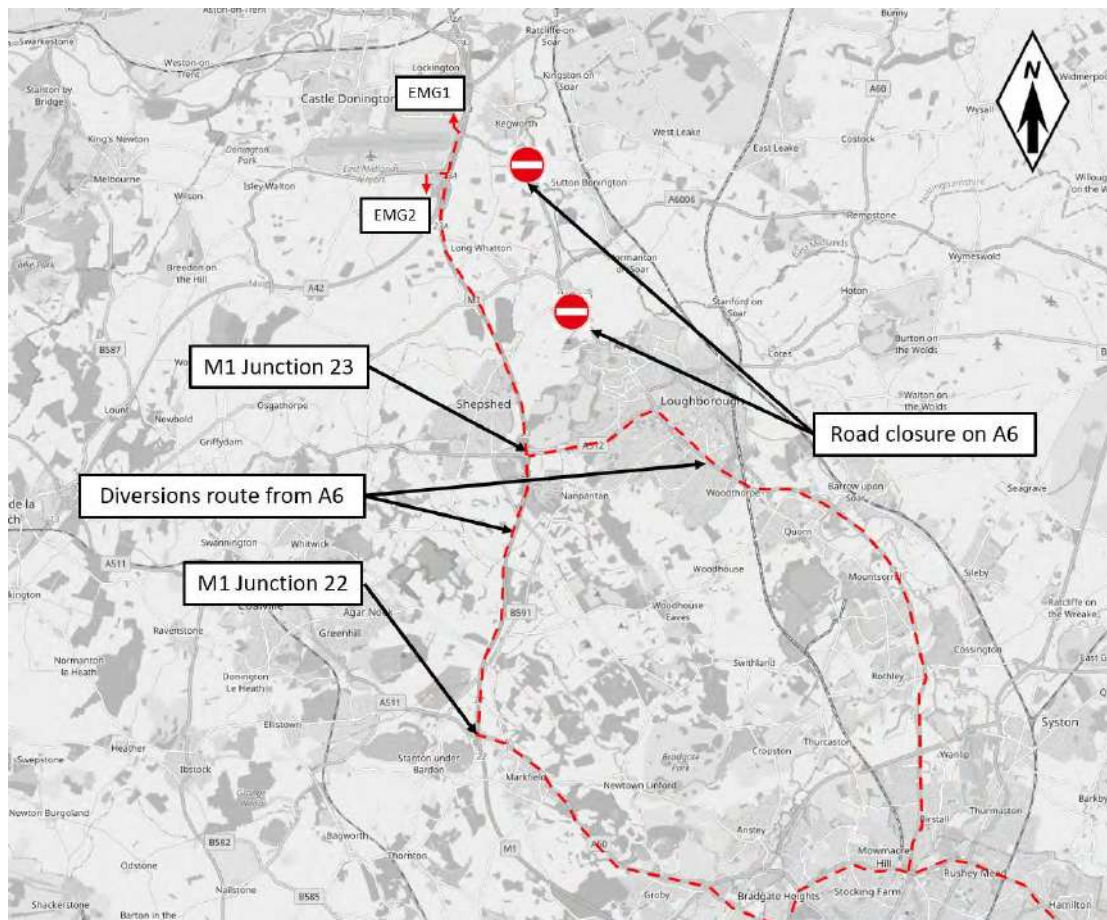
**Figure 6. HGV Diversion Route (A453 northbound closure to J23a)**



### Closures on the A6

- 4.6 Should the A6 be closed, then HGVs travelling from Leicester or Loughborough could divert along the A512 past Loughborough to M1 Junction 23. Should an issue be identified earlier on in the journey, then there is an alternative diversion route via the A46 Leicester Western Bypass to the A50 Markfield Road before joining the M1 northbound at Junction 22. HGVs could then access the site via M1 Junction 23a or M1 Junction 24. **Figure 7** shows the diversion route.

**Figure 7. HGV Diversion Route (A6 closure)**

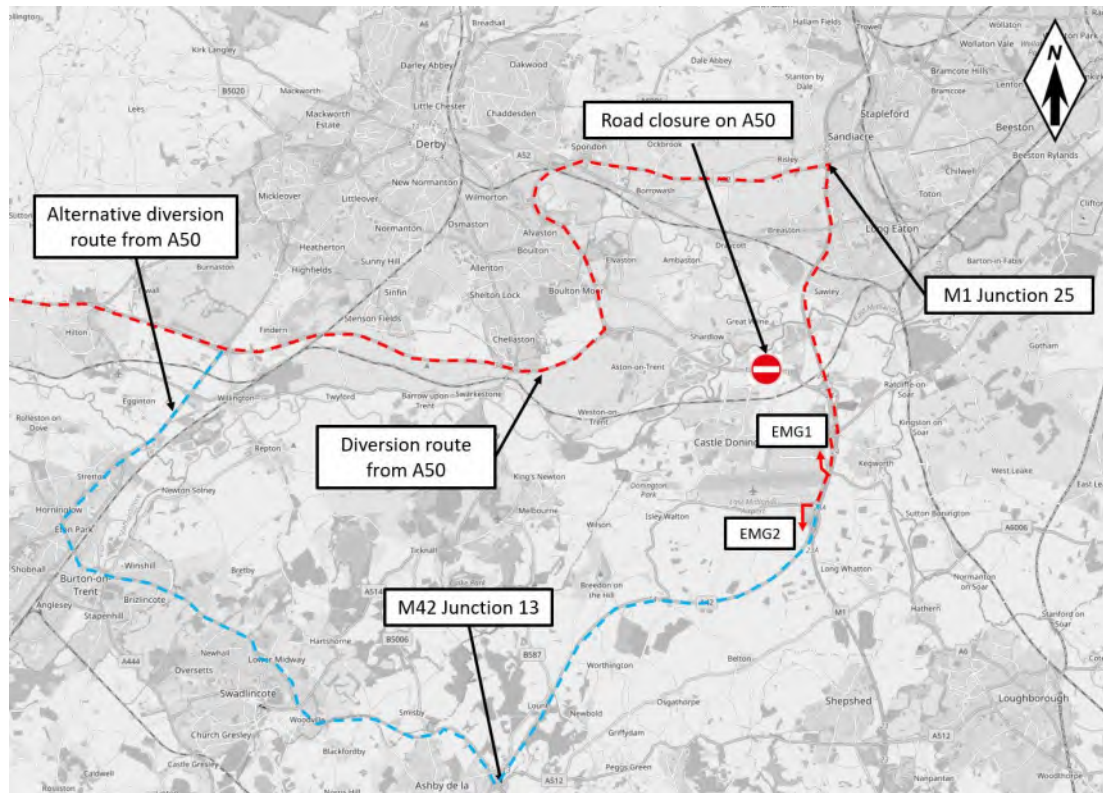


### Closures on the A50

- 4.7 Should there be significant closures to the A50 mainline near A50 Junction 1, then HGVs could travel north to the A52 eastbound via A50 Junction 2 and then south on the M1 to Junction 24. Alternatively, HGVs travelling from further west could divert along the A38 southbound at A50 Junction 4 to Burton-upon-Trent and then eastbound along the A511 to A42 Junction 13, although this would incur a longer journey. **Figure 8** shows the diversion route.



**Figure 8. HGV Diversion Route (A50 closure)**



### Summary

- 4.8 In summary, there are various strategic roads leading to the site that provide HGV drivers with diversion options should parts of the SRN network be temporarily closed. The distribution of HGVs within PRTM shows that naturally all HGVs would be required to use the strategic roads when travelling to the site because of the existing weight restrictions that are in place. Therefore, there should be no requirement for HGVs to use the local roads for accessing the site and multiple route options are available to minimise impacts during times when parts of the SRN are closed because alternative roads of suitable nature are available. There will be an obligation for all occupiers to ensure that HGVs travel on the permitted routes for all operational purposes.

### **HGV Management Measures**

- 4.9 As evidenced by the assignment of HGVs within PRTM, the existing weight restrictions along the undesirable routes leading towards villages means HGVs are forced to the more strategic routes.
- 4.10 PRTM predicts that no HGVs from EMG2 would travel west along the A453 to A42 Junction 14 or via the Castle Donington bypass to A50 Junction 1. This limits any impacts on the A453 around the new Isley Woodhouse settlement, which is seeking permission for a large residential led development. Whilst the Isley Woodhouse proposals involve diverting the A453 towards the western site boundary effectively forming a bypass

around the development site, which makes this route more suitable for HGVs, it is unlikely to be used unless in the event traffic is diverted.

- 4.11 Overall, given the existing route options and weight restrictions in place, no additional management measures are proposed to control the movement of HGVs arriving/departing the site and the existing weight restrictions should ensure that HGVs use the appropriate strategic routes and avoid the more sensitive locations.

## **5. SUMMARY**

- 5.1 This HGV Route Plan has reviewed the PRTM outputs and predicted assignment of HGVs from the EMG2 development to establish whether any management measures are required to control the direction of HGV travel to limit impacts on the local road network.
- 5.2 The existing roads leading to villages surrounding the site all contain weight restrictions. The PRTM outputs demonstrate how all HGVs associated with EMG2 would use the Strategic Road Network and avoid the more sensitive routes. These strategic routes are designed to accommodate large HGVs and would be capable of accommodating these increases with the proposed mitigation in place.
- 5.3 There are a number of route choices available to HGV drivers arriving and departing the site. This means that, during an occasion when part of the Strategic Road Network is closed, there are alternative options for HGVs to divert along other routes of similar strategic nature to access the site. This limits any reliance of HGVs using the local road network.
- 5.4 In summary, the existing highway network and weight restrictions should ensure that HGVs associated with EMG2 travel on the Strategic Highway Network meaning that no additional management measures are required. All occupiers of EMG2 will need to ensure that HGVs travel on the permitted routes. This follows EMG1, which also has no measures in place to control HGV movements.

**APPENDIX 16: Construction Traffic Management Plan (document reference PC23-004  
EMG 2)**

---



---

PC24-004 EMG 2

Construction Traffic Management Plan

Client – (Segro (EMG) Ltd)

---

### 1. DOCUMENT ISSUE RECORD

<b>Author:</b>	Mark Skelton
<b>Checked:</b>	Jared Taylor
<b>Approved:</b>	Jared Taylor

Rev	Date	Status	Comment	Author:	Checked:	Approved:
P00	08/11/2024	S0	Draft – Client submission for review	MS	JT	JT
P01	19/11/2024	S1	Draft 1 – Amendments from comments	MS	JT	JT
P02	22/11/2024	S2	Draft 2 for review	MS	JT	JT
P03	14/04/2025	S3	Amendments for Royal Mail section 42 consultation response and Construction Traffic assessments.	MS	JT	JT

*This document has been prepared for the sole use of the Client Segro (EMG) Ltd in accordance with the terms of the appointment under which it was produced. Taylor Skelton Ltd accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of Taylor Skelton Ltd.*

## CONTENTS

### **1. DOCUMENT ISSUE RECORD**

### **2. INTRODUCTION**

- 2.1 Appointment
- 2.2 Document Objective

### **3. LOCATION AND HIGHWAY NETWORK**

- 3.1 Location

### **4. CONSTRUCTION TRAFFIC ACCESS AND VEHICULAR MOVEMENTS**

- 4.1 Routing Strategy
- 4.2 Proposed Construction Traffic Routes and Temporary Signage
- 4.3 Abnormal loads
- 4.4 Construction Traffic volume assessment
- 4.5 Timing of movements
- 4.6 Royal Mail Coordination and Notification Protocol

### **5. CONSTRUCTION TRAFFIC MANAGEMENT AND TEMPORARY SITE ACCESS.**

### **6. NOISE AND ENVIRONMENTAL IMPACTS**

### **7. MONITORING AND MITIGATION**

### **8. ENFORCEMENT OF THE CONSTRUCTION TRAFFIC MANAGEMENT PLAN**

## APPENDICES

Appendix 1 – DCO Order limits

Appendix 2 – Indicative main site access layout plan

Appendix 3 – Construction Traffic calculations



## 2. INTRODUCTION

### 2.1 Appointment

Taylor Skelton Ltd (TSL) has been appointed by Segro (EMG) Ltd (the Developer) to prepare this Construction Traffic Management Plan (CTMP) report in support of a Development Consent Order (DCO) application for employment development at the site located to the South of East Midlands Airport, and West of Moto Services Donington Park, referred to as East Midlands Gateway 2 (EMG 2).

The extent of the scheme and DCO order limits are denoted in the drawing “Order Limits Amendments”, drawing ref EMG2-BWB-GEN-XX-SK-CH-SK020-S2-P02 which is included in Appendix A for reference.

This Construction Traffic Management Plan (CTMP) document covers the full extent of the Order Limits for the initial stage of the development including:

- EMG 1 Public transport enhancements
  - Extension to the management suite
  - Additional electric bus charging points
  - Construction of a new drop off layby
- EMG 1 Unit 16 Construction
- EMG2 Main site roads and earthworks
- M1 corridor gantry and signage works
- M1 J24 Mitigation package
- Finger Farm signage works and upgrade
- A453 South Minor Highway works
- A453 West (The Green) junction mitigation works

Any Construction phases of the development will require a separate Construction Traffic Management Plan for that specific phase, which will be referenced as a pCTMP (phase).

## 2.2 Document Objective

This CTMP details the proposed mitigation measures which have been included within the Preliminary Design of the DCO Proposed Development, and will be implemented to mitigate, so far as reasonably practicable, the potential effects of traffic during the Construction Stage of the Development.

This document focusses on the construction phase of the Scheme, subsequent phases will be covered in separate pCTMP(s) for each phase as required and as referenced in section 2.

This document will set out the arrangements and management practices that will be adopted to minimise the impact of traffic on the local road network and will be agreed with the relevant highway authority prior to the commencement of construction related works.

This document is also intended to provide clear guidance to the Principal Contractor (once appointed) and all sub-contractors regarding access routes to the site, maintenance requirements for the existing public road, restrictions to vehicle access, speed limits imposed for the duration of the works, and identification requirements for all vehicles involved in the project.

In order to provide vehicular access and facilitate construction of the various elements of the Development, there are three types of road network to be considered:

- National Highway operated Motorway
- National Highway operated Roads
- Local Authority operated roads



The re-routing strategy is based on the following principles and objectives summarised in table 1.1 below:

Table 1.1 Objectives of the OCTMP	
Objective	Description
A	Provide safe and efficient construction access for the DCO Proposed Development.
B	Ensure that movements of people, plant and materials are achieved in a safe, efficient, timely and sustainable manner.
C	Ensure that any impact to the local communities and tourism industry (In particular East Midlands Airport) is reduced so far as reasonably practicable.
D	Avoid sensitive receptors with effective routing and management of Development traffic.
E	Ensure construction traffic levels do not exceed an acceptable and agreed level during network peak periods.
F	Reduce and control construction vehicle trips where practical to meet option E constraints.
G	Ensure strategies and mitigation measures are implemented and adhered to through continued monitoring, with ongoing review and improvement of the OCTMP.
H	Construction routes have been identified based upon their suitability to accommodate HGV and LGV traffic. For the purposes of assessment HGVs are defined as any vehicle exceeding 3.5t gross weight. As far as reasonably practicable, HGV routes maximise use of the SRN with clear defined constraints for the Local Road Network and sensitive receptors.

Public transport operators are unlikely to be significantly affected by the proposals with prior notification and consultation: hence, transport operators and coordinators will be informed of any temporary traffic management requirements on public transport corridors by the Principal Contractor in advance, to afford sufficient time to plan and re-route, in order to maintain the level and frequency of the service, or to give notice otherwise.

A Construction Traffic Management Working group (which will be put into place) will meet regularly (frequency to be defined, but anticipated monthly at peak), to discuss, plan, and manage upcoming traffic management that is planned to be placed on the road network.

The group whilst not limited to, will include, National Highways, Local Authority, (Leicestershire County Council), local bus companies, East Midlands Airport (EMA), Moto Services, Police, Ambulance, and Fire services, the Principle Contractor, and any other Contractor's not associated with the development, who may be working (placing traffic management) on the network, which could have clash/impact potential, thereby necessitating the need for co-ordination, to ensure overall impact on the SNR is considered and mitigated.

Construction information relating to the type and timings of works involved, the transport routes associated with the works, the hours of likely construction traffic movements and key traffic management measures will be communicated on the scheme's website in sufficient advance timeframes to allow for journeys to be Planned, to avoid or allow for any potential impact.

The Principal Contractor will have the facility to answer any enquiries or complaints associated with Traffic Management impact and will record and close out all enquiries as far is reasonably practicable.

The above will be in addition to any constraints placed on the scheme from a reporting perspective, from National Highways or Leicestershire County Council and the timeframes associated with their process for response and close out.

### 3. LOCATION AND HIGHWAY NETWORK

#### 3.1 Location



Fig 1

The site is located in the East Midlands, in the “Triangle” formed by the cities of Derby (15 km or 9.3 mi, Northwest), Nottingham (17 km or 11 mi, North East) and Leicester (24 km or 15 mi, South East) see fig 1 and fig 2.

Direct road access to the site access (EMG2) will be along the A453 West which is served by good arterial road links from the M1 (North and South), A42 (North), and A453 (South).

Construction traffic associated with EMG1 works will access the Site via the existing EMG1 gyratory system, and then via designated routes within the development leading to Plot 16. Additional traffic management measures will be implemented where required within the EMG1 network.

Access to the “Highway works” for the development will be managed through specific traffic management systems tailored to each phase of the works. These systems will evolve as the project progresses to accommodate changing site conditions and ensure safe and efficient access for construction vehicles and workers.

### **M1**

The M1 is a north-south arterial route stretching the 311km (193 miles) between London and Leeds. The M1 passes Northampton, Leicester, Nottingham, Derby, Sheffield and Wakefield. The nearest point of access in relation to the site for North travelling traffic is Junction 23A northbound exit to finger farm roundabout, where traffic will adjoin the A453 West, and travel 500m to the proposed site access.

M1 Southbound traffic will exit at J24, and adjoin to A453 South off J24 gyratory. Access to EMG1 can be gained off the A453 Gyratory at midpoint between junction 24 and Finger Farm roundabout. Existing network signage should be followed. For EMG2 Main Site, traffic will continue on the A453 South to finger farm roundabout and then then travel West on the A453 for 500m to the temporary site access.

### **A42**

The A42 is a major trunk road in the East Midlands, it links J23A of the M1 with junction 11 of the M42. It is 15m (24m) in length.

A42 Northbound traffic will as above, exit North to finger farm roundabout and undertake the same route as M1 Northbound traffic. Note: The M1 North (J23A) and A42 North merge at their respective off slips creating a 3-lane approach to finger farm roundabout.

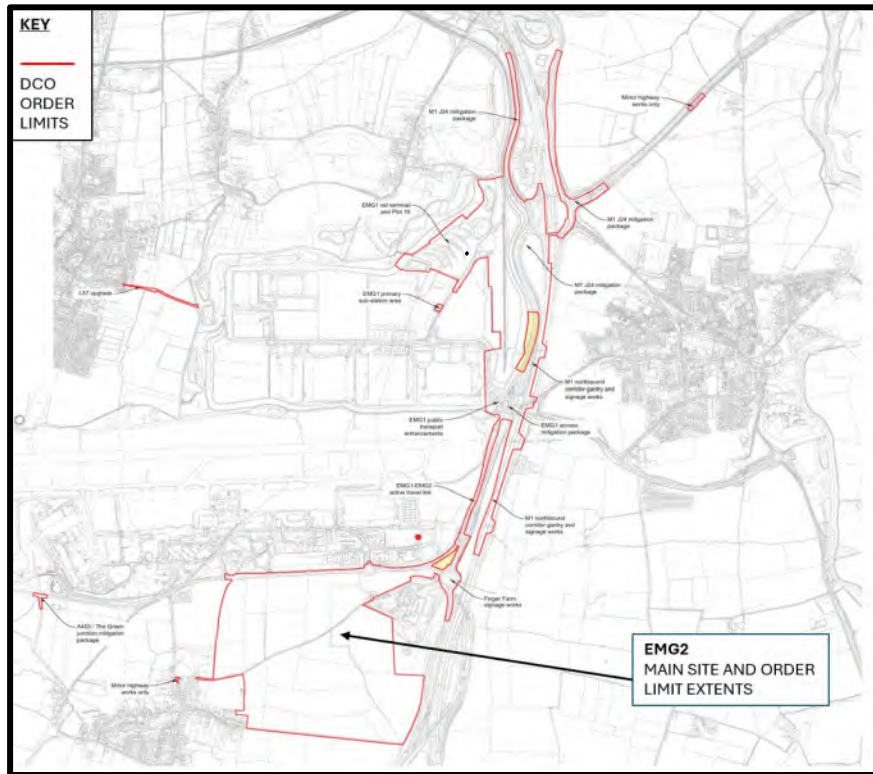


Fig 2

#### 4. CONSTRUCTION TRAFFIC ACCES AND VEHICULAR MOVEMENTS

##### 4.1 Routing Strategy

Vehicles making deliveries to the Site or removing materials from, will travel by pre agreed designated routes which will be definitively confirmed in the CTMP.

Whilst the CTMP will denote assumed routes, the Principal Contractor will be responsible for attaining agreement from the relevant authorities prior to commencement of any phase.

A principal consideration when identifying designated routes will be the minimisation of travel along any road that does not form part of the Strategic Road Network (SRN).

Subject to agreement by the appropriate authorities, it is envisaged that construction vehicles will approach the Site using the M1 (North or South), A42 North, A50 South, or A453 South.

All routes will adjoin the A453 West and travel 500m Westbound to the site access as denoted in figure 3 for EMG2 Main site, or as detailed above will access via the gyratory on the A453 opposite Kegworth Bypass.

No construction access will be taken via Diseworth village, Hyam's Lane or Long Holden?



Fig 3.

Where appropriate, the Principal Contractor will provide haul routes through the site for use by construction vehicles, to reduce the need to use of public roads to access different parts of the main site.

The Principal Contractor will consult with the relevant highway authority regarding the layout and positioning of site accesses and undertake swept path analysis to determine suitability as an access/egress for all vehicle types anticipated to be required to visit the site.



#### **4.2 Proposed Construction Traffic Routes and Traffic Management Requirements.**

##### Traffic Safety and Control Officer

Prior to the implementation of any Traffic Management on the Network, the Principal Contractor will appoint a Traffic Safety and Control Officer whose responsibilities will cover:

- Management and implementation of all temporary traffic management measures associated with the Development.
- Checking that all necessary equipment is in place and confirming that it is in working order, and installed in line with the recommendations of the Traffic Signs Manual Chapter 8.
- Management of the Traffic Management layout at site access points.
- Liaison with the relevant authorities, and traffic safety and control officers on nearby schemes which are deemed to have the potential to adversely impact the SRN and LRN associated with this development.
- Arranging for site inspections at regular intervals and checking that equipment is correctly maintained, and in the case of accidents or incidents having replacement signs, cones, bollards, and lights erected without delay.

Note: Traffic Signs Manual Chapter 8 states: “The complexity of traffic management arrangements varies from scheme to scheme, but the primary objective is ~ to maximise the safety of the workforce and the travelling public.

The secondary objective is ~ to keep traffic flowing as freely as possible”.

Traffic management on all highways and roads associated with the scheme will comply with the UK Government’s Code of Practice ‘Safety at Street works and Roadworks’ (DfT, 2013) (Ref. 2) or other relevant legislation and guidance as appropriate at the time of implementation. Traffic management will be agreed with the relevant HA prior to the commencement of works. Traffic management signage will be in accordance with the Traffic Signs Regulations and General Directions (TSRGD) 2016 (Ref. 3) and Traffic Signs Manual Chapter 8 (Ref. 1).

Temporary signs providing route information for contractors will be erected at key locations along the proposed construction traffic routes on the LRN and potentially the SRN.

Project information boards will be erected and will include key information for the public and relevant contact details. The design and location of route information signs and information boards will be agreed with Leicestershire County Council (LCC) and National Highways (NH) prior to installation.

The Principal Contractor shall ensure that the following general traffic management procedures are implemented for the duration of construction:

- Drivers of site and construction traffic vehicles will be made aware of access routes and contingency/mitigation measures during the site specific induction. In particular, 'no construction access' will be briefed in respect of routes through Diseworth village, Hyam's Lane or Long Holden.
- Drivers of HGV's and abnormal loads will also be inducted, (drivers induction to be undertaken prior to attendance at site) and traffic routes to and from site will be made clear prior to any traffic movements.
- The contractor will be required to implement induction procedures and promote road safety and awareness – in particular Safe access and egress into traffic management should be briefed to all drivers.
- Where possible, arrangements will be made for site workers to share transport and minimise unnecessary traffic movements locally.

#### **4.3 Abnormal loads**

Although A/L deliveries to site will normally be planned for outside normal working hours, it is possible that some abnormal deliveries, e.g. major items of plant and equipment, may require special delivery requirements that would require the activity to be undertaken during the normal operating hours.

In all instances, such deliveries will be planned with appropriate highway authorities and the police and executed in compliance with those requirements.



The Principal Contractor will notify the police, the highway authorities or bridge and structure owners, as appropriate, in moving abnormal loads through the road network.

The Principal Contractor will provide relevant parties with a schedule of abnormal load deliveries prior to the first abnormal load movement being carried out. This schedule will be updated and re-issued to the parties as required throughout the construction period.

#### **4.4 Construction Traffic volume assessment**

For detailed construction traffic volume calculations an assessment has been undertaken by BWB Consulting Ltd (BWB) who have produced the report East Midlands Gateway 2 – Construction Traffic Calculations, document number EMG2-BWB-GEN-XX-RP-TR-0013 which is contained in appendix 3 of this document.

For the purposes of the calculation's, vehicles can be classified as follows:

##### Heavy goods vehicles:

For the purpose of this document HGV associated construction traffic includes:

- Workforce Travel on any vehicle 3.5t or greater.
- HGV deliveries of construction materials and equipment.
- HGV deliveries of plant and equipment.
- HGV deliveries of bulk civils materials including aggregate and backfilling materials.

##### Construction workers and light goods vehicles:

- Cars, vans and any other vehicles less than 3.5t.

In general, it is envisaged that vehicles transporting construction workers will utilise the same route as the construction traffic. However, the route used by construction workers may vary depending on their point of origin.

It is further anticipated that the Principal Contractor will set out arrangements for managing light goods vehicle movement during the course of the working day. Whilst access to areas (in particular offsite Highway works) will be required for surveys and construction works, general travel for personal reasons, both onto the network, and into local towns and villages should be discouraged.

One way of doing this will be, not only to provide the welfare requirements as denoted in the Construction Management and Design regulations, but also to consider the provision of a “canteen” or “shop” that could be served to discourage unnecessary movements from the site during the course of the day.

Based on the above, the BWB calculations have assessed the peak hour construction traffic separately for EMG2 Works, EMG1 Works, and external highway works. Table 7 in the main report is replicated below, which subsequently summarises the totals of the 3 distinct assessments.

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	17	17	34	3	3	6
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total</b>	<b>77</b>	<b>32</b>	<b>108</b>	<b>18</b>	<b>89</b>	<b>107</b>

The details show that there is expected to be a total of 108 two-way construction vehicle movements in the morning peak hour and 107 in the evening peak hour, including both movements by operatives (car and van), LGVs and HGVs.

The Applicant is willing to accept a cap on peak hour construction vehicle movements in line with the table above and the values presented in the Construction Traffic Calculations Technical Note at Appendix 3. The contractor will monitor traffic flows during the construction phase and maintain daily records of all vehicle movements and ensure they are compliant with the above assessment calculations.

#### **4.5 Timing of movements**

Where possible vehicular movements will be constrained to the site working hours:

07:00-19:00 Monday to Friday; and

07:00-15:00 Saturday.

There will be no works on the main site out of these times other than in exceptional circumstances where prior agreement and notification will be given to the local planning authority.

There will, however, be a need for movements outside of this timeframe to facilitate the construction of elements of the scheme that require non-standard working hours to mitigate the impact of the works on the travelling public. Nightworks, and weekend possessions fall into this category. Advance communication in respect of this, will follow the protocol to be determined in the Construction Traffic Management Liaison meeting, but will ordinarily require information placed on the scheme's

website, and circulatory emails to key stakeholders as defined in the communications protocol.

#### **4.6 Royal Mail Coordination and Notification Protocol**

As part of the evolving Outline Construction Traffic Management Plan (CTMP) for East Midlands Gateway Phase 2 (EMG2), it is acknowledged through consultation that Royal Mail's operations are time-critical and rely heavily on predictable access to the local and strategic road network.

In response to Royal Mail's comments during the consultation process, and in recognition of their operational requirements, the Main Contractor will, during the construction phase, provide advance written notification to Royal Mail regarding all relevant traffic management arrangements. This notification will include pictorial aids, annotated maps, and a clear explanation of the traffic scenario, ensuring that Royal Mail has sufficient understanding of traffic management arrangements and any perceived impacts.



The CTMP will incorporate the following Royal Mail mitigation points as a standard protocol that the Principal Contractor will adhere to:

Advance Notice of Disruption: A requirement that during the construction phase Royal Mail is notified by Segro Properties Ltd or its contractors at least one month in advance on any proposed road closures / diversions / alternative access arrangements, hours of working.

Alternative Route Identification: Where road closures / diversions are proposed, Segro Properties Ltd or its contractors should be required to liaise with Royal Mail at least one month in advance to identify and make available alternative highway routes for operational use, where possible.

Ongoing Notification Mechanism: A mechanism will be implemented to inform Royal Mail of any other local highway works that may affect the network, particularly in the vicinity of key Royal Mail operational sites in the area surrounding EMG2.

The above will ensure a coordinated approach and allow Royal Mail to manage its logistics effectively during the construction phase.

## **5. CONSTRUCTION TRAFFIC MANAGEMENT AND TEMPORARY SITE ACCESS.**

The “temporary” construction site access will be off the current roundabout on the A453 West, directly opposite the Beverley Road spur of the roundabout between Finger Farm and the East Midlands Airport access.

Traffic Management will be in place in both directions denoting the site access and warning the travelling public accordingly of vehicles accessing, egressing and turning into or out of the development. TM Layout to be agreed with National Highways the overseeing organisation for the A453 by the Principal Contractor.

For indicative purposes, fig 4 below details likely traffic management arrangement at the proposed temporary site access to the South of the roundabout.

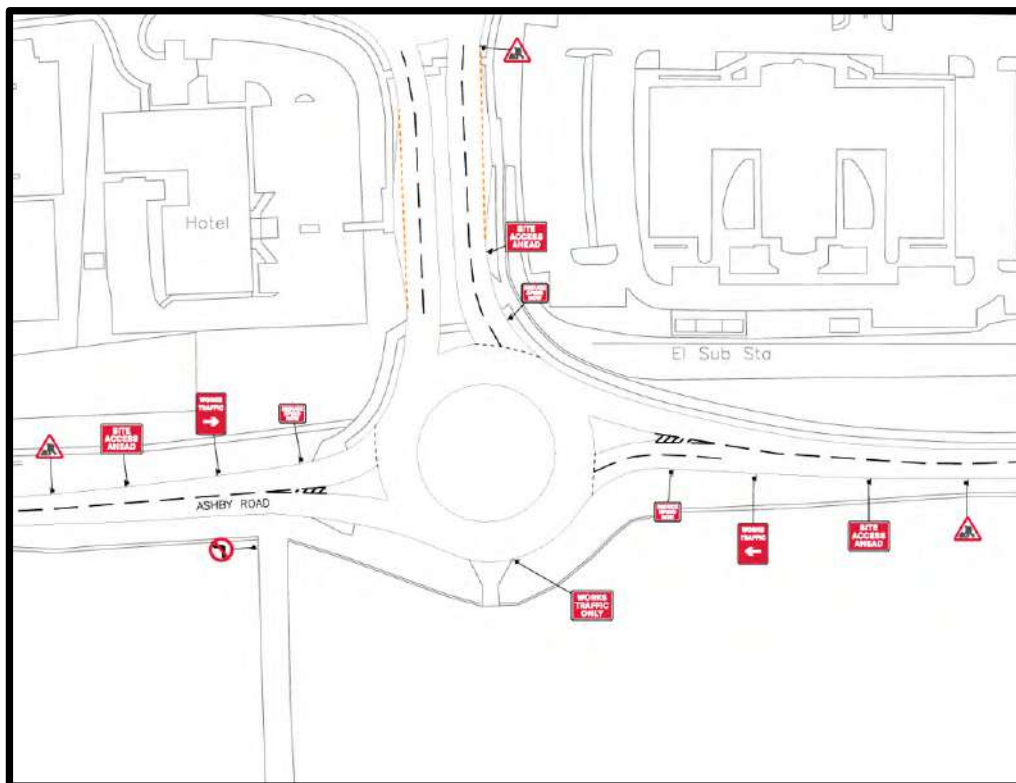


Fig 4.

Note: Traffic Management will be in place until such a time as any permanent works are installed and utilised, including appropriate permanent signage, and an assessment for use by an independent RSA3 Audit (Road Safety Audit).

The main materials storage compound, site welfare facilities, and delivery area, will be accommodated on-site. Additional areas may be required in order to construct the Highway works, whereby satellite office accommodation, and material lay down areas may be additionally required. These will be detailed further in the Contractors CTMP once the Design and methodology are sufficiently developed. Traffic Management associated with access to, and egress from, will be detailed and regularly reviewed in the CTMP.

## **6. NOISE AND ENVIRONMENTAL IMPACTS**

The Principal Contractor will consider the design of the construction site from a noise and environmental impact perspective during the construction works phase.

The Contractor will implement a clear and concise construction signage scheme on-site, to assist in internal traffic control and will separate construction vehicles and pedestrians. Signage will also identify the site office and parking areas (including disabled) for workers, site visitors, and delivery vehicles.

Site haul roads and working areas, insofar as reasonably practicable, will consider sensitive receptors, and ensure that internal traffic routes are planned to consider the impact of noise, vibration, and visual disruptions.

Additional information in respect of noise monitoring and Air quality levels will be contained in the CEMP (Construction Environmental Management Plan), which will set out the levels and monitoring in line with best industry practice.

Whilst noise from Construction Plant is inevitable, the Principal Contractor will need to cover the control and mitigation measures in the CEMP, which will consider the use of noise restricting measures on plant, baffles, white noise, boxing in generators correctly, or using “Hushpods” or main electric connections. Consideration should also be given to the use of electric plant, albeit it is appreciated that for some of the larger pieces of plant that there are currently no electric alternatives.

The vehicles shall not be kept idling, whilst waiting, either to access site, or to be loaded and unloaded. Signage to be displayed, and gateman or Banksman to monitor and control as necessary.

Road sweeping will be required to ensure no debris is left on any road affected by the development. This is particularly pertinent in wet conditions, when the site is likely to generate mud as a consequence of Construction activities. The provision for dealing with this will be covered in the CEMP and the CTMP, where consideration will be given to the use of wheel washes, long run off hard standings with rumble strips, and road sweepers.

## **7. MONITORING AND MITIGATION**

The pCTMP will set out the management mitigation measures to reduce the impacts of the development on the SRN and LRN, communities, and the environment, and should be read in conjunction with the CEMP to give a full understanding of all measures and obligations

Where reasonable and practicable, construction vehicles and delivery vehicles will avoid travelling in convoys on public roads or stopping in laybys or other waiting areas enroute to or from the scheme.

Vehicles shall not wait or stack on the road. There shall be sufficient stacking room for vehicles created in the main site once access has been gained, with additional pull in waiting refuge lanes to maintain the flow of traffic through the gate and into site thereby controlling flow and ensuring traffic back up onto the network is not encountered.

The Principal Contractor will need to demonstrate a robust monitoring protocol to ensure adherence to the Construction Traffic Management Plan, and will consider the use of CCTV, and ANPR (Automatic Numberplate Recognition) in order to demonstrate compliance.

Repeated failure to use authorised routes, will result in disciplinary action in line with the Principal Contractor's disciplinary and grievance policy, or Sub-Contractor/Supplier Contracts.

## **8. ENFORCEMENT OF THE CONSTRUCTION TRAFFIC MANAGEMENT PLAN**

To ensure that the measures outlined in this document can be effectively enforced it is important to define what would constitute a breach. The CTMP therefore considers that the following would constitute a breach whereby corrective measures would be required:

- Failure to implement or use the agreed traffic management protocol.
- Failure to follow the agreed delivery routes.
- Failure to record deliveries and departures for plant and materials with the proposed monitoring system.
- Failure to keep the Construction traffic volumes less than or equal to the traffic management assessment numbers as defined by the BWB report - East Midlands Gateway Phase 2 – Construction Traffic Calculations

Vehicles that are either reported for utilising routes which are not approved, or which are observed to travel along inappropriate routes, or in an inappropriate manner, shall be reported to the Principal Contractor for investigation. Thereafter, the Principal Contractor shall carry out all possible enquiries to identify the relevant company and driver responsible and will take disciplinary action. The step process for this will be covered in the CTMP.

The Principal Contractor shall record all information in a tabulated format and discuss more widely as an agenda item in the Construction traffic management working group meeting.





PC24-004 EMG 2  
Construction Traffic Management Plan



**APPENDIX 1**  
**DCO Order Limits**





**Notes**

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

Legend	
<span style="color: red;">—</span>	DRAFT order limits
<span style="background-color: yellow; border: 1px solid red; display: inline-block; width: 20px; height: 10px;"></span>	Area <u>not</u> included within order limits

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	16.05.24	Issued for information	SRH	SRH	
P02	28.05.24	EMG1 area added	SRH	SRH	
P03	10.06.24	EMG1 and J24 areas amended	SRH	SRH	
P04	18.06.24	EMG1 entrance area amended	SRH	SRH	
P05	23.10.24	Updates as shown on SK020	SRH	SRH	
P06	07.11.24	Updates as shown on SK020	SRH	SRH	



A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☐ Manchester | 0161 233 4260  
☒ Nottingham | 0115 924 1100  
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client



Drawn:	S. Hilditch	Reviewed:	S.Hilditch
BWB Ref:	220500	Date:	16.05.24
		Scale@A1:	1:10,000

Project Title

**EAST MIDLANDS  
GATEWAY 2 (EMG2)**

Drawing Status

**FOR INFORMATION**

Drawing Title

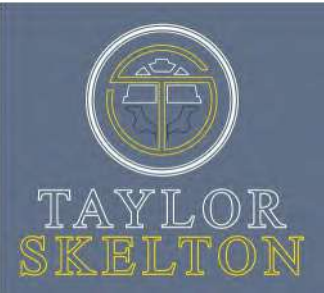
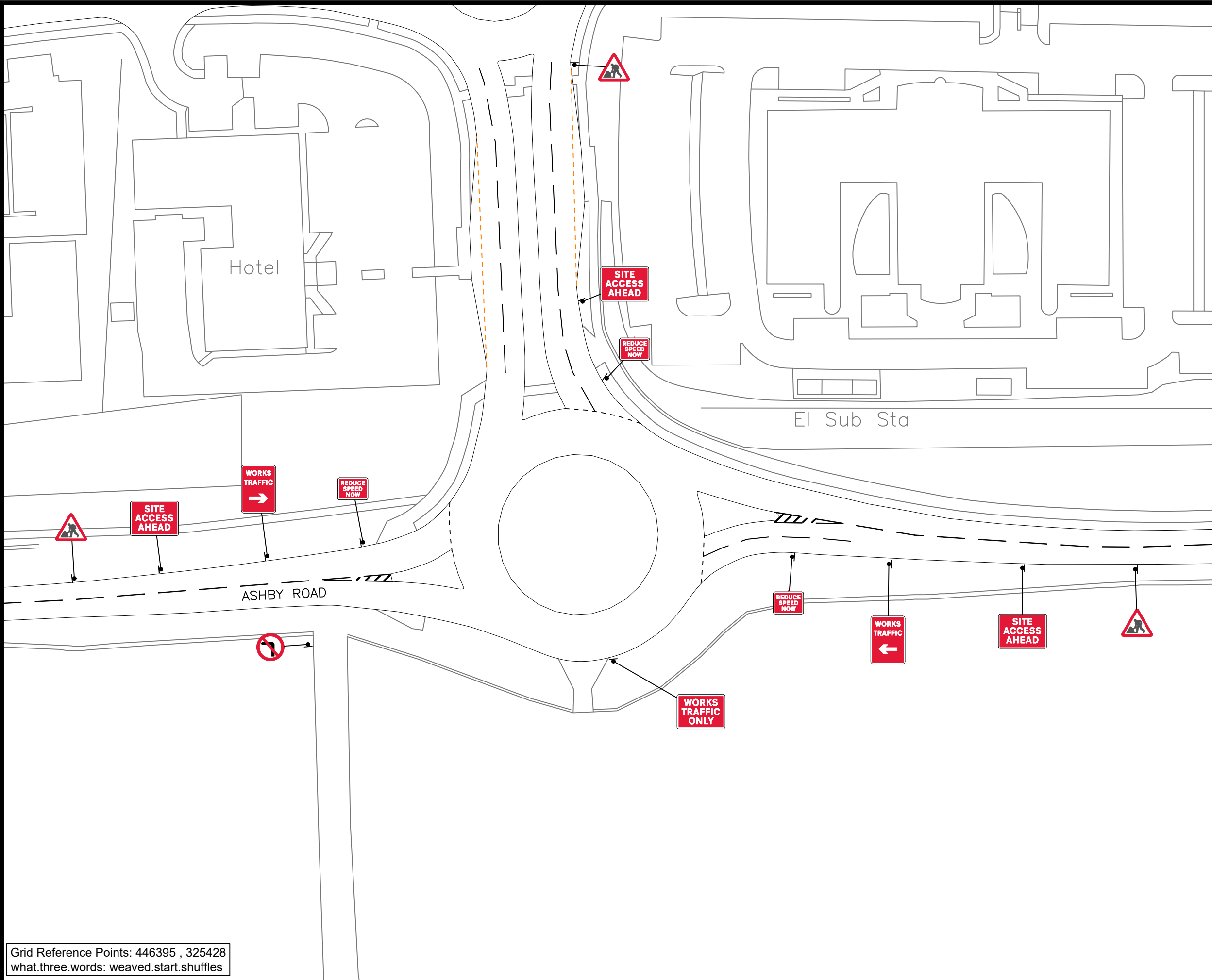
**DRAFT ORDER LIMITS**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
<b>EMG2-BWB-GEN-XX-SK-CH-SK004</b>	<b>S2</b>	<b>P06</b>



## **APPENDIX 2**

### **Indicative main site access layout plan**



BILL OF QUANTITIES

Qty: 3    Ref: 13.9 Schedule 13-9 : Temporary Information	
Qty: 3    Ref: 511 Reduce speed now	
Qty: 1    Ref: 613 No left turn	
Qty: 3    Ref: 7001 Road works ahead	
Qty: 1    Ref: 7301 Works traffic only	
Qty: 1    Ref: 7303 Works traffic direction left	
Qty: 1    Ref: 7303 Works traffic direction right	



Date:	Rev	DRAWN	APPROVED	Drawing Number:	TSM-1325-REV1
13.11.24	1	JA	TSM	Client Reference:	EMG2
Title: Ashby Road, Diseworth, Leicestershire, DE74 2TU				Traffic Management:	Site Management
				Road Speed:	60mph

KEY

● Sign



All drawings are drawn to north.



All layouts are drawn with Traffic Signs Regulation & General Layout Directions 2016 & Chapter 8 Guidelines. Using Safety At Street Works And Road Works A Code Of Practice as a guideline. Drawing to be read with relevant method statement & risk assessment. All sign locations are indicative and exact locations will be determined on site. Cross section is measured from narrowest point throughout works. This may differ on site and are only to be used as a guide.

Drawn by Ackroyd Design.

A3

## **APPENDIX 3**

**East Midlands Gateway Phase 2**

**Construction Traffic Calculations**

**EMG2-BWB-GEN-XX-RP-TR-0013**

PROJECT NAME	East Midlands Gateway Phase 2 – Construction Traffic Calculations		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0013	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Simon Hilditch	REVISION	P3
APPROVED	Paul Wilson	DATE	11.04.25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 This Technical Note presents the methodology used to calculate the traffic generation during the construction phase of the development. It follows the same methodology adopted on other nationally significant employment DCO projects with Segro at East Midlands Gateway (EMG1) and Northampton Gateway, although without the Strategic Rail Freight Terminal element as this is not proposed at EMG2.
- 1.3 A separate Explanatory Note has been produced setting out the assumptions and process adopted in calculating construction traffic. A copy is included in **Appendix 1**.

## 2. CALCULATION METHODOLOGY

- 2.1 The following calculations consider the tonnes of material required to construct various components of the development based on a unit of measurement. The key components being:
- Roads (EMG2 and EMG1)
  - Off-site highway works (EMG2 site access, EMG1 site access, M1 J24, A453/The Green)
  - Bridges
  - Earthworks (EMG2 and EMG1)
  - Buildings (EMG2 and EMG1)
  - Landscaping (EMG2 and EMG1)
- 2.2 It should be noted that reference to EMG2 relates to the main site south of the A453 and East Midlands Airport, whilst reference to EMG1 relates to works associate with developing Plot 16 at the existing EMG site. The off-site highway works are based on the original PRTM modelling work and current mitigation design which reflect 2025 and 2035 future years. If the mitigation strategy changes as a result of the revised PRTM modelling, then this could affect the construction traffic calculations which would then need reconsidering.
- 2.3 The total number of HGV movements has been calculated based on 18.5T per movement.

- 2.4 The total number of LGV movements has been calculated based on the following percentages of the HGV movements for each construction component i.e. for 'roads (on-site)' the total number of LGVs equates to 20% of the total HGVs.
- Roads (on site) – 20%
  - Roads (off site) – 20%
  - Bridges – 40%
  - Earthworks – 50%
  - Buildings – 20%
  - Landscaping – 400%
- 2.5 The total number of cars and vans varies depending on each construction component and are based on Segro's knowledge of developing other sites. However, it has been assumed that cars have an occupancy rate of 1 person and vans have an occupancy rate of 2 people.
- 2.6 The number of construction days has been calculated at 49 weeks x 5 day = 245 days per year.
- 2.7 To establish daily construction movements, total construction traffic has been divided by the days per year x duration in years. A separate Excel Spreadsheet has been produced containing the detailed calculations, contents of which are included at **Appendix 2**, whilst an extract is shown below. A copy of the Excel spreadsheet can be provided on request. **Table 1** subsequently shows the daily construction vehicle movements across the five-year construction period for each vehicle type. This is broken down by works at EMG2, EMG1 and external highway works i.e. at M1 J24 and A453/The Green based on the current mitigation strategy, which is subject to confirmation using outputs from the revised PRTM modelling.
- 2.8 To give an example, for the 'Roads (EMG2 Main Site)' component, this is expected to be on-going for a total of 367.5 days based on 5 days per week for 49 weeks multiplied by 1.5 years ( $49 \times 5 \times 1.5$ ). Across the 367.5 days, there are expected to be a total of 7,750 HGV movements based on the total mass of material required. The daily number of HGVs has been calculated by dividing the total 7,750 HGV movements by 367.5 days, resulting in 21.09 daily HGVs ( $7,750 / 367.5$ ).
- 2.9 The daily number of LGV movements (4.22) has then been calculated based on 20% of the daily number of HGVs ( $21.09 \times 0.2 = 4.22$ ).

# CONSTRUCTION TRAFFIC CALCULATIONS

## EAST MIDLANDS GATEWAY PHASE 2



### Construction Traffic Movements (One Way)

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals					Yrs	Day	Average Movements per Day				
								HGV	LGV	Car	Van	Total			HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425	1.50	367.50	21.09	4.22	42.18	31.63	99.12
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320	1.00	245.00	12.45	2.49	7.47	7.47	29.88
Highway Works (M1J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400	2.00	490.00	32.65	6.53	19.59	19.59	78.37
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340	1.00	245.00	3.98	0.80	2.39	2.39	9.55
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192	0.20	49.00	1.63	0.33	0.98	0.98	3.92
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815	1.00	245.00	5.92	1.18	11.84	8.88	27.82
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240	1.50	367.50	4.35	1.74	8.16	8.16	22.42
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600	1.50	367.50	4.35	2.18	8.71	32.65	47.89
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650	1.00	245.00	0.61	0.31	1.22	4.59	6.73
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636	5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553	1.00	245.00	16.48	3.30	8.24	10.98	38.99
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552	2.00	490.00	0.66	2.64	1.32	2.64	7.25
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.11	0.44	0.22	0.44	1.21
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>			<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

NOTE1: highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.

NOTE2: EMG1 proposals not included, potentially add to buildings as sq ft?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1J24)	Highway works (EMG1 site access)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2)	E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscap e (EMG2)	Landscap e (EMG1)
Yr1	HGV	111.33	49.95	27.10	34.29	10.54	12.45	32.65	3.98	1.63	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr1	LGV	27.11	14.24	6.02	6.86	2.11	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr1	Car	97.03	52.55	23.91	20.57	21.09	7.47	19.59	2.39	0.98	11.84	4.08	8.71	1.22	9.89	8.24	1.32	0.22
Yr1	Vans	123.69	75.84	27.28	20.57	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr2	HGV	100.47	67.82	-	32.65	21.09	-	32.65	-	-	-	-	4.35	2.18	39.54	-	0.66	-
Yr2	LGV	24.12	17.59	-	6.53	4.22	-	6.53	-	-	-	-	1.74	1.09	7.91	-	2.64	-
Yr2	Cars	95.37	75.78	-	19.59	42.18	-	19.59	-	-	-	-	8.16	4.35	19.77	-	1.32	-
Yr2	Vans	104.71	85.12	-	19.59	31.63	-	19.59	-	-	-	-	8.16	16.33	26.36	-	2.64	-
Yr3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
TOTAL																		



**Table 1 – Daily Construction Vehicle Movements by Year**

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
<b>Yr 1</b>	<b>359</b>	<b>193</b>	<b>84</b>	<b>82</b>	<b>718</b>	<b>385</b>	<b>169</b>	<b>165</b>
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
<b>Yr 2</b>	<b>325</b>	<b>246</b>	-	<b>78</b>	<b>649</b>	<b>493</b>	-	<b>157</b>
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
<b>Yr 3</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 4</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 5</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-

- 2.10 For robustness, the calculations assume that all construction components would start in Year 1. The details in **Table 1** show that peak construction traffic would occur in Year 1 with a total of 718 daily two-way construction vehicle movements, comprising 385 movements for works at EMG2, 169 movements for works at EMG1 and 165 movements for external highway works. **Tables 2** and **3** set out the assumptions made for the timings of arrivals and departures for each vehicle type has been adopted.

**Table 2. Percentage Timings of Arrivals**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table 3. Percentage Timings of Departures**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- 2.11 The above assumptions were previously agreed for the East Midlands Gateway and Northampton Gateway DCO projects.
- 2.12 **Tables 4, 5 and 6** summarise the peak hour construction traffic for the EMG2 works, EMG1 works and external highway works respectively, based on the worst-case Year 1 construction period, taking into account the above assumptions. The Excel spreadsheet shows the volume of construction traffic across all 13 hours (0600 to 1900 hours) for clarity.

**Table 4. Peak Hour Construction Traffic Generation (EMG2 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	7	7	14	1	1	2
LGV	2	2	4	0	0	0
Car	11	2	13	3	16	19
Vans	23	5	27	6	35	41
<b>Total</b>	<b>43</b>	<b>16</b>	<b>58</b>	<b>10</b>	<b>52</b>	<b>62</b>

**Table 5. Peak Hour Construction Traffic Generation (EMG1 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	4	4	8	1	1	2
LGV	1	1	2	0	0	0
Car	5	1	6	1	7	8
Vans	8	2	10	2	12	14
<b>Total</b>	<b>18</b>	<b>8</b>	<b>26</b>	<b>4</b>	<b>20</b>	<b>24</b>

**Table 6. Peak Hour Construction Traffic Generation (External Highway works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	5	5	10	1	1	2
LGV	1	1	2	0	0	0
Car	4	1	5	1	6	7
Vans	6	2	8	2	9	11
<b>Total</b>	<b>16</b>	<b>9</b>	<b>25</b>	<b>4</b>	<b>16</b>	<b>20</b>

- 2.13 **Table 7** calculates the total peak hour construction traffic for all three sets out works, calculated as a sum of the values in **Tables 4, 5** and **6**.

**Table 7. Peak Hour Construction Traffic Generation (Total)**

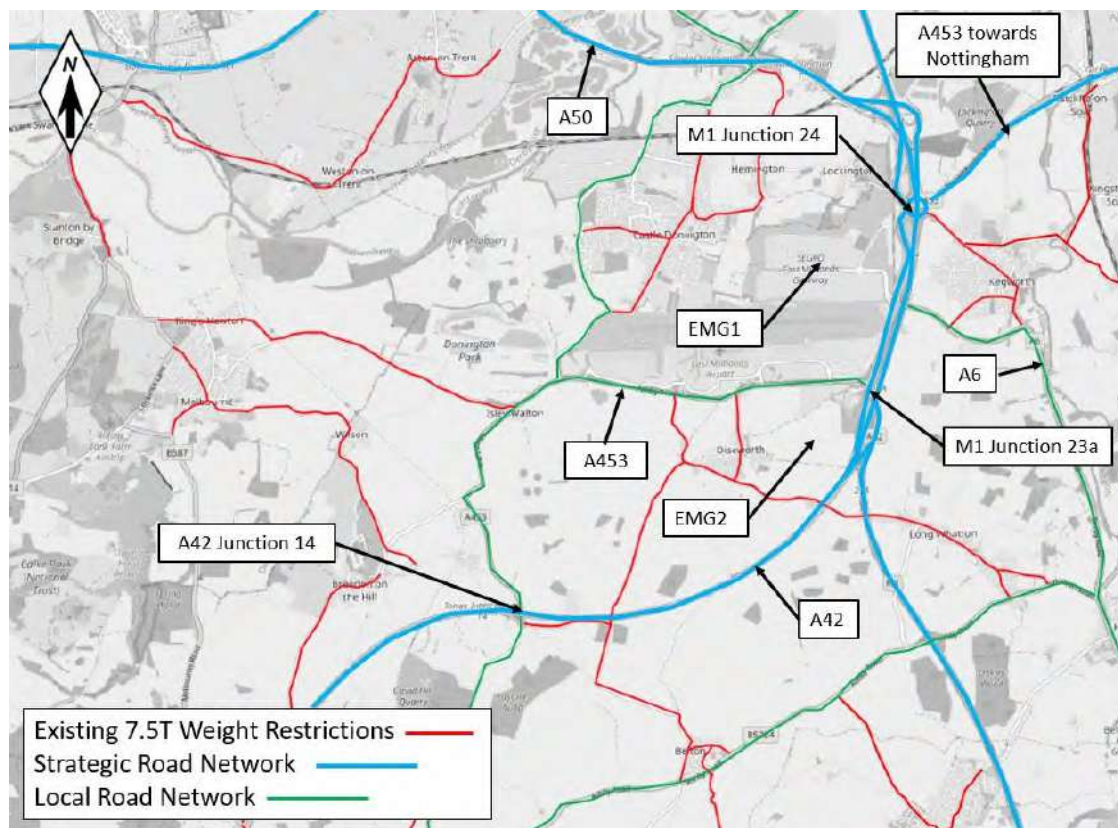
	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	17	17	34	3	3	6
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total</b>	<b>77</b>	<b>32</b>	<b>108</b>	<b>18</b>	<b>89</b>	<b>107</b>

- 2.14 The details show that there is expected to be a total of 108 two-way construction vehicle movements in the morning peak hour and 107 in the evening peak hour, including both movements by operatives (car and van), LGVs and HGVs.

### **3. PROPOSED ASSESSMENT METHODOLOGY**

- 3.1 Whilst peak hour construction movements are expected to be low and do not warrant any further capacity assessment on the surrounding highway network, it is proposed that the peak hour/daily traffic is tested through the Pan Regional Transport Model (PRTM) to provide outputs to inform the ES Chapter, which requires an assessment of AADT construction traffic. Hence peak hour flows will be modelled and a factor will be applied in PRTM to derive AADT movements. This factor will mirror the daily construction vehicle calculations presented in **Table 1**.
- 3.2 The loading points of construction traffic in PRTM can be split by the various locations based on the values in **Tables 4, 5** and **6**. The distribution of construction traffic will be undertaken within PRTM based on the most appropriate methodology, which at this stage is expected to be via a gravity model approach.
- 3.3 The PRTM modelling of construction traffic will provide an indication of the likely increase in traffic across the network, which can be compared against the 2028/2038 forecast base year flows (without development), which are being provided as part of the Stage 1 modelling by AECOM. This will provide an understanding of the percentage increase in traffic which will be detailed in the ES Chapter.
- 3.4 Further details with regard to the routing of construction traffic and measures to limit impacts on the network will be provided in a separate Construction Traffic Management Plan. This includes a commitment to capping construction vehicle movements to those shown in **Tables 4, 5, 6** and **7** and monitoring traffic movements over the construction phase. In addition, consideration can be given to the impacts of lane closures and road space needed to deliver the external highways works, but again this will be covered separately at the appropriate time. HGV route choice will however need to consider existing weight restrictions on the surrounding roads, of which there are a number surrounding the site (as shown on **Figure 1**), which will help limit any impacts along the most sensitive routes and ensure that HGVs use the more strategic routes when travelling to the site. These weight restrictions are already coded into PRTM and was confirmed as part of the Base Model Validation Report.

**Figure 1. Existing Weight Restrictions**



## 4. SUMMARY

- 4.1 This Technical Note presents the traffic generation calculations for the construction phase of the EMG2 development. It follows previous methodologies adopted for other large DCO applications, including at East Midlands Gateway and Northampton Gateway and are based on inputs from an Excel spreadsheet provided by Segro.
- 4.2 The calculations consider each construction component individually and calculate the daily and peak hour construction vehicle movements for cars, LGVs, vans and HGVs across the five-year construction period.
- 4.3 The calculations confirm that peak construction activity would occur in Year 1, with a total of 718 daily two-way construction vehicle movements. When converted to peak hour traffic, there is expected to be a total of 108 movements in the AM peak hour and 107 movements in the PM peak hour (two-way). Whilst peak hour activity is expected to be low, construction traffic is proposed to be tested in PRTM for the purpose of obtaining AADT information for the ES Chapter.

## Appendix 1. Explanatory Note

## EMG2 Construction Traffic Calculations – Explanatory Note

### 1. Introduction

- 1.1 This Explanatory Note has been prepared to provide guidance to users reading BWB's Construction Traffic Calculations Technical Note ref: EMG2-BWB-GEN-XX-RP-TR-0013, which calculates the construction traffic forecasts for the East Midlands Gateway Phase 2 project (EMG2). It also provides guidance on navigating the accompanying Excel spreadsheet so that users can understand how the calculations have been derived and any assumptions made.

### 2. Methodology

- 2.1 The Excel spreadsheet includes two tabs. The 'calculations' tab provides the inputs and assumptions behind the calculations, whilst the 'Daily\_Hourly Flows' tab summarises the data for the purposes of reporting.
- 2.2 Starting with 'calculations' tab, this firstly lists the various construction components, the quantity of material needed to construct each component and the unit of measurement down the left-hand side.

Component	Input Unit	Quantity						Development Totals				
			HGV	LGV	Car	Van	Total	HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	7	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

- 2.3 The volume of HGVs is determined based on a resourced programme with standard elements of work, so in this instance the number of visits needed to deliver the quantity of material to build each particular component and is applied as a factor. The factors reflect historic survey work undertaken by Segro on existing construction sites. As an example, a HGV factor of 0.5 is applied to all highway works.

- 2.4 This factor is then used to calculate the total number of HGV movements that would be required to deliver the total quantum of material for each construction component.

Component	Input Unit	Quantity						Development Totals				
			HGV	LGV	Car	Van	Total	HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	7	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

- 2.5 The total number of LGV movements are then derived as a percentage of total HGV movements, again reflecting historic surveys Segro has undertaken. The following percentages are adopted for each construction component, noting that a higher proportion of LGVs are generated for landscaping purposes compared to highway works. These values reflect one-way movements.



- Roads = 20%
- Highway works = 20%
- Bridges = 40%
- Earthworks = 50%
- Buildings = 20%
- Landscaping = 400%

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

2.6 The methodology for calculating car and van movements is the same and based on a resource programme with a standard element of works and includes movements from operatives, management, visitors and supervisors, which derives a factor similar to HGVs and LGVs. The factors reflect the following occupancy rates:

- Car = 1 person
- Van = 2 persons

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

2.7 Finally, total construction vehicle movements are calculated as a sum of HGVs, LGVs, cars and vans.

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M3 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	800	320	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								85,479	19,270	63,900	78,370	247,019

2.8 The amount of time to complete each construction component is then set in years and reflects Segro's construction programme for EMG2. The number of years is then converted to working days, assuming 5 day working weeks for 49 weeks ((49 x 5) x no. of years). For example, the number of working days expected to complete the 'Roads (EMG2 Main Site)' component is 367.50 days ((49 x 5) x 1.5).



Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.9 The daily number of vehicle movements for each construction component is then calculated by dividing the total number of vehicles across the entire construction programme by the number of working days. For example, daily HGV movements for the 'Roads (EMG2 Main Site)' component is 21.09 calculated as (7,750 / 367.50).

Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.10 The daily number of movements is then profiled out for each year of construction based on the length of time that particular component is expected to take. To ensure a worst-case assessment, all components are set to start in Year 1, however in reality components will be staggered, for example a certain amount of earthworks is required before you can start constructing buildings.
- 2.11 Where a particular component is expected to end mid-way through a year i.e. 'Roads (EMG2 Main Site)' has a duration of 1.5 years, the daily values are taken in full for one of the years and divided by two for the other year, to calculate an average. This depends on each component, for example earthworks start early on in the construction programme, so daily movements for earthworks are taken in full for Year 1, whilst road construction would start later, and so daily movements are taken in full for Year 2.

This report needs to include any column for all of the cities added above																		
	Type	Overall Total	Total EMS2	Total EMS1	Total Extended	Highway needs (MS/1000 cfm approx)	Highway needs (MS/1000 cfm approx)	Highway needs (MS/1000 cfm approx)	Highway needs (MS/1000 cfm approx)	Needs (MS/1000 cfm approx)	Buildings (MS/1000 cfm approx)	Buildings (MS/1000 cfm approx)	Buildings (MS/1000 cfm approx)	Landscaping (MS/1000 cfm approx)	Landscaping (MS/1000 cfm approx)			
City	HCV	311.33 *	48.95 *	27.10	34.75	16.34	32.45	3.98	1.61	5.91 *	7.38	6.81	0.61 *	18.77	10.48 *	6.06	0.11	
City	IGV	27.11	14.24 *	6.02	8.88	2.11	2.49	0.13	0.80	0.33	1.16 *	0.87	2.18	0.11 *	0.05	3.00 *	2.94	0.44
City	IGV	87.94 *	9.94	84.91	80.57	20.18	2.47	0.19	0.06	1.14 *	0.97	0.78	0.16 *	8.14 *	5.51	0.23		
City	Vars	123.69 *	76.84 *	27.28	20.57	17.80	7.47	1.19	2.88	0.84	8.88 *	10.00	4.56 *	13.04	10.56 *	7.64	0.44	
City	IGV	160.47 *	87.82 *	-	32.88	22.19	-	-	-	-	4.35	2.18	-	39.54	-	1.60	-	
City	IGV	24.17 *	17.98 *	-	12.13	4.19	-	-	-	-	6.14	2.18	-	2.18	-	2.49	-	
City	IGV	93.97 *	75.78 *	-	18.39	32.65	-	-	-	-	8.16	4.85	-	19.77	-	6.92	-	
City	HCV	264.72 *	85.12 *	-	15.56	17.31	55.55	-	-	-	0.16	16.31	-	30.34	-	2.64	-	
City	IGV	89.64 *	39.34 *	-	-	-	-	-	-	-	-	-	-	7.03	-	-	-	
City	IGV	7.91 *	7.91 *	-	-	-	-	-	-	-	-	-	-	28.30	-	-	-	
City	IGV	19.77 *	19.77 *	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
City	Vars	26.94 *	26.94 *	-	-	-	-	-	-	-	-	-	-	26.94	-	-	-	
City	HCV	83.94 *	39.34 *	-	-	-	-	-	-	-	-	-	-	7.03	-	-	-	
City	IGV	7.91 *	7.91 *	-	-	-	-	-	-	-	-	-	-	28.30	-	-	-	
City	IGV	19.77 *	19.77 *	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
City	Vars	26.94 *	26.94 *	-	-	-	-	-	-	-	-	-	-	26.94	-	-	-	
City	IGV	39.34 *	39.34 *	-	-	-	-	-	-	-	-	-	-	39.34	-	-	-	
City	IGV	7.91 *	7.91 *	-	-	-	-	-	-	-	-	-	-	28.30	-	-	-	
City	IGV	19.77 *	19.77 *	-	-	-	-	-	-	-	-	-	-	18.77	-	-	-	
City	Vars	26.94 *	26.94 *	-	-	-	-	-	-	-	-	-	-	26.94	-	-	-	

Using the daily number of movements for each year of construction, total movements for works at EMG2, EMG1 and external highway works are calculated.

[illegible]

Within the 'Daily\_Hourly\_Flows' tab, the average number of daily movements (one-way) for each vehicle type across each year are calculated using the values above (left hand side of table). These are then multiplied by two to derive two-way movements (right hand side of table), assuming that any vehicle arriving must then depart.

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
Yr 1	359	193	84	82	718	385	169	165
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
Yr 2	325	246	-	78	649	493	-	157
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
Yr 3	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
Yr 4	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
Yr 5	94	94	-	-	187	187	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-

- 2.14 In this instance, peak construction traffic is expected to occur in Year 1, as highlighted yellow in the table above. These worst-case values have therefore been adopted when converting daily movements to peak hour.
- 2.15 The following percentage breakdown of arrivals and departures for each vehicle type is assumed, with the traditional network peak periods highlighted yellow. These percentages are based on historic survey work undertaken by Segro.

% Arrivals by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
	100%	100%	100%	100%

% Departures by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
	100%	100%	100%	100%

- 2.16 Hourly arrivals and departures for each vehicle type are then calculated by multiplying the daily one-way movements to the percentages above. This has been split by the various locations, EMG2, EMG1 and Off-site highway works as they will have different origin/destination points on the network.

Inbound movements by Hour (EMG2) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	3	5
07:00-08:00	5	1	24	24
08:00-09:00	7	2	11	18
09:00-10:00	5	1	3	4
10:00-11:00	5	1	1	2
11:00-12:00	5	1	1	2
12:00-13:00	5	1	1	2
13:00-14:00	4	1	1	2
14:00-15:00	4	1	1	2
15:00-16:00	4	1	1	2
16:00-17:00	2	1	1	2
17:00-18:00	1	0	3	4
18:00-19:00	1	0	3	1
	45	11	54	80

Inbound movements by Hour (EMG1) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	3	1	11	12
08:00-09:00	4	1	5	8
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	1
11:00-12:00	3	1	0	1
12:00-13:00	3	1	0	1
13:00-14:00	2	1	0	1
14:00-15:00	2	1	0	1
15:00-16:00	2	0	0	1
16:00-17:00	1	0	1	1
17:00-18:00	1	0	1	1
18:00-19:00	1	0	1	0
	28	8	22	29

Inbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	3	1	4	4
08:00-09:00	3	1	4	4
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	0
11:00-12:00	3	1	0	0
12:00-13:00	3	1	0	0
13:00-14:00	3	1	0	0
14:00-15:00	3	1	0	0
15:00-16:00	3	1	0	0
16:00-17:00	1	0	1	0
17:00-18:00	1	0	1	0
18:00-19:00	1	0	1	0
	32	8	17	17

Outbound movements by Hour (EMG2) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	5	1	2	2
08:00-09:00	7	2	2	2
09:00-10:00	5	1	2	2
10:00-11:00	5	1	1	2
11:00-12:00	5	1	1	2
12:00-13:00	5	1	1	2
13:00-14:00	4	1	1	2
14:00-15:00	4	1	1	2
15:00-16:00	4	1	1	2
16:00-17:00	2	1	4	6
17:00-18:00	1	0	14	24
18:00-19:00	1	0	14	9
	45	11	54	80

Outbound movements by Hour (EMG1) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	3	1	1	1
08:00-09:00	4	1	1	1
09:00-10:00	3	1	0	1
10:00-11:00	3	1	0	1
11:00-12:00	3	1	0	1
12:00-13:00	3	1	0	1
13:00-14:00	2	1	0	1
14:00-15:00	2	0	0	1
15:00-16:00	2	0	0	1
16:00-17:00	1	0	4	8
17:00-18:00	1	0	7	8
18:00-19:00	1	0	4	3
	28	8	22	30

Outbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	3	1	2	2
08:00-09:00	3	1	2	2
09:00-10:00	3	1	1	1
10:00-11:00	3	1	0	0
11:00-12:00	3	1	0	0
12:00-13:00	3	1	0	0
13:00-14:00	3	1	0	0
14:00-15:00	3	1	0	0
15:00-16:00	3	1	0	0
16:00-17:00	1	0	3	4
17:00-18:00	1	0	4	4
18:00-19:00	1	0	4	2
	32	8	17	17

- 2.17 From this, total arrivals and departures can be calculated. This provides the final peak hour construction movements, which are set out in the report ref EMG2-BWB-GEN-XX-RP-TR-0013 and to be used for further assessment.

Inbound movements by Hour (total development) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	12
07:00-08:00	11	3	44	56
08:00-09:00	17	3	19	25
09:00-10:00	11	3	5	6
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	2	2
16:00-17:00	4	2	2	2
17:00-18:00	3	1	5	6
18:00-19:00	2	1	5	1
	110	29	98	120

Outbound movements by Hour (total development) - Year 1				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	11	3	3	2
08:00-09:00	17	3	4	5
09:00-10:00	11	3	4	2
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	8	10
16:00-17:00	4	2	15	37
17:00-18:00	3	1	29	37
18:00-19:00	2	1	24	15
	110	29	98	120

- 2.18 The formulas in-built within the spreadsheet assume that vans have an occupancy rate of 3 people. It has been agreed with the TWG for vans to adopt an occupancy rate of 2 people per van. The values for vans in the tables above have therefore been multiplied by 1.5 to calculate this. These are shown in the tables at the bottom of the excel spreadsheet, with the revised total development construction vehicles shown below.

Inbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	18
07:00-08:00	11	3	44	84
08:00-09:00	17	3	19	38
09:00-10:00	11	3	5	9
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	2	3
16:00-17:00	4	2	2	3
17:00-18:00	3	1	5	9
18:00-19:00	2	1	5	2
	110	29	98	180

Outbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	11	3	3	3
08:00-09:00	17	3	4	8
09:00-10:00	11	3	4	3
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	8	15
16:00-17:00	4	2	15	56
17:00-18:00	3	1	29	56
18:00-19:00	2	1	24	23
	110	29	98	180

**Appendix 2. Construction Traffic Flow Calculations Spreadsheet Extract**

Construction Traffic Movements (One Way)

								Development Totals								Average Movements per Day					
Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	HGV	LGV	Car	Van	Total		Yrs	Day	HGV	LGV	Car	Van	Total	
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425		1.50	367.50	21.09	4.22	42.18	31.63	99.12	
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320		1.00	245.00	12.45	2.49	7.47	7.47	29.88	
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400		2.00	490.00	32.65	6.53	19.59	19.59	78.37	
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340		1.00	245.00	3.98	0.80	2.39	2.39	9.55	
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192		0.20	49.00	1.63	0.33	0.98	0.98	3.92	
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815		1.00	245.00	5.92	1.18	11.84	8.88	27.82	
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240		1.50	367.50	4.35	1.74	8.16	8.16	22.42	
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600		1.50	367.50	4.35	2.18	8.71	32.65	47.89	
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650		1.00	245.00	0.61	0.31	1.22	4.59	6.73	
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636		5.00	1,225.00	39.54	7.91	19.77	26.36	93.58	
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553		1.00	245.00	16.48	3.30	8.24	10.98	38.99	
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552		2.00	490.00	0.66	2.64	1.32	2.64	7.25	
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296		1.00	245.00	0.11	0.44	0.22	0.44	1.21	
								85,479	19,270	63,900	78,370	247,019									

NOTE1: highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.  
NOTE2: EMG1 proposals not included, potentially add to buildings as sq ft?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1J24)	Highway works (EMG1 site access)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2)	E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscape (EMG2)	Landscape (EMG1)
Yr 1	HGV	111.33	49.95	27.10	34.29	10.54	12.45	32.65	3.98	1.63	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr 1	LGV	27.11	14.24	6.02	6.86	2.11	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr 1	Car	97.03	52.55	23.91	20.57	21.09	7.47	19.59	2.39	0.98	11.84	4.08	8.71	1.22	9.89	8.24	1.32	0.22
Yr 1	Vans	123.69	75.84	27.28	20.57	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr 2	HGV	100.47	67.82	-	32.65	21.09	-	32.65	-	-	-	4.35	2.18	-	39.54	-	0.66	-
Yr 2	LGV	24.12	17.59	-	6.53	4.22	-	6.53	-	-	-	1.74	1.09	-	7.91	-	2.64	-
Yr 2	Cars	95.37	75.78	-	19.59	42.18	-	19.59	-	-	-	8.16	4.35	-	19.77	-	1.32	-
Yr 2	Vans	104.71	85.12	-	19.59	31.63	-	19.59	-	-	-	8.16	16.33	-	26.36	-	2.64	-
Yr 3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr 4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
Yr 5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	39.54	-	-	-
Yr 5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-
Yr 5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	19.77	-	-	-
Yr 5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	26.36	-	-	-
TOTAL																		

**APPENDIX 17: TA & ES Assessment Methodology (document reference EMG2-BWB-  
GEN-XX-RP-TR-00017\_S2-P4)**

---



PROJECT NAME	East Midlands Gateway Phase 2 – TA & ES Chapter Assessment Methodology		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0017	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	Simon Hilditch	REVISION	P4
APPROVED	Paul Wilson	DATE	28/04/25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is working with the Transport Working Group (TWG) consisting of key statutory highway authorities, including National Highways, Leicestershire County Council and Nottinghamshire County Council on the East Midlands Gateway 2 (EMG2) project.
- 1.2 Transport modelling has been undertaken using Leicestershire's Pan Regional Transport Model (PRTM) to assess the impacts of EMG2. In agreement with the TWG, forecast years of 2028 and 2038 have been adopted, which reflect the year of opening and post 10 years.
- 1.3 The forecast year PRTM modelling has been undertaken in two stages, referred to as 'Stage 1a modelling' and 'Stage 1b modelling'. This was to separate the scenarios required by the highway authorities for the Transport Assessment from those needed for environmental assessment purposes because there are differences in the planning data assumptions and developments included in the baseline traffic, as summarised below:
  - **Stage 1a modelling** (Proforma v14, Uncertainty Log v7) = 2028/2038 forecast years with and without EMG2, including, consented and committed sites as well as draft Local Plan allocation sites and Ratcliffe on Soar power station, which is authorised by a Local Development Order (LDO).
  - **Stage 1b modelling** (Proforma v14a, Uncertainty Log v7a) = 2028/2038 forecast years with and without EMG2, including consented and committed sites but excluding the draft Local Plan allocation sites and Ratcliffe on Soar power station (beyond the element of Ratcliffe power station development which is currently able to proceed under the LDO).
- 1.4 The difference between Stage 1a and 1b is the inclusion or exclusion of the Ratcliffe Power Station and the draft Local Plan allocation sites, which represent the following projects:
  - Isley Woodhouse (W1)
  - Land North and South of Park Lane, Castle Donington (CD10)
  - Land West of Hilltop Farm, Castle Donington (EMP89)
  - Land North of J11/M42 (EMP82)
  - Land North of Remembrance Way, Kegworth (EMP73)
  - Land North of Derby Road, Kegworth (EMP73)



- 1.5 This note sets out the basis for the two stage approach to modelling and the policy context for it.

## 2. POLICY REQUIREMENTS

### Department for Transport TAG M4 'Forecasting and Uncertainty' Guidance

- 2.1 The Department for Transport TAG M4 Forecasting and Uncertainty guidance is primarily used for the appraisal of new transport schemes. This is arguably applicable to the highway works element of the EMG2 scheme, particularly given they are focussed on the Strategic Road Network.
- 2.2 Accordingly, Stage 1a modelling is based on the application of TAG M4.
- 2.3 Paragraph 3.2.4 of M4 refers to four categories of sites for consideration for inclusion in the core scenario<sup>1</sup>, being:
- **Near certain:** The outcome will happen or there is a high probability that it will occur
  - **More than likely:** The outcome is likely to happen, but there is some uncertainty
  - **Reasonably foreseeable:** The outcome may occur, but there is significant uncertainty surrounding it
  - **Hypothetical:** There is considerable uncertainty whether the outcome will ever happen
- 2.4 Paragraph 3.2.4 states:
- "Local sources of uncertainty categorised as **near certain** should be included in the core scenario, whilst all sources categorised as **hypothetical** should be excluded. Between these two categories an element of judgement may be required but usually it would be expected that those inputs categorised as **more than likely** will be included in the core scenario, whilst those categorised as **reasonably foreseeable** will be excluded.*
- 2.5 Whilst it could be argued that not all the draft allocated sites meet the criteria of "more than likely" and some could be considered to fall within the "reasonably foreseeable" category, the highway authorities, applying their judgement, require that all the sites be treated the same and be included in the core scenario. The Applicant has agreed to this.
- 2.6 The forecasting/profiling of these draft Local Plan allocations and the Ratcliffe power station within Uncertainty Log v7 has been agreed with the relevant local highway and planning authorities, based on their judgement and expectations for them receiving planning permission and being built out.
- 2.7 Although the anticipated traffic from the draft Local Plan allocations is being included, any associated highway mitigation is not included. This is with the exception of the

---

<sup>1</sup> Table A2 Appendix 2 M4 defines these terms

proposed realignment of the A453 around the Isley Woodhouse draft allocation, which is included in the agreed Uncertainty Log v7 for Stage 1a modelling because it forms part of the access strategy for that development.

- 2.8 The Uncertainty Log v7 does include committed highway network changes, the list of which has been agreed with the local highway and planning authorities and are included in both Stage 1a and 1b modelling. This is in accordance with Paragraph 7.4.15 of TAG M4, which requires the without scheme scenario to include *“physical changes to highway or public transport networks, including new links and removal of existing links...”*
- 2.9 Since it is not possible to include additional off-site mitigation that is likely to be required to accommodate the draft Local Plan allocations, the inclusion of those sites in the Stage 1a scenario will provide a robust and worse than worst-case assessment of future impacts on the highway network. Therefore, it has been agreed that Stage 1a modelling outputs (i.e. including draft Local Plan allocations) are adopted as the core scenario within the Transport Assessment. As agreed with the TWG, this will also form the cumulative scenario for the transport modelling.
- 2.10 The Stage 1a modelling therefore reflects the above approach.

**Department for Transport Circular 01/2022 ‘Strategic Road Network and the Delivery of Sustainable Development’**

- 2.11 Circular 01/2022 sets out the Secretary of State's national policy requirements for the Strategic Road Network (SRN). Paragraph 49 covers details on the ‘assessment of development proposals’ and states:

*“A transport assessment for consideration by the company must also consider existing and forecast levels of traffic on the SRN, alongside any additional trips from committed developments [footnote 21] that would impact on the same sections (link or junction) as the proposed development. Assumptions underpinning projected levels of traffic should be clearly stated to avoid the default factoring up of baseline traffic. The scenario(s) to be assessed, which depending on the development and local circumstances may include sensitivity testing, should be agreed with the company; where a scenario with particularly high or low growth is proposed, this should be supported by appropriate evidence. Planned improvements to the SRN or local road network should also be considered in any assessment where there is a high degree of certainty that this will be delivered [footnote 22].”*

- 2.12 Footnote 21 describes committed developments as:

*“Where development proposals are consistent with an up-to-date plan or strategy (or where there is no up-to-date plan or strategy), this should include all relevant development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next 3 years and include the full amount of development to be built. Where development proposals are not consistent with an up-to-date plan or strategy, this should include all relevant development that is*

*consented or allocated over the entirety of the plan period. In some instances, due regard should be had to permissions and allocations in neighbouring authorities. The inclusion or exclusion of specific developments should be agreed with the local planning authority at pre-application stage."*

- 2.13 The key difference with Circular 01/2022 policy from the TAG M4 Guidance is that to comply with 01/22, the core scenario should only include consented or allocated sites and their associated mitigation, i.e. it does not include draft allocations.

- 2.14 The Stage 1b modelling is therefore compliant with the Circular 01/2022 policy.

### **IEMA Guidelines: Environmental Assessment of Traffic and Movement**

- 2.15 The EMG2 development triggers the requirement for an EIA. The guidance for Environmental Assessment is set out in the IEMA Guidelines: Environmental Assessment of Traffic and Movement (July 2023).

- 2.16 Paragraph 2.23 states that:

*"Different traffic forecasts may have to be produced for each stage, which may also require the estimation of the changing patterns of general traffic levels in order to provide estimates of different baseline conditions. Use should be made of available datasets (e.g. Local Plan Traffic Models, Department for Transport Trip End Model Presentation Program (TEMPro) and National Traffic Model). It may also be necessary to make an assumption with regard to other existing and/or approved projects and forecasted changes in the highway network that could occur over the time period. These assumptions will need to be based on best judgement taken in consultation with the local planning authority. Any changes in ambient environmental characteristics should also be taken into account."*

- 2.17 Paragraph 2.24 of the IEMA Guidelines states:

*"Transport Assessments are principally interested in evaluating a situation when traffic flows are at their greatest. This may involve looking at a period sometime in the future when traffic from the project is added to traffic flows on the surrounding network, which has itself increased due to natural traffic growth. Such a situation clearly presents the critical traffic pattern, but the natural increase of traffic will generally have the effect of diluting the environmental impact of a project. The greatest environmental change will generally be when the project traffic is at the largest proportion of the total flow. It is therefore recommended that the environmental assessment should be undertaken at the construction/decommissioning phase, year of opening of the project or the first full year of its operation."*

- 2.18 Paragraph 2.29 discusses the baseline assessment and states the following:

*"Future baseline and cumulative assessment should not be confused. They are two different considerations within the environmental assessment process. Derived forecast traffic growth (e.g. TEMPro) should be utilised to derive future year baseline*

*traffic conditions. However, discrete projects within the agreed study area that are existing, approved or likely to come forward (where sufficient certainty and relevant information about the project exists) should not be added to the baseline scenario and should be considered in the cumulative scenario. The competent traffic and movement expert should exercise care to ensure:*

- *'Double counting' is avoided when applying growth factors to the baseline that may have been influenced by approved projects that are being considered in the cumulative scenario,*
- *The proposed transport model has adequate scope to model cumulative scenarios (as they may differ from those required in the Transport Assessment).*

2.19 The words underlined above demonstrate the difference between the approach taken by the highway authorities in the application of the TAG M4 guidance and the approach required to comply with IEMA Guidelines.

2.20 The Stage 1b modelling is compliant with the IEMA Guidance for the core scenario, whilst Stage 1a modelling is compliant for the cumulative scenario.

### **3. ASSESSMENT METHODOLOGY**

3.1 In accordance with the above consideration of the relevant policies, the modelling and related assessment is being undertaken on the following basis:

- i Stage 1a modelling to comply with the highway authorities interpretation of the TAG M4 Guidance
- ii Stage 1b modelling to comply with the guidance in Circular 01/22 and IEMA

3.2 The Stage 1a modelling will also provide the cumulative assessment required for the IEMA assessment.

### **4. SUMMARY**

4.1 The assessment methodology follows detailed discussions with the Transport Working Group. The above review of current adopted policy within the Department for Transport's TAG M4, Circular 01/2022 and IEMA Guidelines documents explains how the agreed assessment methodology, and in particular the modelling being undertaken, is compliant with those policies.

4.2 The key difference in policy requirements is the forecast year baseline position and the developments that should be included in the core scenarios.

4.3 Taking this into account, the following methodology is adopted for the Transport Assessment and Transport ES Chapter:

- **Transport Assessment** – core scenario adopts the Stage 1a modelling, inclusive of draft Local Plan allocation sites, with a sensitivity test using the Stage 1b modelling excluding the draft Local Plan allocation sites due to the lack of mitigation measures included within the Stage 1a modelling associated with the draft Local Plan allocations.
- **Transport ES Chapter** – core scenario adopts the Stage 1b modelling with cumulative assessment based on Stage 1a.

4.4 The above approach should ensure that a robust assessment of EMG2 is undertaken within the Transport Assessment and Transport ES Chapter, in accordance with adopted planning policy and assessment requirements.

**APPENDIX 18: COBALT Assessment (document reference EMG2-BWB-GEN-XX-RP-TR-00018\_S2-P1)**

---

PROJECT NAME	East Midlands Gateway Phase 2 – COBALT Assessment Methodology		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0018	BWB REF	220500
AUTHOR	Matt Corner	STATUS	S2
CHECKED	AJ Oakes	REVISION	P1
APPROVED	Paul Wilson	DATE	12/05/25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is working with the Transport Working Group (TWG) consisting of key statutory highway authorities, including National Highways, Leicestershire County Council and Nottinghamshire County Council on the East Midlands Gateway 2 (EMG2) project.
- 1.2 A Highway Safety Position Statement was produced in March 2025 (Technical Note EMG2-BWB-GEN-XX-RP-TR-0015 Revision P1) summarising Personal Injury Collision (PIC) records on the highway network in the vicinity of the EMG2. This identified existing safety problems at the following three locations:
  - **EMG1 access junction** – a cluster of PICs have been recorded due to turning movements from the A6 to EMG1 colliding with drivers travelling southbound on the A453.
  - **M1 Junction 24** – a cluster of PICs have been recorded on the M1 northbound off-slip on approach to the roundabout.
  - **A453/The Green** – a cluster of PICs have been recorded due to right turning movements from the A453 west into The Green.
- 1.3 Traffic modelling has been undertaken using Leicestershire's Pan Regional Transport Model (PRTM), a strategic highway assignment model. This tested forecast years of 2028 and 2038, with and without the EMG2 development and more recently with the inclusion of the proposed highway mitigation.
- 1.4 The proposed highway mitigation is focused on the A453 corridor between Finger Farm roundabout (M1 Junction 23A) and M1 Junction 24, with the key piece of infrastructure comprising a new free flow link from M1 northbound to A50 westbound, allowing traffic to bypass Junction 24. Traffic flows for each of the forecast year scenarios have been obtained from PRTM and will be used for the COBALT assessment.
- 1.5 The purpose of this Technical Note is to set out the methodology for the COBALT assessment for agreement with the TWG. The COBALT assessment aims to understand the impacts of the EMG2 development and proposed highway mitigation on the rates and severity of PICs and associated cost implications.

## **2. WHAT IS A COBALT ASSESSMENT?**

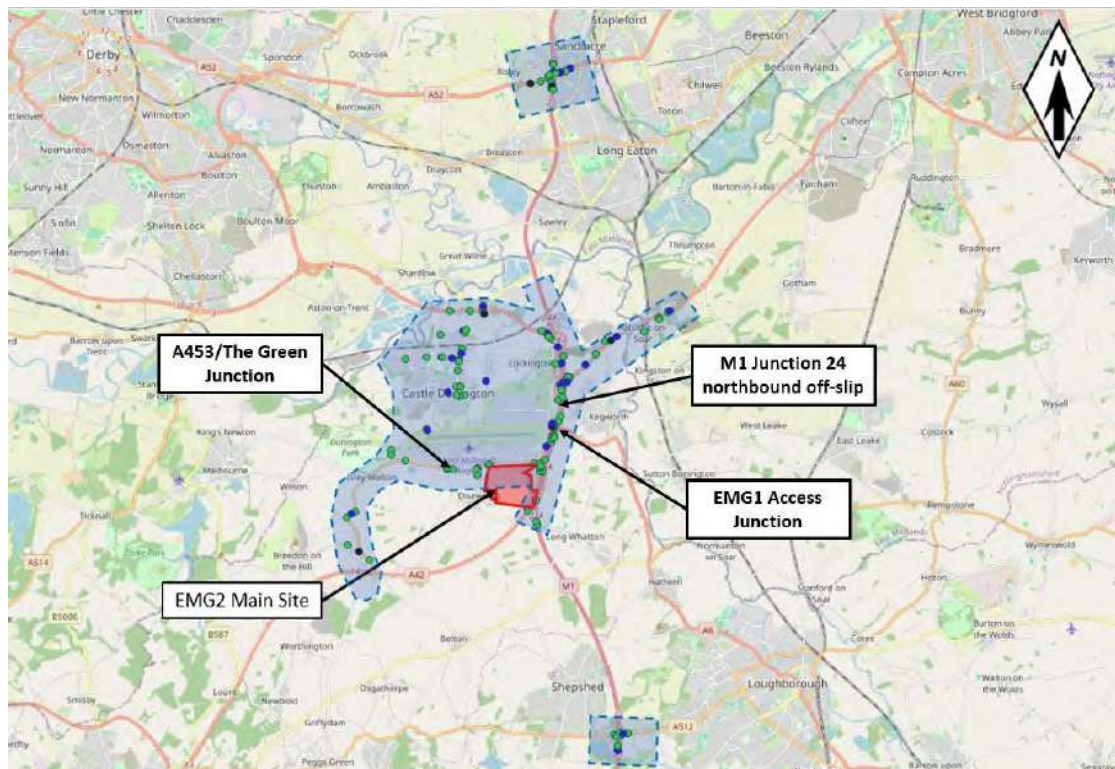
- 2.1 COBALT (Cost and Benefit to Accidents – Light Touch) is a computer program developed by the Department for Transport to assess and quantify the change in PIC rates as a direct result of new road schemes. It does so by comparing the rates of PICs by severity and the associated costs across an identified network in a 'without scheme' and 'with scheme' scenario, using details of link and junction characteristics, PIC rates, casualty costs and projected traffic volumes.
- 2.2 The guidance for undertaking COBALT assessments is detailed within TAG Unit A4.1 'Social Impact Appraisal'. Section 3 covers the 'Use of Accident and Casualty Values for Appraisals' and sets out the purpose of COBALT assessments in more detail.
- 2.3 The techniques used in COBALT to estimate the change in PIC rates are based on established parameters for the number of collisions per million vehicle kilometres travelled on different types of roads. As the number of vehicle kilometres change following implementation of a highway scheme, the number of PICs will also expect to change.
- 2.4 COBALT assesses the safety aspects of road schemes using detailed inputs of either separate road links and road junctions that would be impacted by the scheme or combined links and junctions. The assessment is based on a comparison of collisions by severity and associated costs across an identified network in 'Without Scheme' and 'with scheme' forecasts, using details of link and junction characteristics, relevant collision rates and costs and forecast traffic volumes by link and junction.
- 2.5 COBALT calculates the total cost of PICs on a road network by multiplying the change in number of PICs between the 'without scheme' and 'with scheme' scenarios by a value of prevention of a PIC. The value of a PIC varies by severity and area of road; i.e. a higher cost factor is applied to a fatal PIC compared to a PIC resulting in slight injuries.



### 3. ASSESSMENT METHODOLOGY

- 3.1 The Highway Safety Position Statement reviewed PIC records across a comprehensive study area of junctions and associated links, as shown in **Figure 1**.

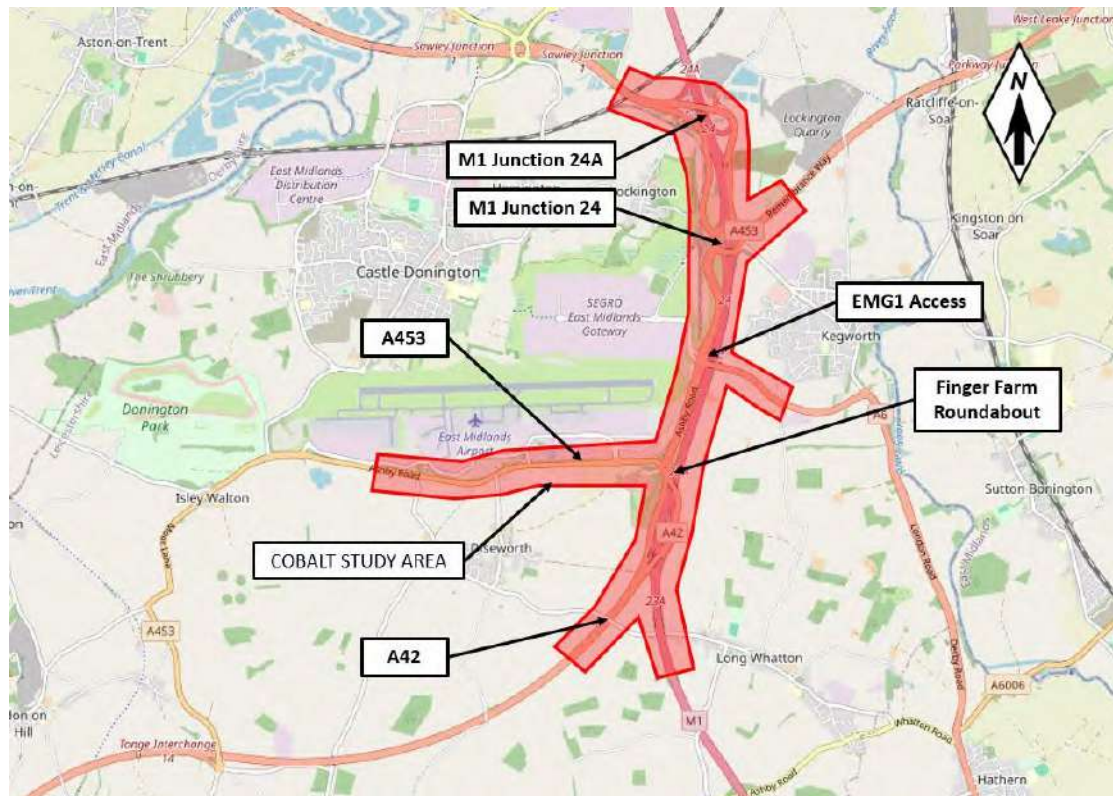
**Figure 1. Personal Injury Collision Study area**



- 3.2 The assessment identified three locations with existing safety problems, shown in **Figure 1** and summarised in Section 1. Two of the locations are on parts of the network included in the proposed highway mitigation, whilst the third location is at the A453/The Green junction to the west of the EMG2 site.
- 3.3 The predicted change in PIC rates from the COBALT assessment will largely be dependent on the change in traffic flows between the 2028/2038 'without scheme' and 2028/2038 'with scheme' scenarios. In this instance, the 'scheme' relates to the EMG2 development and associated highway mitigation. Where there is expected to be a minimal change in traffic flows, the outputs from COBALT will likely predict a "negligible" change in the PIC rates or severity.
- 3.4 It is therefore proposed that the COBALT assessment includes junctions and links that are predicted to experience a material change in traffic flows during the 'with scheme' scenario. This will be determined by comparing PRTM flows between the 2028/2038 with scheme scenario against the 2028/2038 without scheme scenario.
- 3.5 Initial PRTM outputs have been received from the Stage 2a modelling showing the change in traffic flows as a result of the scheme. Whilst the modelling and mitigation is

still being finalised, there are not anticipated to be any fundamental changes to the scheme and therefore it is anticipated that the following links/junctions will form the study area for the COBALT assessment and experience a higher change in traffic. Should any other links/junctions be identified once the PRTM modelling has been finalised, then they will be included. The location of the proposed study area is shown in **Figure 2**.

**Figure 2. Proposed COBALT Study Area**



- 3.6 The data shows that the largest flow changes are expected to occur on the A453 corridor between the A453/The Green junction and M1 Junction 24, which includes all three locations with existing safety problems and the area accommodating the proposed highway mitigation. It is proposed that this forms the study area for the COBALT assessment.
- 3.7 Full details of the COBALT assessment and analysis of the predicted change in PIC rates and severity will be provided in the Transport Assessment.

## **4. SUMMARY**

- 4.1 This Technical Note has proposed a methodology to be adopted for undertaking a COBALT assessment for the EMG2 Transport Assessment. It builds on the details in the Highway Safety Position Statement (Technical Note EMG2-BWB-GEN-XX-RP-TR-0015 Revision P1), which summarised existing Personal Injury Collision records and identified three locations on the highway network where there are existing safety problems.

4.2 A summary of the assessment methodology to be adopted is provided below:

- The study area for the COBALT assessment will be determined by comparing forecast traffic flows from PRTM between the 'without scheme' (2028/2038 forecast year without development) and 'with scheme' (2028/2038 forecast year with development, with mitigation) scenarios.
- Links and junctions that are expected to experience a material change in traffic, or that have existing safety problems, will be included in the COBALT study area.
- Based on the outputs from PRTM and the above methodology, it is proposed that the study area for the COBALT assessment includes the A453 corridor between the A453/The Green junction and M1 Junction 24, along with sections of the A42 and M1 in the vicinity of Junction 23A.

4.3 This COBALT assessment will determine the change in PIC rates and severity across the study area with the EMG2 development and associated mitigation in place. The details will be included within the Transport Assessment.

**APPENDIX 19: Transport Working Group Meeting Minutes**

---

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT INCEPT/INITIAL SCOPING MEETING;  
THURSDAY 28 APRIL 2022 AT 1400 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) & Eri Wong (EW) – National Highways (NH)  
 Geoff Blissett (GB) – Derbyshire County Council (DCC)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Lisa Guest (LG) – Nottingham City Council (NCityC)  
 Simon White (SW) & Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Imogen Smazanovich (IS) – Segro  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Stephanie Meyers (SM) - ITP  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<p><b>Introductions</b></p> <p>a. Having all introduced themselves, PW confirmed that Andy Gibbard of Derby City Council is happy to keep a watching brief on the project, but would be interested in understanding the impacts of the proposals to understand the area of influence (AOI) and distribution. LG suggested similarly for NCityC.</p>	
<b>2</b>	<p><b>Current position planning wise</b></p> <p>b. IS provided an overview of the site and other local Freeport sites; the site measures a total area of c.250 acres and forms part of the EMAGIC tax site within the East Midlands Freeport. There are also other Freeport sites being considered at Ratcliffe-on-Soar Power Station in Rushcliffe and the East Midlands Intermodal Park in South Derbyshire. The site has been legally Designated as a Tax Site by central government as of March 2022, with a large economic status.</p> <p>c. IS set out the timescales for the planning process; an outline planning application to be submitted in Q4 of 2022, with consent anticipated at Q3 of 2023, infrastructure improvements to commence in Q4 of 2024, and construction of buildings to commence alongside the infrastructure. Some of the Freeport tax incentives including business rates relief are scheduled to end in September 2026; therefore it is important to enable maximum building occupation before this date in order to enable businesses and the region to leverage the maximum benefit from the tax incentives offered by central government.</p> <p>d. Hence because of the tight timescales IS asked those on the call to consider what can be done to achieve said timescales, such as expediting the drafting Section 278 agreements for example?</p> <p>e. RH asked about whether any engagement has taken place with North West Leicestershire District Council (NWLDC). IS confirmed that an initial</p>	



	<p>engagement meeting took place on 27/04/22 and that regular contact will now continue throughout the pre and post planning stages. Adam Mellor at NWLDC is the planned case officer.</p> <p>f. GB asked why the application was being submitted through the normal planning route and not through a Development Consent Order. IS confirmed that a normal planning application is to be submitted because there is no rail freight terminal included in the proposals and the application is not deemed to be a nationally significant infrastructure project (NSIP).</p>	
<b>3</b>	<p><b>Proposed Development</b></p> <p>a. IS provided an overview of the site location being to the south of East Midlands Airport and A453. The site will be marketed as an extension to EMG Phase 1, although not located directly adjacent to it.</p> <p>b. IS set out the development proposals comprising 300,000sqm of employment development (excluding any mezzanines - TBC) with an 80%/20% B8 (logistics)/B2 (manufacturing) split, although the final split will largely be driven by the traffic impacts. The site is intended to cater for advanced manufacturing and logistics companies.</p> <p>c. EW requested a plan showing the locations of all the Freeport sites and further information to provide context.</p>	<b>IS</b>
<b>4</b>	<p><b>Proposed approach to be adopted to inform the scoping work</b></p> <p>a. PW provided an overview of previous discussions with RH confirming that LCountyC's preference is to use the Pan Regional Transport Model (PRTM).</p> <p>b. RH confirmed that the neighbouring authorities work closely together and have regular discussions about the different models and in particular the PRTM vs the 'Gateway' model. Each model ultimately has its own benefits and downfalls but both should provide an accurate assessment of the traffic impacts.</p> <p>c. SF asked whether the PRTM and Gateway models complement each other highlighting that the Ratcliffe-on-Soar application recently used the Gateway model.</p> <p>d. TB confirmed that NCountyC's preference is to use the Gateway model, although acknowledged that LCountyC are the local highway authority and hence would ultimately go with their preferred model choice. GB agreed with TB.</p> <p>e. EW confirmed that NH are open to using either model as long as the AOI is adequately modeling on the Strategic Road Network from a validation perspective. The base years would also need to be agreed and hence EW suggested a step by step approach is undertaken to ensure each aspect of the modelling is agreed beforehand to avoid abortive work. PW confirmed that NH and the other authorities would be contacted at each modelling stage for their confirmation.</p>	

	<p>f. PW confirmed that the study area for both models include the site, however RH confirmed that contact should be made with LCountyC's Network Data and Intelligence (NDI) team to understand whether any recently completed traffic surveys are available to finesse the modelling outputs, to inform whether any new surveys are required.</p> <p>g. RH confirmed that the distribution approach to be adopted in the modelling work needs discussing in further detail. For example, would it mirror that of the Phase 1 scheme?</p>	
<b>5</b>	<p><b>Highway authorities initial considerations</b></p> <p>a. EW highlighted a potential issue that the NH Smart Motorway scheme opened between Junctions 23a-25 of the M1 prior to the Covid pandemic and hence this will need to be considered as part of the modelling work.</p> <p>b. PW asked whether there is any preference on the future years to be assessed in the modelling. RH confirmed that the PRTM can assess any year and provided a link to the PRTM web page for BWB to review.</p> <p>c. IS suggested that the proposed development is expected to be fully built out by 2030/1 (subject to the timescales in Section 2 being met) which may ultimately determine the future year assessment needed.</p> <p>d. RH advised that the PRTM pro-forma is not submitted to until the details have been signed off/agreed with each of the authorities. However, the Local Model Validation Report could be commissioned beforehand to get the base model review. PW confirmed he would however get discussions started with NDI to obtain quotes to try and assist timescales wise.</p> <p>e. EW confirmed that from an NH perspective, the DfT Circular 02/2013 should be followed. PW confirmed that this would be considered in detail.</p> <p>f. PW provided an overview of the Scoping Note, confirming that it would include the forecast traffic generation for the weekday peak hour periods plus the modal split/person trip generation calculations. However, the Scoping Note would not include any details on an initial distribution given this is to be determined by the PRTM but will set out details of the next steps to inform the remainder of the scoping discussions/TA.</p> <p>g. RH confirmed that this was acceptable, but each step needs agreeing beforehand. The PRTM includes committed developments for all adjoining authorities, however a sensitivity test including the other Freeport sites and the proposed residential led development at the neighbouring Isley Woodhouse site (which is being assessed using PRTM) will need completing. Therefore, assessment scenarios need to be agreed with all authorities.</p> <p>h. SM provided an overview of the Travel Plan process at EMG Phase 1 confirming that 24% of staff currently travel by bus which is way above the 8% target set at this stage of the process. Hence, a similar approach to the Travel Plan process will be undertaken for the proposed development</p>	<b>PW/MC</b>

	<p>given the success at Phase 1.</p> <ul style="list-style-type: none"> <li>i. With regards to sustainable transport, EW confirmed that thought is required with regards to maximising such opportunities and take advantage of the high profile nature of the proposals to make it a really good site on all fronts.</li> <li>j. SW confirmed that consideration should be given to HGV routing, as HGVs do not necessarily stick to the major ring roads and often route through city centres (Leicester in particular). This will need looking at once the modelling has been undertaken. SW also confirmed that the modelling work should consider the effect on the Leicester City network, particularly the outer ring road junctions from the Fosse Park area to A6 Birstall. Opportunities to support sustainable transport including A6 buses between Leicester and EMA should be explored and maximised. LCityC would work actively with LCountyC as Lead Highway Authority</li> <li>k. IS confirmed that SEGRO take part in a wider Site and Infrastructure Working Group to discuss the infrastructure needs for all local Freeport sites.</li> </ul>	
<b>6</b>	<p><b>Next steps &amp; associated timescales</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed timescales for submitting the Scoping Note, which would ideally be over the next couple of weeks subject to the floor areas/use classes being agreed within the project team.</li> <li>b. RH acknowledged the timescales but confirmed that they could be challenging with other demands across the county and confirmed that LCountyC's typical timescales for responding are 42 days which can be reduced to 28 days if information is formally submitted through NWLDC.</li> <li>c. RH requested for a detailed programme to set out the level of input needed so that LCountyC, and no doubt the other authorities, can plan accordingly.</li> </ul>	<b>PW/IS</b>
<b>7</b>	<p><b>AOB</b></p> <ul style="list-style-type: none"> <li>a. Nothing further was raised. The project team thanked the authorities for their time.</li> </ul>	



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
WEDNESDAY 27 JULY 2022 AT 1030 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) & Catherine Townend (CT) – National Highways (NH)  
 Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Lisa Guest (LG) – Nottingham City Council (NCityC)  
 Imogen Smazanovich (IS) – Segro  
 Stefan Stojasavljevic (SS) – Delta Planning  
 Jon Parker (JP) – ITP  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Geoff Blissett (GB) – Derbyshire County Council (DCC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Simon White (SW) & Anthea Anderson (AA) – Leicester City Council (LCityC)  
 David Green (DG) – Delta Planning  
 Stephanie Meyers (SM) – ITP

**MINUTES:**

Agenda item	Action
<p><b>1 Introductions and Apologies</b></p> <p>a. Following HH and CT introducing themselves, having missed the first meeting on 28 April 2022, PW mentioned the attendees that were unable to make the meeting.</p> <p>b. GB confirmed by email that DCountyC has had sight of the scoping note and that they are happy for LCountyC to take the lead in agreeing trip rates. In addition, Gb confirmed that it will be important that appropriate infrastructure is provided to ensure connections can be made between the site an EMGP1, the surrounding residential settlements and East Midlands Airport building on the approach implemented at EMGP1.</p> <p>c. SW confirmed by email that:</p> <ul style="list-style-type: none"> <li>• Trip Rates – LCityC would defer to LCountyC.</li> <li>• Scoping Note – our views regarding potential impact on the City outer ring road junctions have already been established and scoping should include that. Likewise for public transport support and opportunities for the A6 bus routes serving Leicester City.</li> </ul>	
<p><b>2 Scheme Updates</b></p> <p>a. IS provided recent planning updates, confirming that SEGRO has been developing the site masterplan, which should be issued to the project team and highway authorities soon.</p> <p>b. IS confirmed that a public consultation has been organised for early November.</p>	

	<p>c. IS set out that from a Freeport perspective, SEGRO will be attending monthly board meetings, with a forthcoming meeting scheduled for next week. SEGRO will be providing an update to the board and hence the outcome of this meeting will be key to those updates. SEGRO will be presenting the monthly meetings to representatives from the upper tier and lower tier authorities and the Department for Levelling Up, Housing and Communities.</p> <p>d. JP provided an overview of ITP's recent public transport discussions; confirming that a meeting had been held with Tom Morgan at Trent Barton. The idea at this stage is to develop a similar strategy to EMG Phase 1 with public transport being a key mode, given the surrounding infrastructure and the successes at Phase 1 (EMG Phase 1 currently achieving a circa 25% mode share of travel by public transport).</p> <p>e. LG confirmed she had attended a recent meeting on the Ratcliffe-on-Soar scheme and queried the patronage that could be available for people travelling to Phase 2 by bus because of the demands to each of the Freeport sites locally.</p> <p>f. JP confirmed that the key issue for Trent Barton is diverting existing services to key areas where services can be fast and reliable. Hence, the reason a minibus service was introduced at EMG Phase 1 was to transport staff/visitors to the bus interchange at the site entrance, which removes the need for a commercial bus service to have to travel deep into the site.</p> <p>g. JP shared a figure with all attendees showing four potential options for improving public transport at EMG Phase 2. The options included:</p> <ul style="list-style-type: none"> <li>i. Providing a main stop at the EMG Phase 2 site entrance and diverting existing services to this location. A minibus service would be introduced internally to transport staff/visitors to this location (as per the EMG Phase 1 approach).</li> <li>ii. Provide a new bus interchange close to the Pegasus Business Park junction (i.e. at the eastern entrance to EMG Phase 2), with staff/visitors then using a shuttle bus and/or walking / bike hire to the site.</li> <li>iii. Provide a connecting shuttle bus to the bus stops on the southern exit from Pegasus Business Park, upgrading the kerb side facilities to provide an interchange between services.</li> <li>iv. Introduce a minibus shuttle service from EMG Phase 2 to an enhanced public transport interchange elsewhere where existing bus services currently travel to (for example EMG Phase 1 bus interchange or EMA Interchange).</li> </ul> <p>h. RH suggested that a more strategic plan for bus improvements across all Freeport sites should be considered, rather than each individual site looking at improvements in isolation. This could also consider the possible interaction and movement of people between sites, although acknowledged that this may not be known until end occupiers have been identified.</p>	
--	--	--

	<p>i. IS agreed that a wider strategic plan would be beneficial, although confirmed that the tax benefits within the Freeport sites would not necessarily increase inter-site movement compared to other industrial estates.</p> <p>j. RH clarified the above suggesting that there is the potential for the same businesses to occupy multiple Freeport sites (such as Amazon) who could then generate movements between each site.</p> <p>k. RH went on to say that conversations between Developers and Trent Barton have been individual and whilst Trent Barton may be content with diverting existing services to one Freeport site, this then may not be possible for another Freeport site and hence a collaborative strategy would work best.</p> <p>l. JP confirmed that Trent Barton is aware of the bigger picture, but IS confirmed that a meeting will be organised between the Freeport developers and Trent Barton to start these discussions with the view to agreeing a wider strategy.</p>	<p><b>IS/JP –</b> SEGRO has contacted Uniper to request a meeting</p>
<b>3</b>	<p><b>Scoping Note</b></p> <p>a. PW asked NH whether they had any initial questions having issued their scoping response on 12 July 2022.</p> <p>b. CT confirmed that she will now be leading on the scheme from a NH perspective, with SF remaining involved. CT is catching up on the Scoping Note and confirmed that whilst public transport was clearly key to the scheme, NH are conscious of trips still being generated on the SRN which may travel to the public transport interchanges and hence how any public transport strategy will interact with the development.</p> <p>c. PW provided an overview of the contents of the Scoping Note. In summary, the note focusses on trip rates for B2 and B8 uses and how these compare against EMG Phase 1. Modal split data was considered in various ways; including the 2014 Transport Assessment, 2011 Census data and the current EMG Phase 1 modal split. It also sets out the assessment criteria and modelling scenarios.</p> <p>d. PW provided an overview of NH scoping response; NH confirmed that the B2 trip rates are acceptable, however queried the B8 trip rates. NH also confirmed that the modal split from the 2014 Transport Assessment should be used initially.</p> <p>e. MC confirmed that BWB had revisited the B8 trip rates from TRICS by removing three of the six sites generated from TRICS search, that NH considered incomparable to the proposed development. The revised trip rates were slightly higher in the morning peak hour (circa 0.190) but lower in the evening peak hour (circa 0.11), hence concluding that the rates in the Scoping Note should be acceptable.</p>	

	<p>f. SF confirmed that the revised TRICS search/trip rates therefore address NH concerns, however requested for the impacts of HS2 to be considered.</p> <p>g. TB confirmed that he pushed for HS2 to be considered on the Ratcliffe-on-Soar application and that discussions with the Department for Transport and HS2 were held. However, HS2 is predicted to be completed in the 2040's and hence is hard to factor in, with many unknowns, hence the Ratcliffe-on-Soar application has not included HS2 as a sensitivity test.</p> <p>h. HH asked whether anything had been received from NH on the B8 trip rates.</p> <p>i. PW confirmed that NH has focused on the TRICS rates in their response, however BWB consider these to be suitable, particularly when noting the recent survey results undertaken at EMG Phase 1 and set out in ITP's note issued on 20 July 2022.</p> <p>j. HH confirmed that the ITP note is useful but queried what the purpose of it is and whether it is to show what the EMG Phase 1 trip rates are vs those used in the 2014 Transport Assessment or to understand the impacts of mezzanines and whether a 60% uplift can be built without causing traffic issues.</p> <p>k. PW confirmed that the purpose of the note is both the above; SEGRO were intrigued about how EMG Phase 1 has panned out and what the traffic levels currently are, but also to understand whether the introduction of mezzanines (circa 50% uplift on ground floor space) has had any significant impacts on traffic generation. IS confirmed that this was correct.</p> <p>l. HH asked how the mezzanines were introduced and whether these were included in the Transport Assessments or had planning permission.</p> <p>m. PW confirmed that the EMG Phase 1 Transport Assessment considered circa 500,000sqm of ground floor space but no mezzanines. As Reserved Matters applications came forward, mezzanines were included in the plans but no additional Transport Assessment was provided, hence the project team were intrigued as to the effects of this.</p> <p>n. HH confirmed that LCountyC's preference is for the trip rates from EMG Phase 1 to be retained. RH agreed with this.</p> <p>o. PW confirmed that BWB are happy to retain the trip rates from EMG Phase 1, as whilst they are slightly higher, they are largely comparable to those in BWB's Scoping Note. However PW reiterated that the reason the trip rates were changed was because the EMG Phase 1 rates are 10 years old. However, BWB would not want to adopt higher rates given the recent survey results as the EMG Phase 1 rates should be overly robust.</p> <p>p. SF confirmed that NH are happy with that approach, although need a formal response from BWB. PW confirmed this would be acceptable and asked whether all authorities would agree with this.</p>	
--	--	--

	<p>q. RH confirmed that the joint authorities signed up to the EMG Phase 1 trip rates in 2014 and the follow up survey work shows these were robust. Therefore, LCC would be content with retaining these trip rates although they would need to be presented within a revised note. NH, NCountyC and NCityC confirmed they were content with this approach.</p> <p>r. HH discussed the modal split and that the original percentages within the EMG Phase 1 Transport Assessment should be used, with measures set out in the Travel Plan to reduce car usage. However, the Transport Assessment work should not reduce the number of trips based on future travel planning targets.</p> <p>s. PW confirmed that the trip rates will be taken in full, with no reduction to the traffic generation to account for Travel Plan targets at this stage of the process. HH agreed this was acceptable.</p>	
<b>4</b>	<p><b>EMG Phase 1 trip generation comparison note</b></p> <p>a. PW confirmed that many of the agenda points for Section 4 had been covered in Section 3.</p> <p>b. RH mentioned that it should not be assumed that the same public transport success for EMG Phase 1 can be applied to EMG Phase 2 as the pool of people travelling from nearby areas in Castle Donington, Diseworth and Kegworth may be more limited. However, the home locations of future staff would not be known until end occupiers have been identified. PW confirmed that this would be considered.</p>	
<b>5</b>	<p><b>PRTM Modelling</b></p> <p>a. PW provided an initial overview of the discussions held to date with LCC's NDI team regarding the PRTM, confirming discussions had started and that it is understood the base year model has been updated as a result of the neighbouring Isley Woodhouse proposals. However, the PRTM would not be commissioned until agreements have been made with all the authorities.</p> <p>b. RH confirmed that NDI are extending the model to include for more of the network to the north of M1 J24 and also to the west, suggesting that a new version should be available in the coming weeks, however because of the updates, a Local Model Validation Report (LMVR) will be required first of all and agreed with all authorities.</p> <p>c. PW asked about timescales for extending the PRTM and for the authorities to review and confirm acceptance, given the tight timescales with submitting the application to meet the Freeport Tax savings.</p> <p>d. RH confirmed that timescales for updating the model need to be confirmed with the NDI team. LCC require a programme setting out timescales for key submission dates in order for LCC to plan resource and review outputs to meet project deadlines. IS stated that timescales are</p>	<b>IS/PW</b>

	<p>governed by the Freeport programme although confirmed this could be provided.</p> <p>e. PW confirmed that once the scoping details have been agreed, a draft proforma would be circulated around the joint authorities for agreement prior to instruction.</p> <p>f. HH asked about the scenarios being tested confirming that 2027 and 2032 future years are acceptable, but these would need to test the 'do minimum' (without development) and 'do something' (with development) scenarios separately.</p> <p>g. HH also confirmed that the PRTM is not validated at turning movement level and therefore new turning counts would be needed at all junction in the study area with the turning flows scaled up using growth factors from the PRTM. PW confirmed this was acceptable.</p> <p>h. CT confirmed that NH are happy with the use of the PRTM but queried whether the model only extended to M1 J24 and hence whether it would accurately assess the impacts on the SRN further afield.</p> <p>i. RH confirmed that once the PRTM model has been extended, it will cover more of the SRN network past M1 J24 and also further west. CT confirmed that this should therefore be acceptable.</p> <p>j. PW asked the authorities what developments would need to be included in a sensitivity test. RH and HH confirmed that the sensitivity tests will need to include all Freeport sites, HS2 and Isley Woodhouse, on the basis that they and NWLDC will be very keen to understand the combined effect of the two proposed developments neighbouring each other in particular. PW confirmed that BWB would liaise with NDI to check what data is already available with regard to HS2 but confirmed the above developments would be considered in the sensitivity tests. SEGRO challenged the proposal to include HS2 in the sensitivity analysis due to the current timescales of the project (2040s) and the uncertainties surrounding its delivery.</p> <p>k. PW also discussed preferences with regards to distributing the development traffic in PRTM. RH suggested we should look to clone EMGP1 from a parent zone perspective.</p> <p>l. LG confirmed that NCityC's main concerns are the impacts along the A453 leading to Clifton, particularly at the Crusader roundabout which is already over capacity.</p> <p>m. PW summarised the tasks that BWB would complete to address comments raised during the meeting:</p> <ul style="list-style-type: none"> <li>i. Respond with the revised trip rates and traffic generation calculations based on EMG Phase 1.</li> <li>ii. Draft the PRTM proforma and circulate to the joint authorities with BWB's interpretation.</li> </ul>	
--	--	--

**PW/MC**

	<ul style="list-style-type: none"> <li>iii. Continue discussions with LCC's NDI team to progress the PRTM and to understand timescales for extending the model and whether HS2 is accounted for.</li> <li>iv. Agree the LMVR with the authorities before instructing the modelling.</li> </ul>	
<b>7</b>	<p><b>AOB</b></p> <ul style="list-style-type: none"> <li>a. Nothing further was raised. The project team thanked the authorities for their time.</li> </ul>	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 11 AUGUST 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) & Catherine Townend (CT) – National Highways (NH)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Simon White (SW) & Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Geoff Blissett (GB) – Derbyshire County Council  
 George Nock (GN) – Jacobs; NH transport consultant  
 Imogen Smazanovich (IS) – Segro  
 Stefan Stojasavljevic (SS) – Delta Planning  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Tom Boylan (TB) – NCountyC  
 Lisa Guest -Nottingham City Council  
 David Green (DG) – Delta Planning  
 Jon Parker (JP) – ITP

**MINUTES:**

Agenda item	Action
<p><b>1 27/7/22 Meeting Minutes Review</b></p> <p>a. GN introduced himself and outlined his involvement in the project having not attended any previous meetings.</p> <p>b. GB raised a comment on the minutes from the meeting held on 27/07/22 about public transport, suggesting whether clarification should be provided that the Willington development is excluded from the wider strategy involving the other Freeport sites, given it is geographically more remote than the others.</p> <p>c. SF asked if because the Willington site is being excluded because its geographical location, then should the Ratcliffe on Soar site be too.</p> <p>d. PW confirmed that as Ratcliffe on Soar is closer to our site it will be included in the public transport strategy.</p> <p>e. IS confirmed that Segro has recently spoken to Uniper who are happy to arrange a meeting to discuss the public transport strategy in further detail. Uniper's traffic modelling, using the Gateway model, includes for our development and so there are benefits in sharing knowledge given we are behind them in this regard.</p>	



2	<p><b>Scoping Agreement</b></p> <p>a. PW provided an overview of the revised scoping email issued on 27/7/22 containing revised trip generation calculations and modal split information and asked whether any of the authorities had any comments with the details.</p> <p>b. RH confirmed that LCountyC had received the details and that it covers what was discussed on 27/07/22 and hence will confirm this in writing. However, LCountyC are working to standard pre-application timescales in responding to information.</p> <p>c. No other comments were provided hence this element of scoping is agreed.</p>	LCountyC
3	<p><b>PRTM Modelling</b></p> <p>a. PW mentioned that in recent discussions with the NDI team, it is understood the updated PRTM model should not be available for several months and hence the strategy will be to use the current model given the end of year timescales in submitting the planning application.</p> <p>b. RH confirmed that NDI have advised incorrectly and apologised on their behalf. LCountyC had a meeting with NDI last week and the revised model is expected to be available on 27/09/22.</p> <p>c. IS asked whether this affects timescales for completing the Transport Assessment confirming it is critical that we work to the Governments timescales to ensure the Freeport tax benefits are received, hence whether it was necessary to use the revised model. PW confirmed it would.</p> <p>d. RH confirmed that the current PRTM model has been successfully used on other schemes and confirmed that it is more for the neighbouring authorities to confirm their position on the current model because of possible cross boundary validation – the revised model in effect would have an extended coverage within Nottinghamshire and Derbyshire.</p> <p>e. SF confirmed that NH has no preference and would be led by the lead highway authority.</p> <p>f. GN asked what the update to the PRTM involves.</p> <p>g. RH confirmed that the update involves extending the model to cover in detail the areas to the north and northwest of East Midlands Gateway and the Freeport areas.</p> <p>h. SF asked whether the current model covers M1J26 and the A38 in the vicinity of Derby . RH confirmed that it does.</p> <p>i. GB confirmed that DCountyC's preference would be to use the</p>	

	<p>Gateway model then at present, as this provides better coverage overall in the area.</p> <p>j. IS reiterated that the priority is to choose a model that can be used today to meet the objectives and timescales of the Freeport and that we can't be delayed further on this matter.</p> <p>k. PW suggested that the current PRTM model is used and a sensitivity test undertaken at junctions on the Strategic Road Network if needed.</p> <p>l. RH said that we should be mindful that Local Model Validation Reports have not yet been produced and hence the model runs, in whatever guise, can't be instructed until this has been agreed, hence there is a way to go before this point regardless.</p> <p>m. PW confirmed that NDI have proposed a 10-week timescale from start to finish but appreciate that the LMVR need checking and agreeing in between. BWB understand that the Isley Woodhouse scheme has undertaken sensitivity testing and completed further work from a PRTM perspective, which should only help with validating the model in the vicinity of the site.</p> <p>n. GN confirmed that once the LMVR has been received we will know what additional data is required, which should help with reducing exposure and risk.</p> <p>o. PW shared a copy of the PRTM proforma and provided an overview of the details. PW confirmed that NDI could be commissioned to complete the LMVR as quickly as possible based on the current version of PRTM.</p> <p>p. HH said that an option could be to commission the LMVR and identify issues with the model and following that obtain additional data to address concerns (i.e. where additional traffic survey data is needed), although suggested this could take longer than waiting for the extended model to be completed.</p> <p>q. PW suggested whether it would be fair to keep things moving forward with the current PRTM and continue discussions about the current model vs extension. If significant concerns remain, then we can take a view at the appropriate time. However, if authorities are adamant about using the extended model, then because of the potential 6-week timescale, should we consider using the Gateway model?</p> <p>r. RH said that we need to be careful about referencing work undertaken for Ratcliffe on Soar and assuming that work has been agreed with authorities when this may not be the case. Information should be available on the planning portal highlighting LCountyC's concerns with the Gateway model not validating well in Leicestershire.</p> <p>s. SW said that as LCityC is on the periphery, they would want to understand the development impacts on the Leicester ring road and</p>	
--	---	--

	<p>M1 J21 in particular (M1/M69) but would defer to the view of the lead highway authority (LCountyC) on model choice but agreed with RH comments above.</p> <p>t. GN set out what NH's requirements would be for the scenario testing. This involves assessing 100% development at the opening year as well as 10 years after that/end of the Local Plan period. Mitigation would need to be built into the 2027 opening year tests also.</p> <p>u. GN asked whether the sensitivity testing scenarios should include the Willington and Toyota sites.</p> <p>v. PW confirmed that the modelling can look to include relevant developments requested within the sensitivity test, subject to discussions about the ability to do so with NDI. This can be discussed further at the inception meeting, which would be attended by the authorities, where we can discuss all sites including the two above plus possibly HS2.</p> <p>w. GN confirmed that in terms of testing the impacts of the development on the Strategic Road Network, M1J24 would require microsimulation modelling. As PRTM is not validated at turning movement level, new turning counts may be needed to validate the outputs.</p> <p>x. PW confirmed that BWB would obtain counts but will need to wait until September when the neutral period starts. However, BWB can identify a list of junctions that will definitely be included in the study area to commission surveys and can then include others if/when required. However, the key at this stage is to submit the PRTM proforma, as this is holding up starting the modelling process.</p> <p>y. GN confirmed that they are happy with the proforma so long as the details above are included. PW confirmed that the PRTM proforma will be updated with the scenario requirements.</p>	<b>BWB</b>
<b>4</b>	<p><b>Next Steps &amp; Associated Timescales</b></p> <p>a. PW talked about the work programme, which provides timescales for completing key tasks in the lead up to the end of year planning submission.</p> <p>b. PW went through each of the tasks in the programme and confirmed that a copy would be circulated to all attendees. In summary, the programme shows that to meet the end of year deadline, we need to ensure that work is progressed continually and there is little room for slippage.</p> <p>c. PW ended the meeting by summarising the discussions and outcome from the meeting, which in summary included:</p> <p>i. sending the PRTM proforma, updated to include for GN's comments, to NDI for their consideration, referring back to them regarding the</p>	

	<p>model update set out in point 3b above</p> <p>ii. discussing the modelling issue with the Client team to help inform decision making.</p>	
<b>5</b>	<b>AOB</b> <p>a. Nothing further was raised. PW thanked the authorities for their time.</p>	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 8<sup>TH</sup> SEPTEMBER 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH)– Leicestershire County Council (LCountyC)  
Highway Development Management team  
Catherine Townend (CT) – National Highways (NH)  
Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
Anthea Anderson (AA) – Leicester City Council (LCityC)  
Geoff Blissett (GB) – Derbyshire County Council  
Lisa Guest – Nottingham City Council  
Alex Gray (AG), Laura Good (LG), Tom Baker (TBa) & Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
George Nock (GN) – Jacobs; NH transport consultant  
Mark Dazeley (MD), Sophie Gage (SG) & Kit Tang (KT) – AECOM; PRTM Model  
Imogen Smazanovich (IS) – Segro  
Stefan Stojasavljevic (SS) – Delta Planning  
Steph Meyers (SM) – ITP  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<p><b>Introductions</b></p> <p>a. PW welcomed everyone to the meeting and mentioned that there are a number of new attendees and asked whether they could introduce themselves and their role in the project:</p> <ul style="list-style-type: none"> <li>i. AG (NDI) – manages access to the PRTM model via the Framework.</li> <li>ii. LG (NDI) – ETC Framework Officer for LCC.</li> <li>iii. TB (NDI) – Framework Manager working on behalf of AG.</li> <li>iv. MD (AECOM) – Framework Director for PRTM.</li> <li>v. SG (AECOM) – PRTM transport modelling lead.</li> <li>vi. KT (AECOM) – PRTM modeler.</li> </ul> <p>b. PW named all other attendees who had been at previous meeting on the project.</p>	
<b>2</b>	<p><b>Recap of 11/08/22 Meeting Minutes</b></p> <p>a. PW summarised the previous meeting minutes, the key point being that we have agreed to wait for the updated version of the PRTM due on 27/09/22 before commencing the modelling work.</p> <p>b. PW set out the main purpose of the meeting; which was to use it as a PRTM Inception Meeting to understand in further detail the parameters for the modelling work, together with the anticipated programme, to help BWB plan the timescales for the production of the Transport Assessment and hence planning submission date.</p>	

	<p>c. AG said that the 27/09/22 date is when PRTM will be calibrated, with sign off potentially extending into October.</p> <p>d. PW confirmed that we would come back to this as this could affect the planning application programme.</p> <p>e. PW went on to discuss the Ratcliffe on Soar planning application and that BWB have seen LCC's observations so understand previous concerns with validation of the modelling work undertaken for said application, amongst other key items raised.</p> <p>f. PW confirmed that BWB will be obtaining turning count data at local junctions in the short term and have had initial discussions with LCC about what data is readily available (this is set out in further detail below).</p> <p>g. PW asked whether all attendees are happy with the previous meeting minutes. All attendees confirmed this was acceptable and RH confirmed that LCC would provide confirmation on the Scoping Note once the PRTM proforma has been updated with NH previous comments (since received).</p>	<b>BWB</b>
<b>3</b>	<p><b>PRTM Proforma</b></p> <p>a. PW provided a brief overview of the latest PRTM Proforma. In summary:</p> <ul style="list-style-type: none"> <li>i. Breakdown of development is as agreed.</li> <li>ii. Access arrangements as per latest masterplan.</li> <li>iii. A453 likely to need dualling between the westernmost access and the Finger Farm roundabout.</li> <li>iv. Trip rates and traffic generation are all as per agreed scoping note.</li> <li>v. 300k sqm of development overall, with 80%/20%, B8/B2 split.</li> <li>vi. Assessment scenarios have been updated to include 100% development in both 2027 and 2037 years as per GN's previous comments from 11/08/22. Scenarios to be tested include baseline, baseline + development and baseline + development + sensitivity test (Isley Woodhouse and Ratcliffe Freeport site).</li> </ul> <p>b. PW confirmed that HS2 is mentioned in the proforma but whether it is possible to include it in PRTM needs further thought.</p> <p>c. CT confirmed that from a NH perspective HS2 is not expected to be included because of the 2041 timescale and general uncertainty in its delivery.</p> <p>d. IS asked whether HS2 could therefore be struck off for this reason.</p> <p>e. TB confirmed that the Ratcliffe on Soar application looked into whether HS2 could be included but there was no information available</p>	

	and hence it was disregarded.	
	<p>f. RH mentioned that the planning portal for the Ratcliffe on Soar application includes observations and contact information from HS2 and hence recommended that contact is made to understand more about this.</p> <p>g. MD confirmed that HS2 was included in a previous version of PRTM but is not in the current version because of the uncertainties.</p> <p>h. PW confirmed that contact will be made with HS2, however based on the above discussions and lack of information, it is likely that it will be removed from the sensitivity testing.</p> <p>i. RH confirmed that the site access will need coding into the model and therefore a general arrangement drawing will be required to do this.</p> <p>j. IS asked whether the access layout shown on the latest masterplan would suffice.</p> <p>k. RH confirmed that it would need to be demonstrated that a deliverable access layout on the A453 is achievable.</p> <p>l. PW mentioned that work has commenced behind the scenes about the form of access that could be required, although this is based on turning movements at the Finger Farm roundabout contained within the Ratcliffe on Soar Transport Assessment and hence the final junction form/size will be subject to once accurate traffic data has been obtained.</p> <p>m. AG suggested that BWB prepare a number of design options with different size junctions so that the coding of the access can be updated swiftly should capacity problems be identified.</p>	<b>BWB/Segro</b>
	<p>n. PW confirmed that BWB would prepare initial access designs based on the existing layout of the A453. RH confirmed that this was acceptable and any need to dual the A453 would be identified off the back of the modelling and would form part of the mitigation.</p> <p>o. MC set out the junctions that as an absolute minimum would form the study area:</p> <ul style="list-style-type: none"> <li>i. A453/Hunter Road roundabout</li> <li>ii. A453/EMA signal-controlled junction</li> <li>iii. A453/Walton Hill Signal-Controlled junction</li> <li>iv. A453/Finger Farm roundabout</li> <li>v. M1J23</li> <li>vi. M1J24</li> </ul> <p>p. MC confirmed in recent discussions with LCC it is understood that survey data is available at Junctions ii and iii above, however this could date back to 2017. RH subsequently confirmed that LCC would</p>	<b>BWB</b>

	only accept data within the last 3 years so long as it was collected at a time LCC were issuing permits, and relevant covid uplift factors are applied.	
	q. MC confirmed that BWB would bear this in mind and if needed commission new surveys at all the above junctions, which will be completed within the next month. RH confirmed that this was acceptable unless NDI raise any concerns when the permits are requested, such as planned roadworks etc.	<b>BWB</b>
	r. GN also confirmed that NH may hold data for the junctions on the M1 and hence would be happy to knowledge share. BWB would therefore explore this, to inform what traffic surveys are required.	<b>BWB</b>
	s. PW asked what are the key modelling steps that we should be aware of.	
	t. MD confirmed that the programme is for PRTM to be updated by 27/09/22, with reporting to follow several weeks later. However, work can be completed in parallel to this, to ensure that the timescales in completing the model runs does not slip significantly.	
	u. MD provided an overview of the PRTM update. In summary, the old PRTM had a 2014 base, and the current version has a 2019 base. The updated version being worked on specifically relates to the East Midlands Freeport sites and is known as the East Midlands Freeport Model (EMFM), which continues to adopt a 2019 base but with an extension to reflect the Freeport developments/changes, most of which is within Northwest Leicestershire.	
	v. KT displayed a PowerPoint presentation showing information about the EMFM, confirming that a copy would be circulated around all attendees (since provided and issued alongside these minutes).	<b>AECOM</b>
	w. GB asked whether the model update is taking into account the planned A38 grade separation junction improvements.	
	x. CT confirmed that DCO applications have been submitted for the schemes but not sure about timescales for their delivery. It was discussed that these should therefore already be included for in PRTM.	
	y. MD confirmed that the benefits of the EMFM are that when the base year is updated from 2019 in the current model, then this will automatically feed into the EMFM too. Currently this is being updated to 2023.	
	z. MD reiterated the point that once the model is finished on 27/09/22, it will need validating and agreeing. However, AECOM will be able to start coding in the site accesses in parallel with this to avoid any major delays.	
	aa. PW confirmed that BWB would prioritise looking at junction designs and	<b>BWB</b>



	<p>consider an initial footprint based on the existing layout of the A453. The need for dualling the A453 will then come about following the initial model runs and form part of the mitigation strategy.</p> <p>ab. GN confirmed that he would like to see the pre-modelling outputs specified on Page 10 of the Proforma before any further modelling work is undertaken, which would avoid abortive work being completed further down the line. PW confirmed this would be provided (it is understood GN and TBa have since discussed this).</p> <p>ac. TB confirmed that he would assist with validating any results from the pre-modelling within Nottinghamshire.</p> <p>ad. SG mentioned that at some point AECOM will need to agree the assessment years.</p> <p>ae. PW confirmed that the assessment years in the current proforma (2027 and 2037) have been agreed with the authorities. However, we may wish to include a 2022 year also for the purposes of calibrating/validating the data against turning count information and hence will revert back with any final changes to the proforma.</p>	<b>PW</b>
<b>4</b>	<p><b>AOB</b></p> <p>a. SM asked who the best person is within Leicestershire to talk to about sustainable travel improvements.</p> <p>b. RH confirmed that all initial contact should be made with HDM, who will then pass on queries to the relevant person/team. SM confirmed that she will contact RH about this and continue the strategy for improving sustainable travel.</p> <p>c. PW asked whether there was any further business and following this thanked everyone for their time before concluding the meeting.</p>	<b>SM</b>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 13<sup>TH</sup> OCTOBER 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH)– Leicestershire County Council (LCountyC)  
Highway Development Management team  
Catherine Townend (CT) – National Highways (NH)  
Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
Anthea Anderson (AA) – Leicester City Council (LCityC)  
Geoff Blissett (GB) – Derbyshire County Council  
Lisa Guest – Nottingham City Council  
Alex Gray (AG), Tom Baker (TBa) & Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
Mark Dazeley (MD) & Kit Tang (KT) – AECOM; PRTM Model  
Imogen Smazanovich (IS) – Segro  
Stefan Stojavljevic (SS) – Delta Planning  
Steph Meyers (SM) – ITP  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<p><b>Introductions</b></p> <p>a. PW welcomed everyone to the meeting; Alain Chandler-Hurst introduced himself, given this his first time attending the EMGP2 Transport Working Group meetings.</p> <p>b. ACH confirmed that he works at Jacobs (NH transport consultant) and would be supporting George Nock in terms of advising NH on transport related matters.</p>	
<b>2</b>	<p><b>Review of last months meeting minutes</b></p> <p>a. PW thanked RH for her comments on the previous meeting minutes and asked if anyone had any further comments to add. No-one raised any further comments and therefore the Revision 2 meeting minutes are considered agreed and will be circulated.</p> <p>b. PW went through the previous actions and asked GN if Jacobs had managed to liaise with NH to see whether traffic survey data is readily available at Junctions on the M1. GN confirmed that they are in the process of reviewing this and will revert back as soon as possible.</p> <p>c. PW mentioned that HS2 had been considered since the last meeting and was covered in the last update but because of the reasons previously set out will be disregarded from the modelling.</p> <p>d. PW mentioned that initial access designs of a possible roundabout and signal-controlled junction options had been circulated to all attendees on 05/10/22.</p>	<b>Jacobs</b>

	e. SM confirmed that ITP have arranged a meeting with LCC for 25/10/22 to discuss sustainable travel opportunities.	
<b>3</b>	<p><b>EMFM update from LCC ETC Team and AECOM</b></p> <p>a. PW asked for AECOM to provide an overview of the EMFM and summarise the key findings of the model update and any initial gauge as to how well it is validating.</p> <p>b. KT shared a presentation of the EMFM updates. In summary:</p> <ul style="list-style-type: none"> <li>i. The total number of zones across the model has increased from 412 to 620.</li> <li>ii. EMFM has a 2019 base year.</li> <li>iii. The validation against screenline count data shows that the model is validating well in the PM peak, with a few failings in the AM peak, which are to be rectified.</li> <li>iv. The screenline count data in the local area across Leicestershire has high confidence levels except for at one location so the overall performance is good.</li> <li>v. The link flows are all validating well except for the M1 link between J23A and J24 in northbound direction.</li> <li>vi. Journey times for all links across Leicestershire are passing except for A453 between M1 J23A and A52.</li> <li>vii. AECOM will therefore rectify any issues before sending the validation logs to the authorities.</li> </ul> <p>c. GB asked whether anyone has ever undertaken a validation comparison between the EMG model vs PRTM (EMFM). All attendees confirmed that this hasn't been done.</p> <p>d. ST mentioned that if anyone wanted to compare the models then this could be undertaken by checking the performances in the individual LMVR.</p> <p>e. PW confirmed that the EMG model has a 2016 base whereas the EMFM has a 2019 base and therefore should be more up to date.</p> <p>f. KT went through the proposed development details to be modelled; this includes 240,000sqm of B8 use and 60,000sqm of B2 use. KT mentioned that the Proforma currently has the mitigation model scenarios 'ticked'. PW confirmed that following HH's email of 07/10/22, the Proforma will be updated to 'untick' the with mitigation model runs. This will be considered in further detail post the first run.</p> <p>g. PW confirmed that the strategy for the modelling will be to first of all test the network with the initial roundabout access design, with single lane albeit flared entries in place to understand the base position to confirm whether this is sufficient or not.</p> <p>h. KT confirmed that AECOM have not included for any further mitigation</p>	<b>AECOM</b>

	in their scope thus far.	
i.	PW confirmed that the Isley Woodhouse development would be included in the modelling as a sensitivity test but acknowledged that BWB aren't sure where ADC are at with agreeing their scoping and the PRTM Proforma but would catch up with them separately on this.	<b>BWB</b>
j.	KT went through the forecast assumptions on the EMFM presentation and confirmed that in terms of trip distribution there are two options: <ul style="list-style-type: none"> <li>i. Use the Pegasus Park as a parent zone.</li> <li>ii. Use the PRTM in-built gravity model.</li> </ul>	
k.	GN confirmed that Jacobs would expect both options to be tested and compared and possibly a balance of the two used in the final distribution. All attendees raised no concern against this approach and hence is considered accepted.	<b>BWB/AECOM</b>
l.	PW confirmed that the proposed development would be served by two roundabouts (existing A453/Hunter Road roundabout and a new roundabout further west), However the new roundabout would serve the majority of the proposed development. BWB would confirm the amount of traffic to be assigned through both roundabouts.	<b>BWB</b>
m.	KT ended the presentation and asked if anyone had any comments.	
n.	PW asked whether TBa has all the data such as the local planning data assumptions, network scheme uncertainty logs etc. which can be shared with the authorities. TBa confirmed that he would look into this (which has since been issued and circulated to the authorities).	<b>NDI</b>
o.	RH asked whether using the Pegasus Park as a parent zone would be appropriate or whether it would be better to use EMGP1 as a parent zone. KT said she would look into whether EMGP1 can be used as a parent zone but suggested that the zone EMGP1 is located in may contain other development and hence may not be appropriate but will check and confirm this.	<b>AECOM</b>
p.	PW asked the authorities about their timescales in reviewing the output validation logs once they had been shared by AECOM.	
q.	RH confirmed that LCC would aim to complete checks by 24/25 <sup>th</sup> October 2022.	<b>LCC</b>
r.	GN confirmed that Jacobs would complete their checks as soon as possible.	<b>Jacobs</b>
s.	PW confirmed that BWB would re-send the Proforma (revision 5) without the mitigation run option ticked at this stage.	<b>BWB</b>
t.	HH mentioned that normally an Inception Meeting is held before the modelling is commissioned. PW confirmed that these meetings have	

	<p>in effect the Inception Meeting given we are discussing and agreeing the details in the Proforma and general approach for the modelling. This was accepted by all attendees.</p> <p>u. HH mentioned that even though the model validation logs are due to be issued shortly, it doesn't mean the modelling can then commence straight away, as there may be issues that need rectifying beforehand. PW acknowledged and confirmed this is understandable.</p> <p>v. KT asked the authorities about any reporting requirements and confirmed that AECOM can share the slides of the EMFM presentation (which have since been issued). AECOM are also preparing a Base Year Model Review report which can be circulated to all attendees. All attendees confirmed this would be helpful and had no other comments.</p>	
<b>4</b>	<p><b>Access design options</b></p> <p>a. PW shared the roundabout and signal-controlled access designs to all attendees and provided a general overview to the design approach confirming that in effect they retain the existing layout of the A453 and include for flared entries with two lanes at the give way/stop lines. This would then confirm the base position.</p> <p>b. PW suggested that the modelling could test both access options but suggested that the roundabout is tested first.</p> <p>c. RH suggested that normally only one access option is tested and agreed that the roundabout option is tested first.</p>	
<b>5</b>	<p><b>Proforma, including mitigation approach</b></p> <p>a. PW re-iterated previous comments in that the Proforma will be updated to remove the 'with mitigation' model runs but keep the possible dualling scenarios should they be required on the back of the baseline model runs. All attendees agreed with this approach.</p>	
<b>6</b>	<p><b>Next steps</b></p> <p>a. PW summarised the next steps and tasks to be undertaken:</p> <p>i. TBa to release model plots to authorities for them to check validation (completed).</p> <p>ii. BWB to confirm amount of traffic to be assigned to the new roundabout and existing A453/Hunter Road roundabout.</p> <p>iii. KT to update fee proposal and issue to SEGRO.</p> <p>iv. BWB to catch up with ADC re Isley Woodhouse to understand where they are at and their timescales.</p> <p>v. BWB to undertake as much of the Transport Assessment work as possible prior to the modelling commencing.</p> <p>vi. Next meeting booked in for 10/11/22.</p>	<p><b>NDI</b></p> <p><b>BWB</b></p> <p><b>AECOM</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>

**Jacobs**

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 10<sup>TH</sup> NOVEMBER 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
Highway Development Management team  
Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
George Nock (GN) – Jacobs; NH transport consultant  
Daniel Sullivan (DS) & Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
Anthea Anderson (AA) – Leicester City Council (LCityC)  
Geoff Blissett (GB) – Derbyshire County Council  
Lisa Guest – Nottingham City Council  
Tom Baker (TBa), Alex Gray (AG) & Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
Mark Dazeley (MD) & Kit Tang (KT) – AECOM; PRTM Model  
Imogen Smazanovich (IS) – Segro  
Steph Meyers (SM) – ITP  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

Agenda item	Action
<p><b>1 Highway Scheme Uncertainty Log and Planning Data Assumptions</b></p> <p>a. PW reiterated that the uncertainty log and planning data assumptions had been shared with the Transport Working Group and a few queries raised which had been addressed within the re-issued version sent on 28/10/22. This included changes to the Freeport sites which have been excluded from the base model and are to be considered in a sensitivity test.</p> <p>b. GB asked about the inclusion of the A38 grade separation schemes and whether the updated model includes these. KT confirmed that AECOM have received drawings of the A38 grade separation schemes from NH (via BWB) and that they are waiting for details of the signal timings before coding these into the model. It was agreed that AECOM would liaise internally to obtain the signal timings and any other information needed to code the A38 grade separation schemes into the model.</p> <p>c. KT asked NH what the forecast years are for the schemes and whether they are to be delivered at the same time. CT said that the forecast year may be 2026 (subsequently confirmed that it is actually Spring 2024) and that all three schemes would be delivered together.</p> <p>d. PW went through the other changes to the uncertainty logs, in summary providing clarification on the Western Park Golf Course scheme (LCityC) and confirmed that the Lutterworth East Association scheme had been included (LCountyC).</p> <p>e. TBo raised a query regarding the Rushcliffe planning assumption data which shows slight discrepancies with the data sent through</p>	<p><b>AECOM</b></p> <p><b>TBo/TBa/ AECOM</b></p>

	<p>recently by the Planning Manager for Rushcliffe. AECOM confirmed they would liaise with TBo/Rushcliffe and agree what land uses are included in the base model, although there should be no significant changes to the current uncertainty logs.</p> <p>f. RH asked for copies of the uncertainty logs to be circulated once finalised. PW confirmed that BWB would do this, post receipt from AECOM.</p> <p>g. AA discussed the Western Park Golf Course site and that LCityC's previous comments were in relation to the Ratby Lane/Kirkby Lane roundabout improvements, which is actually within LCountyC's area.</p>	<b>AECOM/ BWB</b>
<b>2</b>	<p><b>Validation and Base Year Review Update</b></p> <p>a. KT confirmed that Base Year Model Review report has been completed and is being reviewed before being circulated. This report will set out the performance of the cordoned model. In addition, journey time route graphs will be included.</p> <p>b. PW thanked Kit and reiterated how AECOM's presentation of 08/09/22 showed that the EMFM model validates well and asked whether this is the same for the cordoned model. KT confirmed that the cordoned model also validates well.</p> <p>c. PW asked about timescales for obtaining the Base Year Model Review Report and agreeing it before the future year model runs are undertaken. In addition, PW suggested a meeting with the Transport Working Group next week could be beneficial so that AECOM can provide a guided tour of the model results so that any issues can be discussed and resolved in the round.</p> <p>d. AG confirmed that the Base Year Model Review would be ready for issue before the end of the week (11/11/22).</p> <p>e. RH agreed that a meeting would be beneficial to go through the details together. PW tried to arrange a meeting for next week, however this wasn't possible availability wise across the Transport Working Group.</p> <p>f. GN suggested, instead, for the Base Year Model Review report to be circulated to the Transport Working Group for review and comments, as from the Strategic Road Network (SRN) perspective the presentation from AECOM highlighted where details need reviewing. Following that, a meeting can be held if required to discuss any specific points of detail before base model and associated validation is signed off.</p>	<b>AECOM</b>
<b>3</b>	<p><b>Information (quantum, land use and trajectory) for Sensitivity Test Sites</b></p> <p>a. PW confirmed that in previous Transport Working Group meetings, it was agreed for all Freeport sites to be considered in a sensitivity test</p>	



	<p>but asked LCC NDI how we can deal with each of the Freeport sites from a confidentiality point of view, as we need to agree how we treat each of these sites with the authorities before the modelling commences.</p> <p>b. TBo mentioned that in terms of Ratcliffe on Soar, information about the land uses and traffic forecasts is publicly available and therefore the assumptions can be taken directly from the Transport Assessment.</p> <p>c. GB confirmed that DCountyC have commissioned Systra to update the Gateway model for the Local Plan allocation purposes. What DCountyC have noticed is that the Ratcliffe-on-Soar scheme is emerging as are the East Midlands Airport schemes, however the Willington (Toyota) scheme has less clarity and DCountyC are yet to be approached on this.</p> <p>d. PW asked whether the Toyota Freeport site should be included in the sensitivity test given the above. GB confirmed from a DCountyC point of view, the Toyota Freeport site does not need including for.</p> <p>e. IS mentioned about timescales for the Toyota site, given no consultation has been received to date by any of the authorities. As the Toyota site is part of the Freeport initiative, there are timescales associated with that set by Central Government and hence may not be being followed.</p> <p>f. GB confirmed that both Erewash and Amber Valley Borough Council have commissioned Systra to use the Gateway model for the transportation evidence base for their respective local plans. In regard of the Freeport sites the text in the respective modelling reports read that <i>"The Midlands Freeport proposals include three schemes:</i></p> <ul style="list-style-type: none"> <li>• <i>Ratcliffe Power Station.</i></li> <li>• <i>The East Midlands Intermodal Park (EMIP) located adjacent to the A50/A38 Toyota junction; and</i></li> <li>• <i>East Midlands Airport Logistics Park expansion.</i></li> </ul> <p><i>Of these schemes Ratcliffe Power Station and the Airport site are included in the Reference Case. Details on their land use and floor space have been obtained from the relevant local authorities and applied to the Reference Case. Where known, infrastructure proposals associated with these sites were included based on information obtained from the Freeport working group.</i></p> <p><i>EMIP currently does not have firm committed status and sufficient detail to include. Therefore, EMIP has been excluded from the Reference Case".</i></p> <p>g. PW asked whether EMIP site should be included in the sensitivity test given the above. GB confirmed from a DCountyC point of view,</p>	
--	--	--

	<p>concur with Systra's approach in that the EMIP site does not need including in the Reference Case.</p> <p>h. IS mentioned about timescales for the EMIP site, given no consultation has been received to date by any of the authorities. As the EMIP site is part of the Freeport initiative, there are timescales associated with that set by Central Government and hence may not be being followed.</p> <p>i. RH suggested however that with regards to Toyota (EMIP), because it is included in the Government Freeport initiative, it should be included in the sensitivity modelling, as whilst no consultation has been received, not all developers engage in pre-application with authorities, so it could still come forward. In terms of Isley Woodhouse, detail is available for this scheme on North West Leicestershire DC's website which can be used to code into the model.</p> <p>j. PW thanked RH for the above and confirmed that BWB would search for these details and revert back if there are any issues.</p> <p>k. PW summarised the discussions on the sensitivity testing confirming that the position on Ratcliffe-on-Soar and Isley Woodhouse is now clearer, however the Toyota site needs exploring further to understand what is being proposed for the purposes of coding it into the model.</p> <p>l. GN confirmed that Jacobs and NH would give further thought to the Toyota site, seeing as it could impact National Highways SRN more than other authorities, and how this can be treated and come back with their thoughts.</p>	<p><b>BWB</b></p> <p><b>Jacobs</b></p>
<b>4</b>	<p><b>Distribution Pattern Approach</b></p> <p>a. PW confirmed that AECOM are currently working on the Base Model and once finalised will consider the proposed distribution pattern next, taking into consideration three methods (using EMGP1 and Pegasus Park as parent zones and using the in-built gravity model). BWB would then review the outputs and provide a recommendation to the Transport Working Group as to which methodology is most appropriate.</p> <p>b. In the meantime, BWB have undertaken a manual distribution using Census 2011 data which was shared on-screen with the Transport Working Group, to provide an initial indication and insight into how the traffic might distribute. This showed the following percentage distribution; circa 30% M1 northbound, 5% on the A453 towards Nottingham City, 17% M1 southbound, 10% on the M42 towards Birmingham, 14% on the A453 to the west of the site and 18% on the A50 towards Derby City.</p> <p>c. GN asked about the above distribution and whether it was a proxy</p>	<p><b>AECOM/ BWB</b></p>

	<p>model to give initial thoughts rather than a model to be adopted. PW confirmed that this is correct, and the purpose is to simply provide an initial indication, hence there is no need for authorities to check said data. These percentages can however be compared against those from the EMFM methodology at the appropriate time to help inform the recommended approach.</p>	
<b>5</b>	<p><b>Traffic Surveys</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed that traffic surveys for the six off-site junctions detailed in the PRTM Proforma have been commissioned with permits approved with LCountyC and asked whether NH had concluded whether they hold any historic traffic data.</li> <li>b. GN confirmed that there is not as much data available as initially first thought but the strategy being taken with getting new data is acceptable.</li> <li>c. PW confirmed that in terms of M1J24, BWB hold the VISSIM model that was used as part of EMGP1, which is coded exactly how it the junction is laid out on the ground. The VISSIM model is quite considerable and includes the network between M1J23 up to A50J1 because there was a significant amount of highway works implemented as part of EMGP1, which should not be the case for EMGP2. Therefore, BWB's recommendation is to cordon the VISSIM model to M1J24 only and use that along with the forecast flows from SATURN (with furnessing against observed counts) and import the data into the VISSIM model to test the development impacts.</li> <li>d. GN confirmed that the base would be different and asked for a succinct summary setting out the status of the model, what we propose to do and the methodology for the modelling which can be agreed with NH. PW confirmed that BWB would produce a short note setting this out.</li> </ul>	<b>BWB</b>
<b>6</b>	<p><b>Timescales</b></p> <ul style="list-style-type: none"> <li>a. PW summarised AECOMs programme and confirming that they proposed 10-12 weeks to complete the process with work starting at the end of October.</li> <li>b. IS confirmed that SEGRO are looking to book the public consultation event for the New Year so need to have confidence that sufficient information will be available to consult locals and other stakeholders.</li> <li>c. KT confirmed that whilst AECOM understand the timescales pressures the Base Model will need agreeing with the authorities so they are comfortable with it before running the next stages of modelling. KT confirmed that AECOM could prioritise supplying certain parts of the output data if this would help move the project forward to meet the public consultation timescales.</li> </ul>	

	<p>d. IS suggested that if SEGRO decide to plan the public consultation for February would this give AECOM comfort that the results will be available. SEGRO need to balance booking the consultation in line with the Government's Freeport timescales against having enough information to properly consult.</p> <p>e. PW mentioned that for the public consultation we may not necessarily need all the details but instead a sufficient level of detail showing what the impacts of the development would be, with potential mitigation options to inform consulting the public as to their thoughts.</p> <p>f. RH suggested that as part of the public consultation we should want to be in a position to have an understanding as to where the impacts are and how they are going to be mitigated. Therefore, we may not be in a position before February where we have schemes of mitigation designed that have been ran in the model.</p> <p>g. PW acknowledged the above and agreed that we wouldn't understand the final position with the approach suggested above, however should be in a position where we have enough information to know where we're heading, to inform local residents of what is likely required to mitigate the development impacts. If the results of the with development runs are received before Christmas, then in January BWB can start considering mitigation requirements ahead of the public consultation; whilst they may not be agreed by the authorities it would at least provide an idea as to what could be required. As part of the final mitigation schemes, the designs can take into consideration comments from the public consultation.</p> <p>h. HH acknowledged the above but highlighted a risk that in February we would not have local authority support, which may not be ideal going into a public consultation.</p> <p>i. PW thanked RH and HH for their thoughts which would be taken into account but confirmed that there is a clear path of what needs doing in the short term so can look into this once the Base Year Model Review report is received against the programme AECOM set out.</p>	
<b>7</b>	<p><b>Masterplan/Public Consultation</b></p> <p>a. SM ran through the sustainable transport initiatives confirming that an initial meeting had been held with LCountyC and the wider team to talk through EMGP1, such as how this site operates and what can be brought across to EMGP2. A second meeting has been scheduled for later this month, alongside Uniper.</p> <p>b. SM shared a plan showing the existing bus services and where the route in the local area and confirmed that the initial thoughts are to provide a bus interchange close to Pegasus Business Park within</p>	<p><b>BWB/ AECOM</b></p>

	<p>eastern part of the site. Staff would be transferred to the main part of the site via a free electric shuttle bus which would drop off employees close to each unit. SM confirmed that Uniper are adopting a similar model.</p> <p>c. SM presented a graph showing how bus patronage has increased at EMGP1 year on year. Therefore, ITP are confident that by adopting a similar model, similar results can be achieved in terms of modal shift to car sharing/public transport usage at EMGP2.</p> <p>d. SM also presented a figure of the masterplan showing the location of the bus interchange and the route the shuttle buses would take within the main part of the site. In addition, it was confirmed that the existing bridleway would be retained for people to walk/cycle to the site as an alternative approach. Free cycle hire would be available to encourage this.</p> <p>e. IS mentioned that retaining Hyam's Lane has wider benefits to local people living in Diseworth who would have continued access to the service station.</p> <p>f. RH said that LCountyC has two concerns with the masterplan. Firstly, the PRTM Proforma does not specify a second point of access, which therefore needs updating. Secondly, LCountyC are of the opinion that the bus interchange is remote from the site and should be integrated within the main part of the site. The connection from Hyam's Lane may not be attractive for people working on shift patterns travelling during nighttime hours. PW confirmed the Proforma would be updated accordingly.</p> <p>g. SM confirmed that in terms of the bus interchange location, the operators would not be willing to travel into the development to serve each unit because of impacts on journey times. If additional vehicles are added to the route, then this may not work financially. Therefore, the strategy is to continue to get more people using the service without impacting existing users. The services currently operate at high frequencies and the shuttle bus would complete the 'last mile' part of the journey to each unit.</p> <p>h. GN thanked SM and agreed that a detailed strategy is being worked up that looks positive. However, GN suggested that it would be critical to get authority support on the public transport strategy to make best use of this as achieving modal shift away from private car use to public transport is a much better way of reducing impacts on the SRN, rather than proposing major highway works such as more lanes etc.</p> <p>i. PW asked if SM could circulate the public transport presentation to the Transport Working Group.</p>	<p><b>BWB</b></p> <p><b>ITP</b></p>
--	--	-------------------------------------

8	<b>AOB</b>  a. PW summarised the meeting confirming that BWB would prepare meeting minutes and circulate them along with ITP's public transport presentation. In the meantime, AECOM will finish the Base Year Model Review this week so that it can be circulated and agreed with the authorities. PW asked if there was any other business.  b. CT confirmed that the timing of the A38 grade separation schemes is Spring 2024 but likely to be a delayed because the DCO has not been approved (as set out in 1c above).	<b>BWB</b>
---	--	------------

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 8<sup>TH</sup> DECEMBER 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
Highway Development Management team  
Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
George Nock (GN) – Jacobs; NH transport consultant  
Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
Anthea Anderson (AA) – Leicester City Council (LCityC)  
Geoff Blissett (GB) – Derbyshire County Council  
Tom Baker (TBa), Alex Gray (AG) & Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
Kit Tang (KT) – AECOM; PRTM Model  
Imogen Smazanovich (IS) & Martin Eckersall (MK) – Segro  
Steph Meyers (SM) – ITP  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Tom Boylan (TBo) – NCountyC  
Lisa Guest – Nottingham City Council  
Simon White - LCityC  
Mark Dazeley – AECOM; PRTM Model

**MINUTES:**

Agenda item	Action
<p><b>1 Review of Previous Actions</b></p> <p>a. PW started the meeting by reviewing the previous actions, confirming that the A38 grade separation junction improvements have been circulated to AECOM for coding into the EMFM.</p> <p>b. KT confirmed AECOM have received the improvement schemes and asked NH whether the signal-controlled Toucan crossings require including in the model or whether demand is expected to be low and hence they may not be required.</p> <p>c. CT confirmed that she would need to defer to other colleagues before confirming this.</p> <p>d. PW suggested that it is unlikely that the Toucan crossing would affect vehicle capacity significantly because they will most likely operate alongside traffic phases rather than under an all red stage.</p> <p>e. KT agreed with the above confirming that either way it is unlikely that the crossings will have a major impact on the modelling, although would defer to NH on this.</p> <p>f. PW went through the remaining actions from the 10/11/22 meeting minutes summarising the work that had been completed since this time. This includes:</p>	<p><b>CT</b></p>

	<ol style="list-style-type: none"> <li>1. Base year model review issued to the Transport Working Group.</li> <li>2. BWB issued information on the interpretation of the sensitivity testing sites (Ratcliffe on Soar and Isley Woodhouse). PW confirmed that GN and CT had also referred back on the EMIP site.</li> <li>3. In terms of development distribution there are other stages that need bottoming out before we move onto this, but this is being undertaken using three methodologies.</li> <li>4. The methodology for the VISSIM modelling will be covered in this meeting.</li> <li>5. EMFM Proforma was updated and reissued.</li> <li>6. Further discussion has been held on public transport which are covered in this meeting.</li> </ol> <p>g. PW confirmed that BWB would update the previous meeting minutes from 10/11/22 to include GB's comments. These have since been updated and circulated.</p>	
<b>2</b>	<p><b>Planning and network uncertainty log information</b></p> <ol style="list-style-type: none"> <li>a. PW confirmed that TBo had recently confirmed by email that the Rushcliffe planning data should now be finalised for inclusion within the uncertainty logs and includes the Toton link road scheme. PW asked KT if this is indeed the case.</li> <li>b. KT confirmed that AECOM are still in discussions with Phil Marshall at Rushcliffe Borough Council who sent through information for the 2022-2030 period but as the model base year is 2019, AECOM will need data for the 2019-2022 period. AECOM have received all housing planning data but are still finalising the employment planning data. Phil Marshall confirmed he would come back to KT this week, but KT would chase if nothing is received.</li> <li>c. KT confirmed she has spoken to TBo about the HS2 Innovation Hub and this information is now included in the uncertainty logs, which will be circulated to the Transport Working Group once complete with the final Rushcliffe planning data.</li> <li>d. KT confirmed that AECOM have received a drawing of the Toton link road scheme and have coded two signal junctions into the model. However, AECOM require further information on the phasing so that this can be included in the model.</li> <li>e. DS confirmed that he would speak to TBo about this and provide the signal data for the two junctions on the Toton link road.</li> <li>f. KT confirmed that AECOM are progressing with updating the uncertainty log information and once finalised will be able to issue the latest version (Rev 3) to the Transport Working Group.</li> <li>g. PW thanked AECOM and NCountyC in particular for trying to move</li> </ol>	<p><b>KT</b></p> <p><b>NCountyC</b></p>



	<p>this forward but raised concern with timescales and that agreeing the planning data is taking longer than expected, which is causing us to deviate from the programme and hence holding back the rest of the modelling. PW asked whether Phil Marshall is aware of the timescale pressures on the project.</p> <p>h. KT confirmed that Phill Marshall is responding swiftly to emails but will follow up with him if nothing is received this week.</p> <p>i. CT asked KT what assumptions have been made for the Toton link road scheme as the new junctions are on the A52 which are under the remit of NH.</p> <p>j. KT confirmed that TBo had issued drawings showing two signal junctions and shared the drawing to all attendees on screen.</p> <p>k. CT confirmed that she was aware of the drawing but highlighted that the junction layouts are not agreed and hence asked whether two scenarios could be tested that look at with and without the Toton link road scheme.</p> <p>l. KT confirmed that this would involve an additional scenario and additional work above that currently being undertaken.</p> <p>m. PW suggested whether this would be necessary given the distance the scheme is from the site and whether the principles of the two junctions have been agreed that can be moved forward with for the purposes of modelling.</p> <p>n. CT confirmed that the current position is that NH are not content with signal junctions because they impact the A52 and would prefer roundabouts but would liaise with colleagues on the type of junction that will most likely come forward and refer back to KT with how the modelling should be undertaken.</p> <p>o. PW asked what KT's 'gut feel' is with regard to the difference between signals and roundabouts on the junction modelling/performance.</p> <p>p. KT suggested that the either the signals or roundabout options should not have a significant impacts/change on the wider strategic modelling.</p> <p>q. AA asked what the housing and employment planning data is based on in Leicester. RH confirmed that it is based on the Leicestershire's latest dataset included in the model and should also include all of the sites within LCityC. AA confirmed this was acceptable and thanked RH.</p>	<p><b>KT</b></p> <p><b>CT</b></p>
<b>3</b>	<b>Base model validation</b>	
	a. PW confirmed that to date, BWB have received confirmation from	

	<p>NH, LCountyC and LCityC that the base model is acceptable and asked whether DS and GB are happy from a NCountyC and DCountyC respectively.</p> <p>b. DS confirmed that he has seen the recent emails being circulated from other authorities and that NCountyC are satisfied that the model is suitable if others are happy.</p> <p>c. GB confirmed that DCountyC would take the lead of NH who have confirmed they are content with the base model.</p> <p>d. PW concluded that all authorities are now in agreement that the base model is accepted and hence no further work is required on this.</p>	
<b>4</b>	<p><b>Next steps/programme – EMFM modelling</b></p> <p>a. PW summarised the next set of actions that need completing to allow AECOM to undertake the next stage of modelling which is the 'without development' runs.</p> <p>1. Rushcliffe planning data needs finalising and agreeing. 2. NH to confirm the approach to coding the Toton link road scheme.</p> <p>b. KT confirmed that the above is required but before modelling can be undertaken AECOM will need to process the data, update the uncertainty logs and issue the final data to the Transport Working Group.</p> <p>c. PW asked KT what her thoughts are timescales wise in completing the without development model runs and providing the outputs of the results for BWB to start furnishing the traffic flows.</p> <p>d. KT confirmed that if the planning data can be agreed early next week (w/c 12 December 2022) then it should take another week to complete the without development runs. The aim is to complete the without development runs and provide development distribution plots before the Christmas break.</p> <p>e. PW confirmed the above information would be useful to receive before Christmas to allow BWB to start progressing the traffic flow furnishing/individual junction modelling, albeit focusing on the distribution information in the first instance. In terms of the wider programme the public consultation is being held at the end of February/March 2023 with the planning submission date set for April 2023.</p>	<p><b>NCountyC</b> <b>NH</b></p> <p><b>KT</b></p>
<b>5</b>	<p><b>Sensitivity modelling</b></p> <p>a. PW set out the assumptions that have been made on the Ratcliffe on Soar (Uniper) and Isley Woodhouse sites, as set out in his email of</p>	

	<p>23/11/22. PW also confirmed that CT and GN have provided information on the EMIP site. In summary this includes:</p> <ol style="list-style-type: none"> <li>1. Ratcliffe on Soar information has been extracted from the associated Transport Assessment and hence should be accurate.</li> <li>2. Isley Woodhouse assumptions are less clear but information has been found on headline development details which AECOM are able to use for modelling purposes.</li> </ol> <p>b. IS confirmed that SEGRO have met with NWLDC who can provide high level input on the assumptions for the Isley Woodhouse scheme.</p> <p>c. RH agreed that the info from NWLDC is needed to ensure accuracy. IS confirmed that she would continue liaising with them and refer back.</p> <p>d. DS mentioned that concerns have been raised with the Ratcliffe on Soar site because the development is intended on being delivered in phases. In summary, Phases 1 and 2 would have little impact on the network but Phase 3 would have a larger impact. Hence, NCountyC are uncomfortable providing a condition for mitigation to be provided as it may not be deliverable. DS did however confirm that the proposed development floor areas would not change</p> <p>e. PW confirmed that BWB would be testing the Ratcliffe on Soar site in its entirety and hence the development phasing would not have any impacts on the modelling, which would assess worst-case. DS therefore confirmed that the information BWB have shared on 23/11/22 would assess the worst-case impacts and confirmed that was agreed.</p> <p>f. PW shared an email from CT regarding the EMIP site confirming that the general consensus across the authorities is that this site does need considering in the sensitivity testing (notwithstanding that DCountyC are of the opinion it does not).</p> <p>g. PW asked KT if she is aware of the planning data assumptions for EMIP that had been made from colleagues at AECOM within the associated transport modelling.</p> <p>h. KT confirmed that she is aware of the planning data assumptions available for the EMIP site although acknowledged the information is only high level.</p> <p>i. PW confirmed that this is the only data currently available and DCountyC and NH have nothing more detailed to provide at this stage. Therefore, advised KT to proceed using this.</p> <p>j. PW confirmed that the sensitivity testing would include two model runs, one that includes the proposed development and another</p>	<p><b>IS</b></p>
--	--	------------------

	that excludes the proposed development so that the difference/impacts can be considered.	
<b>6</b>	<p><b>VISSIM modelling</b></p> <p>a. PW referred back to previous discussions confirming that GN advised for a VISSIM model to be used to assess the impacts at M1 Junction 24.</p> <p>b. PW confirmed that BWB already hold the VISSIM model at M1J24 from work undertaken for EMGP1, which extends from A50 J1 to the north to M1 J23A to the south, but the intention is to cordon the model to include M1 J24, EMGP1 signal gyratory, Finger Farm roundabout, M1J23A and the site access roundabouts on the A453. The model is several years old and hence work will be required to update the model to a suitable base year and go through the validation process, however this will be undertaken in parallel with building individual Linsig and Junctions 10 models for comparison and to give us an earlier indication of performance levels.</p> <p>c. GN acknowledged the commitment to running with the VISSIM model and agreed with the approach. GN asked for BWB to send through details of the current model and methodology for updating/validating it so that this can be agreed upfront. PW issued the VISSIM modelling methodology to GN on 09/12/22.</p>	<b>BWB/GN</b>
<b>7</b>	<p><b>Public Transport</b></p> <p>a. PW mentioned that a meeting had been held with ITP, LCountyC and Trent Barton and LCountyC were intending on following that up with a further meeting to discuss public transport improvements.</p> <p>b. RH confirmed that LCountyC have spoken to Trent Barton and have a meeting arranged for 12/12/22. However, LCountyC still have concerns with the location of the bus interchange.</p> <p>c. SM asked whether LCountyC would provide an update on the outcome of the discussions with Trent Barton next week. RH confirmed that she would send an update to the Transport Working Group following the meeting.</p> <p>d. IS confirmed that a separate meeting had recently been held with NWLDC planners who didn't raise any concerns with the location of the bus terminal and understand it's on the location of all the main bus routes in the local area. RH confirmed that to date no discussion has taken place between LCountyC and NWLDC.</p> <p>e. PW asked whether IS should co-ordinate a meeting with NWLDC and LCountyC after their meeting with Trent Barton on 12/12/22. RH mentioned that the reason no discussions have taken place so far is because the pre-app came through to LCountyC directly but if IS is happy for LCountyC to share the information with NWLDC then they</p>	<p><b>RH</b></p> <p><b>RH</b></p>

	<p>would be happy to discuss public transport with them. IS confirmed she is happy with this and therefore RH will have a discussion with both Trent Barton and NWLDC and revert back to the Transport Working Group.</p> <p>f. AA asked whether there is intention to liaise with other bus operators to the south of the site to connect people to the site from Leicester City.</p> <p>g. SM asked AA whether there are any operators in mind as Trent Barton are the main operators in the area. Midlands Classic do travel out to Burton upon Trent but not directly to the site. AA confirmed she would come back to SM on this.</p>	<b>AA</b>
<b>8</b>	<p><b>Next steps/programme - general</b></p> <p>a. PW summarised the next steps/actions to be completed:</p> <ol style="list-style-type: none"> <li>1. NCountyC and AECOM to finalise the Rushcliffe planning data assumptions.</li> <li>2. AECOM to provide the development distribution plots.</li> <li>3. AECOM to complete the without development model runs and provide outputs for BWB to start furnishing the traffic flows.</li> <li>4. AECOM to complete the with development and sensitivity model runs in the new year following further agreements on the planning assumptions.</li> </ol>	<b>NCountyC /AECOM</b>
<b>9</b>	<p><b>AOB</b></p> <p>a. PW confirmed that scoping responses have been received from NWLDC who have listed a number of committed developments that need including for in the modelling and asked KT to check whether they are included in the planning data assumptions. This information has since been issued to KT.</p> <p>b. PW confirmed that in terms of noise and air quality, BWB need to go back to the team on a programme. There are a couple of items for KT to consider and confirm what information can be provided and hence PW confirmed he would liaise with KT separately.</p>	<p><b>KT</b></p> <p><b>PW</b></p>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 12<sup>TH</sup> JANUARY 2022 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
Highway Development Management team  
George Nock (GN) – Jacobs; NH transport consultant  
Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
Anthea Anderson (AA) – Leicester City Council (LCityC)  
Geoff Blissett (GB) – Derbyshire County Council  
Lisa Guest – Nottingham City Council  
Kit Tang (KT) – AECOM; PRTM Model  
Imogen Smazanovich (IS) – Segro  
Steph Meyers (SM) – ITP  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
Tom Baker (TBa), Alex Gray (AG) & Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
Tom Boylan (TBo) – NCountyC  
Simon White – LCityC  
Mark Dazeley – AECOM; PRTM Model

**MINUTES:**

Agenda item		Action
1	<p><b>Review of Previous Actions</b></p> <p>a. PW started the meeting by reviewing the actions from the previous meeting on the 8 December 2022:</p> <ul style="list-style-type: none"> <li>i. A38 grade separation schemes now included in base model.</li> <li>ii. Rushcliffe planning data now agreed and included in base model.</li> <li>iii. Toton link road to be included in the sensitivity test and not base model.</li> <li>iv. The base model is therefore now agreed and whilst it has taken a little longer than expected, it was crucial that all parties were comfortable with this as it underpins the rest of the modelling.</li> <li>v. BWB have prepared a Technical Note building on the email issued previously by PW setting out the VISSIM methodology. This note was issued to the TWG on 12 January 2023.</li> </ul> <p>b. PW asked AA whether there are any updates on public transport from LCityC. AA confirmed that there are no updates at this moment and happy with the progress made so far but will keep everyone informed.</p> <p>c. PW asked if anyone had any further comments on the meeting minutes from 8 December 2022. No further comments were received, hence the minutes are agreed.</p>	

<b>2</b>	<p><b>Programme update</b></p> <p>a. IS confirmed that the public consultation was planned in line with the modelling timescales. A virtual event is booked for 27 February 2023, with in person events booked at Radisson Blu Hotel (East Midlands Airport) for 14/15 March 2022. Hence the traffic modelling work needs accelerating in order to have meaningful conversations.</p> <p>b. IS confirmed that the next Freeport board meeting is taking place on 12 January 2022 and one of the biggest risks is the progress on traffic modelling. The planning application is due to be submitted during the first week of April 2023. This is a requirement in line with the timescales issued to Central Government and to meet the planning deadline of September 2023. The tax incentives available to businesses end in September 2026 and business rates relief need to have started to be claimed by businesses before 30 September 2026, hence timescales are crucial.</p>	
<b>3</b>	<p><b>Planning and network uncertainty log</b></p> <p>a. PW confirmed that the uncertainty log data should now be signed off from a base modelling perspective. The most recent version of the model is being used (EMFM) which has been updated and validated. Planning data has now been received from NWLDC and included.</p> <p>b. PW asked whether anyone has any further comments on the uncertainty log/planning data assumptions. No further comments were received and hence the base model assumptions are agreed. AECOM now have the ability to undertake the base model runs.</p> <p>c. PW confirmed that given the timescales set out by IS in 2b, BWB may need to take a professional judgment on certain aspects of the modelling to move things forward in line with these timescales. However BWB will share all information with the TWG and understand that this does result in an element of risk but will be moving with what professionally is considered most appropriate.</p>	<b>KT</b>
<b>4</b>	<p><b>Modelling update</b></p> <p>a. PW mentioned that development distribution patterns are now on the critical path and will be shared with the TWG on w/c 23 January 2023. The with development outputs will then be issued once the scenarios have been ran which will provide an understanding of the impacts/study area.</p> <p>b. KT confirmed that the base model has been ran over Christmas with the planning data and uncertainty log information included in Version 3, which includes the Rushcliffe and NWLDC data. This also included for the Toton link road scheme.</p> <p>c. KT confirmed that AECOM are now feeding the demand growth</p>	<b>KT</b>



	<p>into the model which is being completed this week with the model run being undertaken over the weekend. Development plot distribution and routing will be provided next week (middle of next week at the earliest).</p> <p>d. KT confirmed that the development distribution will be undertaken in three ways:</p> <ul style="list-style-type: none"> <li>i. Pegasus business park as a parent zone</li> <li>ii. EMGP1 as a parent zone</li> <li>iii. In-built gravity model in EMFM</li> </ul> <p>e. KT confirmed that once the distribution methodology has been reviewed and agreed, AECOM can start extracting the outputs. The plan for the next TWG is to provide a presentation on the forecast modelling.</p> <p>f. PW asked for clarification that the modelling outputs will be issued to BWB initially for review before being circulated to the TWG. This will allow BWB to review the information and provide thoughts and interpretation to the TWG to hopefully make things more straight forward for others to review. KT agreed with this.</p> <p>g. RH pointed out that in terms of distribution, LCountyC do not consider Pegasus Business Park to be representative and instead EMGP1 would be better.</p> <p>h. PW acknowledged RH comment on Pegasus Business Park as a parent zone and confirmed that BWB would review all three options but take into consideration LCountyC position on this. It is more likely that the other two options will be taken forward.</p> <p>i. PW asked the TWG their timescales for reviewing the development distribution plots.</p> <p>j. RH confirmed that from an LCountyC perspective it depends when the information lands and in what format because of other deadlines. PW confirmed that BWB would provide the data in the most efficient way possible to help with the authorities reviewing the details.</p> <p>k. RH thanked PW for this but highlighted that LCountyC would not recommend any assumptions/risks are taken on development distribution and suggested that the modelling is held off until this is agreed.</p> <p>l. PW acknowledged RH comment and that BWB will aim to get all key aspects agreed where possible but noting IS timescales.</p> <p>m. IS asked whether it would be worthwhile BWB providing some certainty on timescales for issuing the development distribution plots so that LCountyC can plan time in their diary to review.</p>	<b>KT</b>
--	--	-----------



	<p>n. PW said that if AECOM can provide the information by the end of next week (20 January 2023), then BWB would jump onto the outputs and present the details in the best way for the authorities to review. Should the data land by 20 January 2023, then BWB would aim to issue the information by 25 January 2023.</p> <p>o. GN asked whether it would be better for AECOM to simply circulate the base model and development distribution information to all attendees once the model has been ran.</p> <p>p. PW suggested that it would be better for AECOM to issue the information to BWB first off, for BWB to review and summarise with recommendations and an interpretation of the results based on our professional experience. This would save everyone from having to review all the raw data.</p> <p>q. GN agreed with the above and confirmed that the gravity model is something NH are familiar with. In terms of localised knowledge with EMGP1 and Pegasus Business Park this can be provided by LCountyC. GN confirmed that he looks forward to receiving the outputs.</p> <p>r. GB said that DCountyC are happy to defer to LCountyC and NH on the development distribution but would still welcome being kept in the loop when information is issued.</p> <p>s. PW thanked GB and asked whether LG from a NCityC perspective is happy for LCountyC and NH to take the lead. LG said that NCityC main concerns are on the A453 and through Clifton into Nottingham. However, the main concerns are on public transport and getting people from Nottingham City to the site. Apart from that NCityC are quite peripheral.</p> <p>t. PW asked AA whether this is also the case for LCityC. AA confirmed that she would want to look at the impacts on the ring road and radial routes from the SRN. PW acknowledged this and agreed it would be considered and confirmed that all information would be shared with everyone in any case.</p> <p>u. PW asked if anyone had any further comments on the modelling. No further comments were received.</p>	<b>BWB</b>
<b>5</b>	<b>VISSIM modelling</b> <p>a. PW confirmed that BWB have prepared a note on the VISSIM modeling methodology, which is ready to issue and will circulate a copy to everyone after the meeting. This note was issued on 12 January 2023.</p> <p>b. PW reminded the TWG of the VISSIM network, which involves cordoning the existing model to include M1J24, EMGP1 gyratory</p>	

	<p>M1J23a (including Finger Farm roundabout and M1/A42 slips), A453/Hunter Road roundabout and new site access roundabout on the A453.</p> <p>c. PW mentioned that BWB have received turning count survey results at 10 junctions from November 2022 (including those listed in 5b) which are being summarised for inclusion in the VISSIM model.</p> <p>d. MC provided an overview of the furnishing procedure to derive future forecast flows. Once BWB receive the modelling outputs from AECOM there will be a furnishing process that needs undertaking and there are four options being considered, which were summarised:</p> <p>i. Option 1 – take traffic flows directly from the EMFM.</p> <p>ii. Option 2 – work out the % difference between the base and future SATURN flows and apply the % growth to the 2022 observed counts.</p> <p>iii. Option 3 – Take the absolute increases in turning movements between the base and future SATURN flows and apply the growth to the 2022 observed counts.</p> <p>iv. Take absolute increase in link flows between the base and future SATURN flows and apply proportionately to the 2022 observed counts.</p> <p>e. RH suggested we agree the furnishing process before it is carried out and also that Option 1 will not be acceptable to Leicestershire. RH asked for the turning counts to be provided beforehand.</p> <p>f. RH suggested that BWB prepare a note setting out the furnishing process and including the raw observed turning count data, which can be signed off to help speed up the process. BWB agreed that it would be worthwhile doing this and will provide a note to all attendees</p> <p>g. GN asked whether BWB are intending on issuing a note setting out the VISSIM methodology. PW confirmed this and issued the note on 12 January 2023.</p> <p>h. PW acknowledged RH comments above regarding the furnishing options and whilst will take on board LCountyC preference for not going with Option 1, wanted to set out all options at this early stage.</p> <p>i. GN asked about the base model construction for VISSIM and whether this has started. PW confirmed this has been started, BWB are also building individual junction models too, some of which will inform the VISSIM model.</p> <p>j. GN asked whether the base VISSIM model would be signed off before any future year assessments are undertaken. This will give stability on forecasts before it is tested. PW confirmed that the base VISSIM model would be agreed before being progressed further.</p>	<p><b>BWB</b></p>
--	--	-------------------

	<p>GN confirmed that he would await on the VISSIM note.</p> <p>k. PW confirmed that BWB will share all models, results, outputs etc but to meet the Freeport timescales may need to move on the front foot with certain tasks but acknowledge this is at BWBs risk.</p> <p>l. RH asked about timescales and whether the individual junction models could be shared with the authorities to get them signed off before the traffic flows are inputted.</p> <p>m. PW confirmed that BWB have models available and can share these with the authorities. MC confirmed that BWB have 10 junction models built for junction along the A453 up to M1 J24.</p>	<b>BWB</b>
<b>6</b>	<p><b>Public Transport</b></p> <p>a. SM provided an update on public transport:</p> <p>i. RH recently attended a meeting with Trent Barton and provided actions which SM following up with by email.</p> <p>ii. SM mentioned that ITP are to liaise with Trent Barton on passenger numbers and whether there are any issues with capacity at present.</p> <p>iii. In terms of junction priority and shift timings, ITP will liaise with BWB to understand what is happening with access.</p> <p>iv. ITP are to share detailed drawings with Trent Barton once available.</p> <p>b. SM mentioned that RH had picked up that some permissive paths were missing off the plans. RH asked for ITP to share the plans they hold for LCountyC to add to if need be.</p> <p>c. SM asked whether there are any changes to the emergency access to Diseworth via Long Holden and whether this is outside the site boundary. IS confirmed Long Holden is outside the site boundary.</p> <p>d. IS mentioned that there are aspirations for people to have walking routes between Long Whatton and Diseworth and whether there is anyone at the council who SEGRO can liaise with about improvements.</p> <p>e. IS mentioned that Hyam's Lane is currently a muddy track that gets waterlogged in the winter and the intention is to do something to improve the conditions, such as resurfacing, low level lighting to make it a more useable path. There could be scope to bring the private shuttle bus along Hyam's Lane but this needs to be considered further. Hence there are a few things to explore.</p> <p>f. RH said that it is LCountyC's understanding that Long Holden provides emergency access to the M1 but aren't certain so recommended NH to check their records before we start agreeing any changes. GN confirmed that he would liaise with NH on this.</p> <p>g. IS confirmed that there is definitely a pedestrian gate that exists</p>	<p><b>ITP/BWB</b></p> <p><b>ITP</b></p> <p><b>GN</b></p> <p><b>IS</b></p>

	rather than a vehicular gate but will investigate further.	
<b>7</b>	<b>Next steps</b>  a. PW confirmed that the timescales would be included in the minutes as IS set out. This is included at 2b.	
<b>8</b>	<b>AOB</b>  a. IS asked whether LCountyC have a net zero strategy and how it is being progressed and fits into the NWLDC proposal. SEGRO have received the climate chapter which RPS are working on and want to make sure they are on the right track to meet net zero from a LCountyC perspective.  b. RH confirmed that there is a strategy available on the LCountyC website but the best contact is Luke Radden Jackson who can provide further information. At the moment, the net zero strategy is council wide but LCountyC are in the process of developing LTP4 but it is not completed yet.  c. PW thanked all attendees for their time and ended the meeting.	<b>IS</b>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 9 FEBRUARY 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Catherine Townend (CT) – National Highways (NH)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Simon White (SW) & Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Geoff Blissett (GB) – Derbyshire County Council  
 George Nock (GN) – Jacobs; NH transport consultant  
 Sonny Tolofari (ST) – LCountyC Network Data Intelligence  
 Stefan Stojasavljevic (SS) – Delta Planning  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Lisa Guest -Nottingham City Council  
 David Green (DG) – Delta Planning  
 Jon Parker (JP) – ITP  
 Imogen Smazanovich (IS) – Segro

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<b>Review of previous actions</b>  a. PW/MC went through the meeting minutes from 12 January 2023 discussing each of the previous actions.  b. PW asked if anyone from the TWG has any comments on the previous meeting minutes. No comments were received from the TWG.	
<b>2</b>	<b>Recently consented Castle Donington industrial park St Mowden development</b>  a. PW summarised an email received from AA on 30 January 2023 regarding a scheme at Castle Donington Industrial Park to the south of A50 J1 that was recently overturned at committee and now has outline planning permission. This therefore hasn't been included in the uncertainty log information and base model runs.  b. PW confirmed that AECOM have already ran the base model and hence suggested that the Castle Donington scheme is included in the sensitivity test as there is a risk that schemes will continuously come forward once agreements have been made and hence a line need to be drawn somewhere.  c. GN mentioned that whilst he acknowledges the unfortunate timing of this, it is a committed scheme and hence would normally be included in the reference case. GN asked whether BWB know the trip generation associated with the scheme. PW confirmed that he wasn't aware of the trip generation at this stage.	

	<p>d. GN confirmed that he had reviewed the Transport Assessment and the Castle Donington development is expected to generate circa 230 two-way trips in each peak hour of which circa 100 trips would route towards the M1 J24a, which isn't insignificant.</p> <p>e. GN also highlighted that from the distribution plots submitted in relation to EMGP2, it is clear that there is re-distribution away from M1J24 and hence there are wider effects that need to be considered.</p> <p>f. PW understood GN's comments and confirmed that further discussion on distribution and the effects of congestion/re-distribution away from M1 J24 would take place later in the meeting.</p> <p>g. RH highlighted that the EMG application will be determined by NWLDC members who refused the Castle Donington development and a question that is likely to be asked at committee is whether the EMG assessment took into account this scheme. LCountyC would like to be in a position to say yes and hence advised that SEGRO weigh up the risks against updating the log and re-running the base model.</p> <p>h. PW suggested that if BWB/AECOM do go back and update the logs and include the Castle Donington scheme then could we agree to draw a line on this matter else there is a risk that this may continue happening.</p> <p>i. RH acknowledged that a line needs to be drawn somewhere but because of the location, impacts and sensitivity of the Castle Donington scheme, LCountyC feel that it should be considered. GN agreed with RH stating this scheme is highly relevant to the assessment and EMG application.</p> <p>j. PW confirmed that BWB would liaise with SEGRO on this matter and revert back.</p> <p>k. GN asked whether he could take an action away to quantify the impacts of the Castle Donington scheme and issue the details to BWB. PW confirmed this would be useful.</p>	<p><b>PW</b></p> <p><b>GN</b></p>
<b>3</b>	<b>Traffic Flow Technical Note</b>	
	<p>a. PW confirmed that BWB issued the Traffic Flow Technical Note on the 19 January 2023. BWB are now in the throes of working through the note and are adopting the methodology set out within it to validate and furnish the traffic flows, as it is considered to be a sound approach.</p> <p>b. PW asked if there are any comments on the Technical Note.</p> <p>c. GN confirmed that he would come back to BWB on the Technical Note but is prioritising other matters at the moment, such as the development distribution pattern, which PW agreed was a priority.</p>	

	<p>d. RH mentioned that it would be helpful for the TWG to have a project programme for when certain items are likely to be issued and timescales for when these need to be reviewed by. This should set out how everything is intended on being complete in line with the planning submission deadline.</p> <p>e. PW confirmed that BWB would prepare a project programme.</p>	<b>BWB</b>
<b>4</b>	<p><b>VISSIM Model Technical Note</b></p> <p>a. PW thanked GN for the meeting on 25 January 2023 which was followed by a revised Technical note issued on 27 January 2023.</p> <p>b. GN thanked PW for the revised Technical Note and confirmed that it is being reviewed internally on behalf of NH. However, GN is unclear on the journey time routes that are being proposed for validation. However, Jacobs are currently reviewing everything in detail and hence will confirm everything with the TWG and ask for further information if required.</p> <p>c. GN mentioned that in terms of the Area of Interest (Aol), this normally comes from the model but this is a piece of work that hasn't been received yet. Normally this is defined as a 5% increase or 30 additional trips.</p> <p>d. PW confirmed that there is still an exercise that needs to be undertaken to agree the study area for the Transport Assessment, post agreement of the distribution pattern. However, BWB have offered the VISSIM model to cover a study area that includes key junctions in the area but do not intend to extend this any further. The plan is to then assess other junctions individually (Junctions 10, Linsig) and will agree the Aol/study area with the TWG at the appropriate time.</p> <p>e. GN asked whether he should respond on this point to close it out. PW agreed that this would be useful.</p> <p>f. PW asked RH/HH from a LCountyC perspective whether BWB should expect comments on the VISSIM Technical Note or whether they would defer to GN on this.</p> <p>g. HH confirmed that LCountyC were keen to attend the meeting on 25 January 2023 but would mirror GN comments on the Aol. LCountyC are happy with GN reviewing the technical details of the VISSIM model but would want to be kept informed on matters.</p> <p>h. TB confirmed that from a NCountyC perspective he is happy to be kept in the loop but won't be providing much feedback.</p>	<p><b>GN</b></p> <p><b>GN</b></p>
<b>5</b>	<b>Development Distribution</b>	

	<p>a. PW confirmed that BWB issued the distribution information on 27 January 2023 and received comments from GN and TB this week.</p> <p>b. GB suggested that there are sensitivities about small traffic increases across the Swarkestone Causeway and that this should be considered in the Transport Assessment.</p> <p>c. PW thanked GB for pointing this out and confirmed that the distribution information was sent at face value which included the gravity model and EMGP1 parent zone approaches and recommended that EMGP1 parent zone is the most appropriate option to move forward with, although there are no significant differences particularly for car distribution, although there are local route choices avoiding M1J24 which were set out in the email issued to the TWG.</p> <p>d. RH confirmed that LCountyC will go through GN's email of 7 February 2023 but added that the traffic routing through Castle Donington is predicted to travel through the village and not the new bypass, which is a concern and also traffic is diverting away from the M1 and through Kegworth which needs further understanding.</p> <p>e. PW asked if any other authorities had comments on the distribution. No further comments were received.</p> <p>f. KT picked up on GN comments of 7 February 2023 and reiterated that traffic is avoiding M1J24 because of local congestion and instead choosing to route around local villages. KT shared a presentation about the journey time routes in draft to check with GN that this is what he is after. GN confirmed that the information looked suitable. KT confirmed she will finish the presentation and issue the journey time/distance details to the TWG, which would also include M1J25 as requested by GN.</p> <p>g. KT confirmed that AECOM would also include this information for local routes through Castle Donington (new bypass vs High Street) for LCountyC purposes.</p> <p>h. PW thanked KT and summarised the actions for the modelling:</p> <ul style="list-style-type: none"> <li>i. BWB to liaise with Imogen regarding the St Mowden scheme.</li> <li>ii. KT will come back with the distribution pattern and journey time data.</li> <li>iii. BWB will wait to hear back from the TWG on the VISSIM Technical Note and junction models.</li> </ul> <p>i. PW confirmed that BWB have issued base models to LCountyC and welcome any comments on those ahead of receiving the traffic flows, but wouldn't chase them for feedback.</p>	<p><b>BWB</b></p> <p><b>KT</b></p> <p><b>BWB</b> <b>KT</b> <b>TWG</b></p> <p><b>LCountyC</b></p>
<b>6</b>	<b>Sustainable Transport Improvements</b>	



	<p>a. PW confirmed that he was aware of Transforming Cities funding being available in the past, that was planned to be used to deliver footway/cycleway improvements along the A453. PW asked whether anyone was aware of any planned infrastructure improvements, particularly on the A453 between the EMG sites.</p> <p>b. TB stated that he could provide contact details of someone involved in the Transforming Cities Fund at NCountyC who can provide up to date information on what is being planned.</p> <p>c. PW thanked TB and mentioned that whilst the distribution pattern doesn't suggest HGVs will route through Diseworth, whether BWB should be considering banning HGVs through the village.</p> <p>d. RH asked whether BWB have reviewed HGV restrictions in the local area. PW confirmed that BWB had started to undertake this as part of reviewing the distribution pattern.</p> <p>e. RH asked BWB to undertake a review of the current restrictions and then liaise with LCountyC for their opinion. RH also mentioned that there are lots of schemes being ran by Parish Council's and not the highway authority but if BWB revert back with a plan then LCountyC can provide further comments.</p>	<p><b>TB</b></p> <p><b>BWB</b></p>
	<p><b>AOB</b></p> <p>a. GN mentioned that there is also another local scheme referred to as EM Point from 2018 located next to Finger Farm and asked whether this is included in the base model.</p> <p>b. PW confirmed that this should be picked up already but would check and revert back.</p> <p>c. GN highlighted the importance of getting the parameters agreed with the authorities at each stage and recommended that this is obtained before moving forward with the modelling.</p> <p>d. PW thanked GN for the above and confirmed that the authorities would continue to be taken through each step. GN also reiterated that it would be useful to have a project programme that can brought in as an agenda item at subsequent meetings.</p> <p>e. GB confirmed that he is leaving DCountyC at the end of the month and it is likely that Steve Hawley will be taking over as DCountyC's representative on this scheme, although this is to be confirmed (Nigel Atkinson is another contact at DCountyC).</p> <p>f. The TWG thanked GB for his contribution and wished him well for the future.</p>	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 9 MARCH 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Simon White (SW) – Leicester City Council (LCityC)  
 Tim Bellinger (TBe) – Nottingham City Council (NCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Alex Gray (AG) - LCountyC Network Data Intelligence  
 Imogen Smazanovich (IS) – Segro  
 Kit Tang (KT) – AECOM  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Laura Good, Tom Baker and Sonny Tolofari – LCountyC  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Lisa Guest - NCityC  
 Steph Meyers and Jon Parker – ITP  
 Stefan Stojasavljevic and David Green – Delta Planning

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<b>Introduction</b> <ul style="list-style-type: none"> <li>a. TBe introduced himself confirming he is the Transport Strategy Manager at NCityC and joined the authority in October 2022.</li> <li>b. PW confirmed that GB won't be joining now that he is retired but hasn't heard from anyone at DCountyC since, so will enquire to see who else will be picking up this project.</li> <li>c. PW confirmed that the previous meeting minutes will be amended to include AA as an attendee.</li> </ul>	<b>BWB</b>
<b>2</b>	<b>Review of previous actions</b> <ul style="list-style-type: none"> <li>a. PW went through the actions from the previous meeting:               <ul style="list-style-type: none"> <li>i. The Castle Donington scheme is now included in the base model and listed within V4.0 of the Uncertainty Log information.</li> <li>ii. The traffic flow Technical Note was issued to the TWG and will be discussed in more detail during the meeting.</li> <li>iii. A programme has been prepared and will be discussed at the meeting.</li> <li>iv. The VISSIM Technical Note has been revised with GN comments and has been re-issued.</li> <li>v. GB comment regarding the Swarkestone Causeway has been noted and will be considered in the TA.</li> <li>vi. Information has been issued on development distribution which will</li> </ul> </li> </ul>	

	<p>be a focus of this meeting.</p> <p>vii. Base junction models have been issued to LCountyC, although BWB will not chase for comments but would welcome them if possible.</p> <p>viii. A plan was circulated showing the current weight restrictions in the local area.</p> <p>b. PW asked if anyone had any further comments on the meeting minutes, in addition to including AA as an attendee. No further comments were received.</p>	
<b>3</b>	<p><b>Uncertainty Log V4.0</b></p> <p>a. PW confirmed that the uncertainty log information has been updated to include the Castle Donington scheme close to A50J1 that was recently granted permission at Appeal.</p> <p>b. KT confirmed that in light of the above AECOM will re-run the forecast year without development scenarios. PW confirmed that all instructions have now been issued for AECOM to proceed with this.</p> <p>c. PW asked if anyone has any further comments on the uncertainty log V4.0 information. No further comments were received and hence this is now agreed.</p>	<b>AECOM</b>
<b>4</b>	<p><b>Development distribution pattern</b></p> <p>a. PW confirmed that BWB had sent through three lots of information:</p> <ul style="list-style-type: none"> <li>i. Expanded screenshot information was sent with the previous meeting minutes.</li> <li>ii. On 17/02/23, BWB provided the journey time analysis and a PDF document prepared by AECOM.</li> <li>iii. On 24/02/23, BWB provided further distribution information showing origin/destinations for where development traffic is travelling to from.</li> </ul> <p>b. PW suggested that based on the information received, and whilst both the gravity and parent zone approaches show similarities, BWB's preference is to run with EMGP1 parent zone approach.</p> <p>c. GN confirmed that AECOM's information was useful and exactly what NH were looking for. NH will write to confirm the preferred distribution approach. However, key things to consider is traffic using the High Street in Castle Donington rather than the new relief road. Similarly, traffic is traveling through Kegworth rather than using the link road. This should be considered in the TA.</p> <p>d. GN expanded on the above to say that the above is due to congestion around M1J24 and hence mitigation is likely to be needed to bring traffic back onto the SRN. However, in terms of distribution, whilst normally the preference is towards the gravity model, NH has no real position given the similarities.</p>	

	<p>e. RH confirmed that LCountyC will respond after NH, however, have the same concerns with regard to traffic travelling through Castle Donington and Kegworth villages. Politically this will be a 'hot potato' as residents of Castle Donington were asking for the relief road for some years.</p> <p>f. PW suggested whether the lack of traffic calming through the villages could be a reason why development traffic is routing this way?</p> <p>g. KT confirmed that the EMFM is a mathematical model and interpretation is required on some of the results.</p> <p>h. RH acknowledged the above and suggested that how the data/information is presented will be key as there isn't a significant amount of traffic using the routes and so the details in the TA should be clear.</p> <p>i. GN agreed that the EMFM has been coded correctly, however an iterative process is recommended to agree each stage of the modelling to ensure all key issues are covered and signed off by all parties, in particular any mitigation.</p> <p>j. PW asked GN when he will likely confirm the development distribution approach. GN confirmed that he would revert back this week and that the response will align with discussions during the meeting, with LCountyC to follow suit.</p> <p>k. HH agreed with GN and suggested that the traffic flows should be agreed before detailed modelling starts so that any mitigation is based on agreed traffic flows.</p> <p>l. PW mentioned that it appears there is no major preference to either distribution approach and hence are close to closing this item out subject to confirmation from LCountyC. Once the with development scenarios have been ran, BWB will be interested to see what the model outputs are and this will be assessed at face value to understand mitigation requirements and once mitigation has been set out then there is an iterative process to understand what benefits this will have.</p> <p>m. GN confirmed that the iterative process he is suggesting relates to the evaluation and discussion of results, modelling outputs etc. to make sure everyone is on the same page at all stages.</p> <p>n. SF asked whether there are already weight restrictions in the villages. RH confirmed that Castle Donington and Kegworth both have weight restrictions. MC confirmed that this is shown on the plan issued on 24/02/23.</p> <p>o. HH mentioned that with regard to HGV distribution, do the model outputs show traffic going through the villages? PW confirmed that they did initially but this was flagged by BWB and amended in the</p>	<p><b>NH/LCountyC</b></p>
--	---	---------------------------

	<p>EMFM. All HGVs now use the SRN as expected.</p> <p>p. GN confirmed the above and that the plots show HGV traffic using the SRN and avoiding weight restricted areas.</p> <p>q. DS confirmed that NCountyC's main concern is traffic routing through Ratcliffe on Soar village. The main routes leading to the County are strategic roads up until Rushcliffe, so this is the main area that should be considered within the iterative process.</p> <p>r. TBe confirmed that most of the impacts will probably be on the SRN. It is unlikely that there will be a major impact of NCityC network.</p> <p>s. SW confirmed that LCityC will defer to the lead local authority on development distribution, however, confirmed that freight traffic does travel far distances and therefore would like to see how these impact the strategic roads in the authority area.</p> <p>t. PW summarised the discussion on development distribution:</p> <p>i. BWB has provided information on development distribution including the additional outputs from AECOM.</p> <p>ii. BWB will wait to hear from NH and LCountyC to confirm distribution approach.</p> <p>iii. BWB will note the key areas that need focusing on for the TA mentioned by the TWG.</p>	<p><b>NH/LCountyC</b></p> <p><b>BWB</b></p>
<b>5</b>	<p><b>Traffic flow Technical Note</b></p> <p>a. PW confirmed that the Technical Note was issued on 19/01/23 to set out the methodology for calculating future forecast traffic flows. BWB are currently preparing a spreadsheet to initially compare the 2022 data from the EMFM and surveys to determine which furnishing methodology is most suitable.</p> <p>b. MC confirmed that 2022 data has been received from the EMFM and has been compared against the 2022 survey data to understand the statistical difference between the two. This has been carried out for 10 junctions across the network.</p> <p>c. MC confirmed that the two datasets aren't showing complete correlation for all turning movements and some movements show a statistical difference of +5, which means we can disregard Option 1 (as originally discussed) which is taking the flows directly from the model and hence will now consider Options 2, 3 and 4.</p> <p>d. MC confirmed that once the model outputs have been received a second Technical Note will be prepared to set out the methodology BWB recommend to adopt in calculating future forecast traffic flows.</p> <p>e. HH confirmed that LCountyC would be prioritising the distribution pattern information before reviewing the traffic flow Technical Note.</p>	

	<p>HH recommended that the furnishing approach is agreed with the authorities beforehand and if Option 4 is progressed there would be other information such as convergence criteria etc. which LCountyC would like to see before any modelling starts. If there is some unusual assignment in the area, then there may be a need to consider an engineering judgement but would welcome being consulted initially for sign off.</p> <p>f. MC confirmed that if Option 4 is progressed then further information on convergence criteria would be provided to the authorities but either way a Technical Note will be prepared setting out the methodology to be adopted.</p> <p>g. PW confirmed that BWB will continue to share relevant information and meetings are continually booked for the future to keep regular dialogue with everyone. However, an application will need to be submitted at some point, likely in June at present.</p> <p>h. KT mentioned that with the inclusion of the Castle Donington scheme an additional zone was created which has slightly changed the 2022 base year flow outputs, but this is within 10 pcus and hence should have no material change on the analysis BWB has undertaken on the original information issued..</p> <p>i. MC thanked KT for notifying the above and that BWB would undertake spot checks to understand the difference, but this is unlikely to change the outcome of the statistical comparison being undertaken. KT agreed that the differences would not be material.</p>	
<b>6</b>	<p><b>VISSIM Modelling Technical Note</b></p> <p>a. PW asked GN whether BWB will be receiving formal comments from NH on the report.</p> <p>b. GN shared his screen with all attendees showing various route choices and highlighted that Routes 9 and 10 between the A42 and Castle Donington would take the nearside slip instead of the far side, as is currently shown on the plan.</p> <p>c. PW asked GN whether he would write to confirm this. GN confirmed he would raise this in an email so that it is logged.</p> <p>d. GN asked when the VISSIM base model is due to be issued. PW confirmed that the base VISSIM model is largely finished and should be issued next week.</p> <p>e. PW mentioned that from an AECOM point of view, BWB will wait to hear from NH and LCountyC on the distribution methodology before instructing the with development scenario runs.</p> <p>f. KT confirmed that the future baseline will be commenced based on uncertainty log V4.0. Once the distribution approach has been agreed,</p>	<b>GN</b>

	<p>AECOM would then run the with development scenarios.</p> <p>g. PW asked KT how long it would take to run the with development scenarios once the agreements have been received on the distribution pattern. KT confirmed that the model would take 1 week to run and then a further week would be needed to check the outputs and provide forecast flow changes etc. before they are issued.</p>	
<b>7</b>	<p><b>Next steps</b></p> <p>a. PW shared the project programme with everyone and provided an overview of how it has been produced/presented. In summary, it provides a chronological list of key milestones and dates for when information was issued and timescales for when responses are needed by from authorities. The colour coding system highlights green for where responses have been received, orange for where no response is needed/an authority is deferring to another authority and red where responses are still required.</p> <p>b. GN asked that when the VISSIM model is issued can the input files, associated spreadsheets and the LMVR be provided. PW confirmed that all this information would be shared with all authorities.</p> <p>c. GN confirmed that the programme should include sufficient for statutory consultation responses. In addition, the modeling is unlikely to be completely correct first time and so some scope for iterations should also be included.</p> <p>d. PW confirmed that the items on the critical path are agreeing the distribution and instructing the with development model runs and then to then agree the Area of Influence for the TA.</p> <p>e. PW confirmed that a WCHAR assessment is being prepared and should be completed soon, although understands there is no requirement for this to be shared at this stage of the process.</p> <p>f. RH highlighted that the WCHAR will be assessing access by all modes however the authorities have not had sight of the access designs which are fundamental to this work. PW confirmed that the access designs will be shared however have not so far because BWB are awaiting the modelling to be undertaken to know what is required from a capacity perspective. RH acknowledged this but asked for the access designs to be included on the programme with time also included for comments/iterations, and that Road Safety Audits will need to be undertaken for the avoidance of doubt . PW confirmed that the programme can be continually updated and will be amended to include the key tasks.</p> <p>g. PW highlighted that the public consultations are now scheduled for May after the local elections and BWB will be continuing with the TA work as expediently as possible and will continue sharing information with the authorities, as the process so far has been really useful. However, at</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>

	<p>some point BWB will be asked to gear up to submit a planning application and therefore some assumptions may need to be taken but the aim is to minimise these as much as possible.</p> <p>h. RH acknowledged PW comments but ultimately confirmed that the work will need to be done either pre-application or as post submission work. PW understood RH but confirmed that the right balance needs to be struck to meet the client's needs.</p> <p>i. PW asked if anyone has any further business to raise. SF asked if there has been any mitigation suggested for the SRN. PW confirmed that this is premature, and that AECOM still need to complete the modeling work first of all before mitigation is considered.</p> <p>j. PW thanked all attendees for their time and concluded the meeting.</p>	
--	--	--



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 13 APRIL 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) – National Highways (NH)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) & Simon White (SW) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) & Lisa Guest (LG) – Nottingham City Council (NCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Alex Gray (AG) and Patrick Brooks (PB) - LCountyC Network Data Intelligence  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 tefan Stojavljevic – Delta Planning  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Catherine Townend (CT) – National Highways  
 Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Laura Good, Tom Baker and Sonny Tolofari – LCountyC  
 Steph Meyers and Jon Parker – ITP  
 David Green – Delta Planning  
 Imogen Smazanovich (IS) – Segro

**MINUTES:**

Agenda item	Action
<p><b>1 Review of previous actions</b></p> <p>a. PW confirmed that BWB are still liaising with DCountyC to see who is best placed to take over from Geoff Blissett on the TWG. TBe mentioned that he is on another Local Transport Working Group where there is a contact from DCountyC attending and so will come back and advise who that is. TBe has since confirmed that this is Alan Marsden and therefore BWB will liaise with him to see if he is best placed to join the TWG moving forward.</p> <p>b. PW went through the actions from the previous meeting minutes (March):</p> <ul style="list-style-type: none"> <li>i. Forecast with and without development flows received from AECOM.</li> <li>ii. Distribution has been agreed with the authorities (gravity model).</li> <li>iii. BWB have prepared a list as a reminder for specific things to cover in the TA raised by certain authorities over the course of the pre-application discussions.</li> <li>iv. The VISSIM base model and LMVR has been issued to the authorities.</li> <li>v. Access designs and programme to be discussed in this meeting and sent separately.</li> </ul> <p>c. PW asked if anyone had any comments on the previous minutes. No comments were received hence they are agreed.</p>	<p><b>BWB</b></p>

2	<p><b>VISSIM base model &amp; Local Model Validation Report</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed that the VISSIM base model and LMVR were issued at the end of March.</li> <li>b. GN thanked PW for engaging and appreciated the complexity of the model and will aim to provide a response by 5<sup>th</sup> May 2023.</li> <li>c. GN highlighted how it is important to have the base VISSIM model agreed with forecasting then built from this to avoid abortive work.</li> <li>d. PW thanked GN and confirmed that there are other things to do before running the VISSIM model (traffic flow furnessing etc.) and so will welcome GN's comments.</li> </ul>	GN
3	<p><b>With development model outputs and Aol</b></p> <ul style="list-style-type: none"> <li>a. KT shared a presentation of the EMFM 2025 and 2035 forecast results and provided a summary: <ul style="list-style-type: none"> <li>i. The results build on the previous SATURN plots, although these were in % and the forecast report results are now in pcus (with a pcu factor of 2 for HGVs).</li> <li>ii. The forecast report considered the 2022 (without development) and 2025 and 2035 (with and without development) scenarios. The sensitivity test including the Freeport and Isley Walton schemes will be run shortly.</li> <li>iii. There are two access points; the first being a new 3-arm roundabout and the second being a fourth arm off the existing Hunter Road roundabout. The agreed development trip generation has been split with 98% from the 3-arm roundabout and 2% from the Hunter Road roundabout as per the masterplan.</li> <li>iv. The gravity model approach has been used to distribute the development traffic.</li> <li>v. Plots were displayed showing the routing of car and HGV traffic, in pcus rather than %. This reiterates the findings from before in that there is some 'rat running' through local villages (Kegworth, Castle Donington and Diseworth in particular).</li> <li>vi. There is a greater amount of rat running in the PM peak than the AM peak. However, HGVs largely stick to the Strategic Road Network (SRN).</li> <li>vii. Some non-development trips change their route choice towards Derby from A50J1 and J2 to A52 via M1J25 (circa 100 pcus).</li> <li>viii. Aol has been determined by links with a forecast flow change of +/-5% or 30 additional pcus.</li> <li>ix. There is quite a high change in delay in 2035 around Toton but this is where there is already high delay without the development and so is sensitive to change.</li> <li>x. VoC ratio plots are presented by two semi circles; the left half showing without development and right half showing with development.</li> <li>xi. VoC plots are shown as nodes and those that are expected to</li> </ul> </li> </ul>	

	<p>experience a maximum VoC of 85% or above. Any nodes with a VoC of less than 85% are not shown (except for site accesses).</p> <p>xii. VoC increases at Finger Farm with the development. The M1J24 and EMGP1 gyratory are already congested without development, although some nodes do jump into the next band criteria with the development, hence possible impacts.</p>	
	<p>b. PW thanked KT and suggested that the study area will include junctions with a VoC above 85% and where the development may be having an impact, although it is for BWB (with AECOM's support) to lead on and present in a format that is helpful for the authorities to review. Once the study area is agreed, BWB will commission new surveys at those junctions where data is not already obtained. The junctions on the A453 to Diseworth will be modelled regardless given the possible sensitivities.</p>	<b>BWB</b>
	<p>c. SF mentioned that Page 18 shows all junctions that are expected to experience increases in delays and whether we know the actual delay changes there. PW confirmed that BWB can delve into the details further and come back to the authorities with additional information.</p>	
	<p>d. GN confirmed that the Aol looks right and asked whether a copy of the presentation can be shared. PW confirmed that BWB would issue the presentation after the meeting, which has now been sent.</p>	<b>BWB</b>
	<p>e. RH thanked PW for agreeing to share the presentation and asked when the full report is expected to be produced with the sensitivity assessment results. KT confirmed that the report has been drafted but only includes the with and without development scenarios. This should be ready in the next 2 weeks. The forecast results for the sensitivity test will be appended to the Forecasting Report or provided in a separate TN, once the planning assumptions have been confirmed and the model has been run.</p>	<b>AECOM</b>
	<p>f. RH first thoughts are that the model shows routing through local villages and therefore will be interested to see the proposed mitigation and how traffic can be moved back onto the SRN and how the impacts can be resolved at the junctions on the SRN.</p>	
	<p>g. PW confirmed that BWB would consider this and will be focusing on the 'with' and 'without' development traffic scenarios first before looking at the sensitivity test.</p>	
	<p>h. RH acknowledged that the focus is on with and without development, however the Freeport schemes are committed and Isley Walton is a Local Plan promotion and therefore LCountyC are interested in seeing the sensitivity test results.</p>	
	<p>i. PW confirmed that this information will be provided, however the study area would not be increasing as a result of the sensitivity test over and above that to be agreed in the TA, but rather the junctions within the study area will be tested with the sensitivity traffic flows to understand</p>	

	<p>the end position.</p> <p>j. GN confirmed that in terms of mitigation, an iterative process is needed and reciprocated back through the model as a result. PW agreed with GN and that this will be needed; if we remove traffic from the villages then we will need to understand how this affects the SRN further.</p>	
<b>4</b>	<p><b>Traffic flow furnessing note</b></p> <p>a. PW mentioned that comments have not been received on the traffic flow furnessing note, although it is for BWB to build upon the process set out in that note once traffic flows are received from the EMFM. However, PW asked if anyone had any further comments at this stage of the process. No comments were received.</p> <p>b. PW confirmed that there will be more to come on this exercise at the appropriate time.</p>	
<b>5</b>	<p><b>Sensitivity assessment</b></p> <p>a. PW reiterated that in November 2022, BWB set out the planning assumptions for the Freeport and Isley Woodhouse sites from a sensitivity testing point of view. Uniper was more straight forward as the TA is on the panning portal. However, EMIP has less information, but it was agreed that this scheme should still be included and AECOM have retained it in the uncertainty log and have likely job numbers for this scheme.</p> <p>b. PW asked if anyone had any comments on the above. GN asked whether BWB would like comments on the planning assumptions. PW confirmed that BWB would summarise the details building on the information AECOM have for the authorities to then comment.</p> <p>c. SF confirmed that NH have not received any further details on the EMIP Freeport scheme either.</p> <p>d. PW thanked SF and confirmed that the planning data assumptions will need to be based on the best information available.</p> <p>e. PB asked whether the uncertainty log data includes the other EMAGIC cluster sites. PW shared the uncertainty log information which confirmed that this includes the EMA aviation expansion site within the EMAGIC cluster.</p> <p>f. KT confirmed that the EMA aviation expansion will be included as it is within the Freeport and so this will be included in the sensitivity test. PB agreed with KT.</p> <p>g. PW asked whether AECOM have enough information to run the sensitivity assessment or whether any other planning data details are needed.</p>	<b>BWB</b>

	<p>h. KT confirmed that planning data is already within the EMFM but these schemes are toggled off at present and can be toggled on for the sensitivity tests. If there are any changes to the planning data assumptions, AECOM can update if required. KT confirmed that the job numbers are taken from the business case or Freeport websites.</p> <p>i. PW shared an email sent by BWB to all in November 2022 which showed the breakdown of the Freeport and Isley Walton schemes and the Transport Assessment details for the Uniper scheme that are available (trip generation, GFA).</p> <p>j. KT confirmed that job numbers is the standard data requirements for modelling schemes in EMFM; however, a sense check can be undertaken to compare this against the trip generation figures in the TA if required.</p> <p>k. PW confirmed that BWB would collate and issue the trip generation for Uniper and work with the job numbers for the other sites. No comments were received against this approach.</p> <p>l. PW set out that in terms of Isley Walton, BWB and Delta Planning have been liaising with NWLDC and confirmed that overall, there are understood to be plans to develop 4,000-5,000 houses plus commercial development at Isley Walton. However, SS has picked up that, from a Local Plan allocation perspective, the are expected to be 1,785 dwellings delivered by 2040, but by 2035 (TA assessment period) only 1,000 houses are expected to be built out. The difference being that the 4,000-5,000 homes are planned for post 2040 in the next Local Plan. Hence, the strategy for the TA is to look at 1,000 homes as part of the sensitivity assessment to strike the right balance with what will give us meaningful information.</p> <p>m. RH asked if BWB could send the correspondence with NWLDC and LCountyC will review and comment. PW confirmed that was fine and that BWB can assess whatever is needed but recommended that it should be meaningful.</p> <p>n. SS added that the Isley Walton site does not currently hold any planning weight but for context the 5,000 dwelling figure has been ruled out by NWLDC until post 2040 and a realistic figure is 1,785 dwellings. Ian Nelson at NWLDC, who is leading on Local Plan allocations, suggested that 1,785 dwellings is what will carry them through the next Local Plan period and by 2035 approximately 1,000 of these can be expected to be built. NWLDC haven't had much engagement with Isley Walton and aren't expecting any construction until 2027/28. SS is happy to send across the correspondence for LCountyC to pick it up with NWLDC.</p>	<p><b>AECOM</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>
<b>6</b>	<b>Next steps/programme</b>	
	a. PW shared the project programme on screen. The planning submission	

	<p>date is set for this summer, with public consultation just before in June, after the May elections. The items in the programme include for receiving comments from the authorities and iterations of certain tasks but there is a lot of work that needs doing up to the planning submission date but thank the authorities for their continued input.</p> <p>b. PW confirmed that the programme will be issued alongside the meeting minutes.</p>	<b>BWB</b>
<b>7</b>	<p><b>AoB</b></p> <p>a. PW mentioned that improvements for Hyam's Lane will be discussed with LCountyC in the coming weeks.</p> <p>b. KT confirmed that the EMFM presentation has been updated with some minor changes and so will be re-issued. This has since been received and circulated to the authorities.</p> <p>c. PW thanked everyone for attending and concluded the meeting.</p>	<b>BWB/Segro</b>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 11 MAY 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) & Catherine Townend (CT) – National Highways (NH)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Alex Gray (AG) – LCountyC Network Data Intelligence  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 Imogen Smazanovich (IS) – Segro  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited;  
 Segro transport consultant

**APOLOGIES:**

Simon White (SW) – Leicester City Council (LCityC)  
 Lisa Guest (LG) – Nottingham City Council (NCityC)  
 Laura Good, Tom Baker and Sonny Tolofari – LCountyC  
 Jon Parker – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning

**MINUTES:**

Agenda item	Action
<p><b>1 Review of previous actions</b></p> <p>a. PW reviewed the previous meeting actions:</p> <ul style="list-style-type: none"> <li>i. BWB had a meeting last week with Nigel Atkinson of DCountyC who is the interim highways lead at the authority and confirmed that following initial discussions is happy to be merely kept informed of key updates but doesn't intend on joining the TWG meetings. Similarly, the Forecasting Report has been shared with Andy Gibbard of DCityC who is also happy to be kept updated with key information only.</li> <li>ii. BWB have received comments from GN on the base VISISM model and that these are being discussed in detail in a separate meeting at 12pm on 11/05/23.</li> <li>iii. AECOM's presentation has been shared, along with the Forecasting Report, which is to be discussed in further detail at today's meeting.</li> <li>iv. RH has liaised with NWLDC with regard to the Isley Walton scheme and what land use assumptions are to be tested in the sensitivity assessment.</li> </ul> <p>b. PW asked if there are any further comments on the previous meeting minutes other than those received from KT. No further comments were received.</p>	



2	<p><b>AECOM forecasting report and study area</b></p> <p>a. PW reiterated that MC issued an email on 28/04/23 setting out BWB's suggestions for the study area. This was followed by the Forecasting Report issued on 03/05/23.</p> <p>b. PW mentioned that the Aol in the Forecasting Report includes 23 junctions based on those expected to operate with a VoC above 85% and BWB have reviewed the information in further detail and proposed 15 of these junctions to be included in the study area. This is based on the difference in VoC and the absolute difference in traffic flows between the with and without development scenarios.</p> <p>c. PW suggested that based on the proposed study area, some authorities may choose to follow DCityC and DCountyC in merely being kept updated of key matters rather than being included in all meetings/correspondence moving forward, but this is up to each authority and what they are comfortable with.</p> <p>d. RH asked whether the junctions in the table could be plotted on a plan and following that it may be that other junctions should be included. For example, two junctions are included at either side of Castle Donington but not one in the middle.</p> <p>e. MC highlighted that the table only includes junctions with a VoC above 85%.</p> <p>f. RH confirmed that the High Street/Park Lane junction is in the table but not proposed to be included in the study area and questioned why there is a reduction in traffic at this junction but not at the other junctions at either end of Castle Donington.</p> <p>g. KT mentioned that some traffic is being displaced along other routes with the inclusion of additional development traffic and hence why there may be a decrease at certain junctions.</p> <p>h. RH suggested that a plan is prepared plotting the junctions before finalising the study area. In addition, other junctions that have been excluded from the study area are expected to operate with a VoC of 85-95% but have been disregarded because the change in traffic is expected to be low, but may need modelling to understand the impacts on delays, queues etc.</p> <p>i. GN suggested that the table is a useful starting point and would welcome a plan. It is noted that M1J25 is included in the proposed study area, so BWB need to make sure the traffic flows are obtained from the EMFM.</p> <p>j. GN also suggested that A42 Junction 14 should be reviewed and whether it is worth modeling this junction. However overall, the main junctions have been included in the study area from a NH perspective.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
---	---	-------------------------------------



	<p>k. TB mentioned that NCountyC's normal stance is for all junctions expected to see any increase of 30 movements to be included in the study area. However, NCountyC would review the details and respond shortly.</p> <p>l. TBe agreed that the impacts within Nottingham are minimal and hence no further assessment is required from NCityC's perspective.</p> <p>m. PW asked whether TBe would like to step aside from future TWG meetings. TBe suggested that it would be better if he is kept in the loop and if able to attend in the future would do so.</p> <p>n. AA also confirmed that LCityC have no major concerns but to be kept updated with any key pieces of information, particularly once mitigation is being considered, to see if there are any knock on effects in Leicester.</p>	<b>NCountyC</b>
<b>3</b>	<p><b>Sensitivity test assumptions</b></p> <p>a. PW suggested that agreements have now been made regarding the land use assumptions for the Freeport and Isley Walton sites being considered in the sensitivity assessment.</p> <p>b. PW mentioned that RH had responded on the Isley Walton scheme following discussions with NWLDC and asked for the assessment to include 1,000 dwellings plus 24,000sqm of employment development, 1x secondary school, 1x primary school, 1x nursery and 1x local centre.</p> <p>c. PW agreed that the above would be taken into account and asked whether KT has enough information to run this scenario.</p> <p>d. KT confirmed that AECOM have all the information needed and shared a presentation showing details of the 2035 sensitivity assessment scenario to check the trip ends in the model. In effect, the Uniper site has been split into north and south zones. Similarly, Isley Walton has been split into east and west zones with two access points, the first from the EMA roundabout and the second via a new priority junction from the A453. Traffic from Isley Walton has been split evenly between the two junctions.</p> <p>e. KT asked whether this approach is considered suitable. No responses were received. KT confirmed she would share the information presented at the meeting for the avoidance of doubt.</p> <p>f. SF asked why 1,000 houses are being considered for the Isley Walton scheme. PW confirmed that this is because of timescales and the number of houses expected to be delivered by 2035, which is the future year being assessed in the modelling.</p> <p>g. GN asked whether the details in AECOM's presentation reflect the Uniper and Isley Walton sites only and that the EMIP and EMA aviation expansion sites are also included in the sensitivity assessment. PW confirmed that all Freeport sites are included with the latter two based</p>	<b>KT</b>

	on job numbers only because that is the data available.	
<b>4</b>	<p><b>Traffic flow furnessing and future forecast traffic flows</b></p> <ul style="list-style-type: none"> <li>a. PW shared an email sent on 02/05/23 setting out the future forecast flows highlighting that there is a discrepancy between the traffic flow data extracted from the EMFM model.</li> <li>b. VD mentioned that the key question is what dataset is to be used for the traffic flow furnessing ('demand' or 'actual' flows). Demand flows include traffic from the model assignment independent of when the flow arrives, whereas actual flows include traffic that reaches a particular link during that time period. Typically, AECOM provide actual flows to consultants but nevertheless they should largely be similar, unless there is high levels of congestion where demand flows could be higher.</li> <li>c. VD confirmed that the strategy for furnessing the traffic flows is to look at the difference in link flows between the base and future year SATURN flows and apply the difference proportionately to the surveyed turning movements.</li> <li>d. VD mentioned that for certain junctions the volume of traffic entering a is different to the volume of traffic exiting and hence this is causing problems with convergence.</li> <li>e. GN confirmed that he will review the details within the email of 02/05/23 and confirm his preference on dealing with this issue but is focusing on the base VISSIM model first of all.</li> <li>f. RH confirmed that LCountyC will review the information and respond accordingly.</li> <li>g. KT highlighted that in terms of the traffic flow data, the destination flows on A453N is also the approach arm to M1J24 so the queuing flows are picked up on approach to M1J24 as well, so to be careful when reviewing the information.</li> </ul>	<p><b>GN</b></p> <p><b>LCountyC</b></p>
<b>5</b>	<p><b>VISSIM base model</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed that BWB have a meeting with GN and his colleagues at 12pm on 11/05/23 to discuss the comments received on the base VISSIM model and asked whether any other authorities are expecting to provide further comments.</li> <li>b. RH suggested that LCountyC will wait GN's comments and respond then as they see fit.</li> </ul>	
<b>6</b>	<p><b>Next steps/AoB</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed that BWB will take on board comments received at today's meeting, particularly on the study area and base VISSIM model</li> </ul>	

	<p>to keep things moving in the right direction.</p> <p>b. GN asked whether everyone received a copy of NH's audit note on the base VISSIM model but is conscious that this was not issued to DCityC and DCountyC.</p> <p>c. PW confirmed that DCityC and DCountyC are happy to be kept abreast of the VISSIM model information.</p> <p>d. GN asked for the names of the officers at DCityC and DCountyC. PW confirmed that this is Andy Gibbard and Nigel Atkinson respectively. GN confirmed he would copy them into future correspondence.</p> <p>e. PW thanked everyone for attending and concluded the meeting.</p>	<b>GN</b>
--	--	-----------

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 8 JUNE 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Steve Freek (SF) & Catherine Townend (CT) – National Highways (NH)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) & Lisa Guest (LG) – Nottingham City Council (NCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Alex Gray (AG) – LCountyC Network Data Intelligence  
 Paul Wilson (PW), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited;  
 Segro transport consultant

**APOLOGIES:**

Simon White (SW) – Leicester City Council (LCityC)  
 Laura Good, Tom Baker and Sonny Tolofari – LCountyC  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 Imogen Smazanovich (IS) – Segro

**MINUTES:**

Agenda item	Action
<p><b>1 Review of previous actions</b></p> <p>a. PW reviewed the previous meeting actions:</p> <ul style="list-style-type: none"> <li>i. A plan showing the junction locations for the proposed study area was issued on 16.05.23.</li> <li>ii. Further information was issued to GN with regard to A42 Junction 14.</li> <li>iii. Further information was issued with regard to junctions on the A453 leading to Nottingham in NCountyC's jurisdiction.</li> <li>iv. Discussions have been held with NH and Jacobs with regard to traffic flow furnessing.</li> <li>v. Discussions have been held with NH and Jacobs on the base VISSIM model.</li> </ul> <p>b. PW asked if there are any further comments on the previous meeting minutes. No further comments were received hence they are agreed.</p>	
<p><b>2 AECOM forecasting report and proposed study area</b></p> <p>a. PW confirmed that the forecasting report has been issued and shared a plan on screen showing the junction locations for the proposed study area (green showing those proposed to be included in the study area and red showing those proposed to be excluded from the study area).</p> <p>b. PW thanked TB and DS for their off-line conversations regarding Junctions 21/22 located on the A453 towards Nottingham and whether they agree with our justification/position for removing these from the study area.</p>	

	<p>c. TB confirmed that the 30 two-way threshold is set by NCountyC and therefore these junctions do need including in the study area. However, the Ratcliffe on Soar Freeport site has modelled these junctions, which showed that there was plenty of capacity available. NCountyC would be happy for BWB to use the same input files for efficiency.</p> <p>d. PW thanked TB however confirmed that the majority of time incurred is through commissioning the traffic surveys and furnishing the traffic flows rather than building the models themselves.</p> <p>e. TB confirmed he is happy to see whether any traffic survey data is available to send to BWB. However, the 30 movement threshold is set by NCountyC and hence modelling is needed.</p> <p>f. PW appreciated TB's position and understood why certain junctions need assessing for political reasons, even if there is not expected to be any capacity problems. He set out that whilst the 30-movement threshold is frustrating, seeing as such an increase should never result a 'severe' impact, and comes from the former Guidance on Transport Assessment, it is understood that there is a wider picture with satisfying members at committee. Therefore, BWB will include these two junctions in the study area.</p> <p>g. PW asked TB whether the models and assessment undertaken by Arup has been agreed. TB confirmed that Arup tested different phases of development and for the initial phases the results showed that there are not any impacts at either junction. There is nervousness about the Freeport sites in NCountyC and potential rat running through local villages and therefore if members ask questions on this it is important to demonstrate how there are not expected to be any impacts.</p> <p>h. PW asked LCountyC what their thoughts are on the study area and if they have come to a conclusion as to whether they agree with our position.</p> <p>i. HH mentioned that there are reservations about the approach being taken, particularly on the willingness to agree a study area without further understanding of the impacts of the wider Freeport designation. The strategic modelling for the sensitivity test is still being undertaken and so LCountyC would want to see those results before agreeing to an Area of Interest (Aol) and study area. Whilst BWB have disregarded junctions towards Charnwood Forest, the outputs suggest that mitigation could be needed on the Strategic Road Network to bring traffic back onto those routes, hence the iterative process discussed at previous TWG meetings. However, in terms of the study area, LCountyC would suggest that the strategic modelling is looked at and interventions are proposed to make the best use of the available network, recalling discussions in the past about the potential for dualling on the A453.</p> <p>j. PW mentioned that the possibility of dualling the A453 was raised initially as a potential option but the modelling undertaken by AECOM shows</p>	<p><b>NCountyC</b></p>
--	--	------------------------

	<p>there are no link capacity issues on the A453, hence dualling is not required to support EMGP2 (albeit the Finger Farm roundabout and the signal junction to the airport will need looking at). Hence whilst the sensitivity testing will be run using the agreed parameters/traffic flow data, BWB do not propose to increase the study area of the EMGP2 TA on the back of this, as it is not SEGRO's responsibility to deal with impacts generated by the other Freeport sites together with Isley Walton. Instead, BWB can test the impacts of the wider Freeport and Isley Walton schemes within a suitable study area triggered by the EMGP2 development and consider mitigation at any junction where significant impacts are identified.</p> <p>k. HH highlighted that the sensitivity assessment is not just for study area purposes but also infrastructure requirements to support all the developments in the local area. Therefore, traffic flows for the sensitivity assessment sites need considering before the study area is determined.</p> <p>l. RH mentioned that the NPPF asks for a cumulative assessment and therefore LCountyC cannot agree the Aol until they see the outputs from the sensitivity test.</p> <p>m. PW confirmed that instructions will therefore be sent to AECOM to proceed with the sensitivity test, seeing as the inputs are agreed, and BWB can then share the outputs before having a discussion further on the study area. Hopefully this information will be available ahead of the next TWG meeting where we can discuss things in more detail, with a view to finally agreeing the study area.</p>	<b>BWB</b>
<b>3</b>	<p><b>Traffic flow furnessing and future forecast traffic flows</b></p> <p>a. PW mentioned that BWB have been in discussions with GN and Jacobs to agree the approach to furnessing the traffic flows following GN's email of 26.05.23.</p> <p>b. VD mentioned that there were discrepancies between the flows entering and exiting certain junctions meaning there are difficulties in carrying out the furnessing process. GN has therefore suggested we take a cordon of the SATURN model to match the VISSIM and use the flows from the cordoned data which should get rid of the extra demand that is stuck in the network elsewhere.</p> <p>c. BWB are happy to consider this approach for testing the network of junctions in VISSIM but it would not work for the other individual junctions. For these, BWB propose to look at the difference in SATURN flows (actual and demand, taking the worst-case, noting that AECOM have a preference for actual flows to be used) and furness those to provide a forecast scenario.</p> <p>d. In terms of furnessing, the observed counts do not calibrate against SATURN flows and hence BWB propose to take the absolute difference in flows from SATURN and add them to the observed link flows. This will allow the matrices to be converged to calculate the revised turning</p>	

	<p>movements. The initial furnessing exercise has shown that the matrices are converging well.</p> <p>e. HH asked whether this information will be issued within a revised note. PW confirmed that this information will be provided in a note and circulated to the TWG.</p> <p>f. HH mentioned that LCountyC have reviewed the initial TN on the traffic flow furnessing methodology but thought it was better to wait until an approach has been decided upon so that everything can be reviewed in the round.</p>	<b>BWB</b>
<b>4</b>	<p><b>VISSIM base model</b></p> <p>a. VD mentioned that BWB have updated the VISSIM model to reflect GN comments and are now tweaking the flows to converge the model and following that the model can be resubmitted to the TWG before looking at the forecast scenario flows.</p> <p>b. PW asked LCountyC if they are comfortable for BWB to continue liaising with GN and update them. HH confirmed LCountyC are happy with this, but asked to be kept in the loop on key updates and emails. PW confirmed that BWB would continue to do this and confirmed that GN is reviewing things in detail, which should hopefully give LCountyC the confidence that the model will be robust.</p> <p>c. GN asked what timeframes BWB are working to, to get the base model agreed and whether BWB will be issuing the model alongside a note confirming what changes have been made. VD confirmed that a log has been produced with all the model changes which will be submitted with the network base model.</p> <p>d. GN thanked VD and asked PW what the timescales are for resourcing purposes. VD suggested that the model should be issued next week by 16/06/23.</p>	<b>BWB</b>
<b>5</b>	<p><b>Next steps</b></p> <p>a. PW confirmed that AECOM will be instructed straight away to undertake the sensitivity testing. BWB's next steps are then to agree the study area on the back of the sensitivity testing and to issue information on this to inform the next TWG. Beforehand there is work to be completed on the base VISSIM modelling and the traffic flow furnessing.</p> <p>b. PW confirmed that this work would then inform what further traffic survey work is needed, which will probably have to wait until after the school summer holidays now.</p>	
<b>6</b>	<p><b>AOB</b></p> <p>a. PW thanked RH for the email she sent to SM with regard to sustainable</p>	<b>ITP</b>

	<p>travel, which will be considered accordingly.</p> <p>b. RH mentioned that LCountyC have been contacted by Fairhurst out of the blue regarding an AiP for a structure on Hyam's Lane. However, LCountyC have not seen any details regarding changes to Hyam's Lane so cannot engage with Fairhurst on an AiP. It also suggests that work is being undertaken on the internal site layout but not being shared.</p> <p>c. PW confirmed that Fairhurst are working on the internal detailed design with focus on Hyam's Lane. BWB have not received any updates on the internal layout recently,, but ultimately this work will be being undertaken by Fairhurst with BWB working on the external off-site works.</p> <p>d. RH highlighted that Fairhurst suggested they are looking at the AiP for the bridge only. PW suggested that this is probably the work completed so far but Fairhurst will ultimately be looking at the internal layout. RH confirmed that LCountyC cannot engage on this matter any further without further information being provided about the internal layout. PW said he would make the Client aware of this.</p> <p>e. PW thanked everyone for their time and ended the meeting.</p>	<b>BWB</b>
--	--	------------



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
WEDNESDAY 20 SEPTEMBER 2023 AT 1500 HOURS (ON TEAMS)**

**ATTENDEES:**

Rebecca Henson (RH) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Catherine Townend (CT) – National Highways (NH)  
 Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Imogen Smazanovich (IS) – Segro  
 Paul Wilson (PW) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Steve Freek (SF) – NH  
 Lisa Guest (LG) – NCityC  
 Simon White (SW) & Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Alex Gray, Laura Good, Tom Baker and Sonny Tolofari – LCountyC Network Data Intelligence  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM

**MINUTES:**

Agenda item	Action
<p><b>1 Review of previous actions</b></p> <p>a. PW reviewed the previous meeting key actions:</p> <ul style="list-style-type: none"> <li>i. BWB have agreed to model the two additional junctions requested by NCountyC along the A453 corridor</li> <li>ii. AECOM had completed the sensitivity testing, PW issued the report on 27/7/23 and HH responded on 23/8/23; to be discussed in item 3 of this meeting</li> <li>iii. An updated traffic flow furnessing note was issued to all by PW on 18/9/23; to be discussed in item 4 of this meeting</li> <li>iv. The updated VISSIM base model was issued to Jacobs by VD on 15/8/23; to be discussed in item 5 of this meeting.</li> </ul> <p>b. PW asked if there are any further comments on the previous June meeting minutes. No further comments were received hence they are agreed.</p>	
<p><b>2 Project update</b></p> <p>a. IS provided an update; there is a commercial/land ownership issue with regards to the airport which Segro are working on. This has affected the timescales with regards to the planning application, but a focus remains on transport because of the timescales involved. Hence BWB remains instructed to continue accordingly.</p> <p>b. RH asked if an updated programme can be shared to assist with</p>	<p><b>IS/BWB</b></p>

	<p>resource planning. IS said that this is difficult at this stage of the process, but will work with BWB with re. to timing assumptions and provide a guide based on the transport modelling work which has been commissioned.</p> <p>c. IS asked the question of the TWG as to whether they were aware of grant funding being shortlisted for Midlands Connect to engage with the highway authorities to undertake some modeling work for the Freeport schemes in their entirety? CT confirmed NH have not heard anything, other than some HS2 modelling work is planned to be undertaken in the same area. TB was aware of a case being made, but had not heard anything further. IS will see if she finds out anything further, because the TWG would need to be aware of this.</p>	
<b>3</b>	<p><b>Sensitivity test outputs and proposed study area</b></p> <p>a. PW set out what had been issued, and that HH replied on 23/8/23. BWB have reviewed the comments and ran through what HH had set out, which, in summary, was <i>"fewer trips on the Strategic Road Network (SRN) and more trips on local roads such as Grimes Gate, through Diseworth, and through Castle Donington and Kegworth to avoid the congested M1 Junction 24"</i> and that LCountyC <i>"would therefore welcome reconsideration of the proposed study area in this regard and in line with our previous conversations which have also identified the similar journey times for alternative routes on the LRN"</i>.</p> <p>b. In response, PW reminded that it was not for BWB/Segro to produce a strategic TA for all Freeport and related sites; stating that if it would help from a wider political perspective, we could consider assessing the following additional three junctions to take the total being assessed to 20; the High Street/Delven Street/Park Lane signal controlled junction in the centre of Castle Donington, The Green/Lady Gate/Long Mere Lane cross roads to the south of Diseworth and A6/Kegworth Bypass roundabout.</p> <p>c. RH questioned the lack of modelling in relation to the Freeport sites and Isley Woodhouse (IW) site, what with NPPF requiring cumulative assessments being undertaken. PW confirmed that we would be assessing these sites as part of the sensitivity testing, but the study area for the EMGP2 TA would not be driven by it, otherwise Segro/BWB would be undertaking in effect the strategic TA for all such sites.</p> <p>d. RH confirmed they will assess the planning application in line with NPPF and report back to NWLDC accordingly. PW questioned whether LCountyC therefore have a wider study area in mind to cover the other Freeport sites and IW?</p> <p>e. HC set out that such growth needs considering holistically. In response to IS's question, RH confirmed that only our impact would need to be mitigation, but our impacts could be wider as a result of the other committed development. RH have had concerns from the start about the study area, and asked for it reviewing. HH elaborating by</p>	

	<p>saying we need to understand what the strategic modelling is telling us, appreciating the impact is brought about from other developments, and hence the strategic requirements to deliver that growth.</p> <p>f. Hence HH was of the opinion that a narrative should be agreed with stakeholders as to what is happening with the modelling outputs and agree what needs to be undertaken to answer it. Adding a couple of additional junctions to the study area wouldn't necessarily answer this, nor would simply looking at capacity assessment findings in isolation. HH asked what other stakeholders thoughts, albeit PW confirmed their agreement to 17 junctions to date.</p> <p>g. HH asked whether we are content that if a junction shows little flow difference in PRTM that such a junction does not need to be looked at, or is that identifying where we should be focusing our attention to enable this growth? PW responded in that a balance needs to be struck; a change in flows and PRTM outputs as to forecast congestion has been considered when determining the study area, which, in his option, provides very good coverage overall, even when including for the sensitivity testing. Post agreeing a study area and furnishing of traffic flows, capacity assessments would be undertaken to help determine what mitigation may be required,</p> <p>h. HH continued to challenge this, saying that within PRTM, on a congested part of the network, the most congested junctions will be subject to the least amount of change because they are already at capacity, Mitigation shouldn't be based on changes in traffic flow, but what is required to deliver growth. The strategic modelling outputs need to be looked at holistically, to focus on the constrained parts of the network where traffic needs to be travelling on, typically the SRN, where mitigation should be focused on, rather than off-site junctions.</p> <p>i. VD interjected and asked why are we using strategic modelling in the first instance? RH clarified matters, saying the mitigation strategy should not focus on what we can see from the modelling outputs, but address the cause of the issue. For eg, if traffic is routing through Castle Donington to reach the A50, LCountyC would want to see it use M1 J24. Hence the mitigation strategy should focus on mitigating the SRN to draw traffic back through it.</p> <p>j. VD questioned whether we should add traffic through the congested junctions, rather than assessing the minor junctions as a result? HH said no; we should look at what PRTM is showing and then consider what strategic mitigation is required to enable the growth. This may require infrastructure over and above this project, which is likely, but it's an iterative process, which GN has referred to previously. PRTM could then be re-run without assessing the more minor junctions.</p> <p>k. PW said he would not disagree with anything discussed; this section of the agenda focuses on agreeing an actual study to progress with. But what does that mean with regards to potential additional junctions? The additional ones suggested, even with re-routing, are not forecast to be</p>	
--	--	--

	<p>an issue in capacity terms. HH said he does not think we can fix a study area at this stage as a result and stride ahead, without considering how it can be delivered looking at junctions in isolation.</p> <p>l. PW confirmed that we need to move forward, and HH confirmed that this is happening, post the very useful PRTM outputs, but we have to make a start somewhere. PW said we'd consider these useful discussions in further detail, but are confident the key junctions are being considered.</p> <p>m. RH asked when the plan presented on screen was shared; PW confirmed the plan has not been updated (but can be), hence this would be undertaken regardless.</p> <p>n. HH asked if we knew what the emerging mitigation strategy is looking like? PW confirmed that dualling of the A453 does not appear necessary even in the sensitivity testing, but there are options at Finger Farm, and whilst M1J24 has been discussed with Ratcliffe, it appears that certain improvements may be possible, but a significant amount of work was undertaken for EMGP1 and very little land left to go further.</p> <p>o. HH was pleased to hear this and questioned whether this would be the preferable way forward, sharing possible mitigation strategies with the TWG for comment, rather than looking at a large number of off-site junctions. PW confirmed we would consider this accordingly, with the key focus being the VISSIM model which includes Finger Farm and M1J24, and only concept designs are ready which need to be considered further modelling wise before they can be discussed further.</p> <p>p. Hence a focus can be placed on this, to understand impacts, and any further junctions which may be agreed as being assessed would follow in due course anyway, what the current position with the project. IS does not want us to slow down if such important work can be undertaken now and is more inclined to get on with it than not. IS and PW will therefore talk tactics having heard LCountyC's thoughts in particular.</p>	<p><b>PW</b></p> <p><b>IS &amp; PW</b></p>
<b>4</b>	<p><b>Traffic flow furnessing and future forecast traffic flows</b></p> <p>a. VD provided an overview of the report which had been issued on 18/9/23, reminding attendees of the four options originally presented to be assessed.</p> <p>b. In summary, post the GEH assessment test, Options 1 (extraction of data directly from the PRTM model) and 3 (calculating the difference between the 2022 base and 2025/2035 future PRTM flows in absolute numbers and applying the increase directly to the 2022 observed counts) were discounted.</p> <p>c. Option 2 (calculating the percentage difference between the 2022 base and 2025/2035 future PRTM flows and applying the percentage growth directly to the 2022 observed counts at turning movement</p>	

	<p>level) was not considered to be a suitable approach either.</p> <p>d. Hence Option 4 (adding the difference in link flows between the 2022 base and 2025/35 future PRTM to the 2022 observed link flows to derive a target link flow) was therefore considered the most applicable and recommended as a suitable way forward, However, with regards to the junctions contained within the VISSIM model, because the number of vehicles entering the model did not match those exiting (perhaps because of congestion) it was agreed with GN that the model would be cordoned in PRTM and an origin and destination flow based on the VISSIM network and using that in line with Option 4 to derive forecast flows. AECOM will therefore be commissioned on this basis.</p> <p>e. No initial comments were received but VD confirmed he is happy to ask any subsequent questions should they be forthcoming (and comments/hopeful agreement would be welcome regardless)</p>	<p><b>BWB/IS</b></p> <p><b>LCountyC, NCountyC and NH</b></p>
<b>5</b>	<p><b>VISSIM base model</b></p> <p>a. CT confirmed that the base model is agreed and has been signed off by NH, with forecasting model to follow.</p> <p>b. GN requested that the relevant information is shared with the TWG, which PW confirmed would be the case,</p>	<p><b>VD</b></p>
<b>5</b>	<p><b>Next steps</b></p> <p>a. PW confirmed that the plan was to undertake an initial assessment of the 15 junctions agreed to be assessed, which include for the key SRN junctions, taking into consideration comments received, to see what impacts occur as a result, to help inform a suitable mitigation strategy.</p>	<p><b>BWB</b></p>
<b>6</b>	<p><b>AOB</b></p> <p>a. PW confirmed BWB had reviewed the latest position with regards to the Ratcliffe Power Station Local Development Order and noted that trips are limited, so as not to generate a net increase versus the existing use, over and above which requires further assessment, which includes further modelling at M1 J24. It was also noted that LCC maintained their objection.</p> <p>b. IS asked if there was anything specific we should be made aware of; a meeting date has been sought with Uniper to discuss modelling related matters. CT confirmed that NH had raised concerns that they are also building a VISSIM model to consider impacts of Phases 2 and 3, even if they were advised to use our model. The concern being they may not show the same things. They have used the East Midlands Gateway Model. IS suggested that they will have no doubt built their own model so that they are not beholden to us, but everyone will be keen to see similar outputs achieved even if different models are used.</p> <p>c. DS confirmed that Uniper were concentrating on avoiding the peak</p>	

	<p>hours and hence impact on the SRN, eg shift turnovers missing said periods. The office development would come later and would be more challenging mind.</p> <p>d. PW thanked everyone for their time and ended the meeting.</p>	
--	--	--

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 14 DECEMBER 2023 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Ian Rigby (IR) – Segro  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Catherine Townend (CT) – National Highways (NH)  
 Steve Freek (SF) – NH  
 Lisa Guest (LG) – NCityC  
 Simon White (SW) – Leicester City Council (LCityC)  
 Alex Gray, Laura Good, Tom Baker and Sonny Tolofari – LCountyC Network Data Intelligence  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM

**MINUTES:**

Agenda item	Action
<p><b>1 Introductions</b></p> <p>a. PW introduced each individual within the TWG to IR. IR introduced himself as the Infrastructure Director of SEGRO who will be involved in the project moving forward. Over the last 10 years, IR has been involved with a scheme near Northampton at M1J15 for a DCO rail freight terminal, which has about a year left until completion.</p> <p>b. IR gave an update on EMGP2 confirming that SEGRO are looking to proceed with the scheme via the DCO route, which has implications for the TWG on the quantity of work, Statement of Common Grounds etc. but this should be confirmed towards the end of February 2024. Based on experience, having a TWG set up is important to ensuring momentum, so is pleased to see the relationships built to date. The message to the TWG is that there is work going on in the background but from a transport perspective it is 'full steam ahead'.</p> <p>c. PW confirmed that the TWG has worked well over the last circa 18 months and has no doubts that this will continue.</p> <p>d. IR confirmed Imogen has moved to a different role in SEGRO, hence why she is no longer involved. PW also set out the same of Rebecca Henson at LCountyC.</p> <p>e. AA confirmed that SW will be retiring at Xmas hence she will remain the sole point of contact at LCityC.</p>	



2	<p><b>2024 meeting schedule</b></p> <p>a. PW confirmed his intention is to continue the same approach for meetings within 2024 by having monthly TWG meetings on the second Thursday of each month.</p> <p>b. PW confirmed to IR that DCityC are comfortable being kept abreast of the scheme and copied into key update emails, as now are DCountyC, following initial modelling results being provided from AECOM which show little traffic impacts on their part of the network.</p> <p>c. All attendees confirmed with the 2024 meeting schedule plan. PW to action</p>	PW
3	<p><b>Review Actions from last meeting in September 2023</b></p> <p>a. PW reviewed the meeting minutes from September 2023:</p> <ol style="list-style-type: none"> <li>No programme has been provided because of the land assembly issues but can be provided now we have been instructed on the next stages of work. BWB will work with the Client on this.</li> <li>BWB sent a plan showing the junctions included in the current study area, there are now 17 altogether including the two in NCountyC's network on the A453 near Ratcliffe on Soar. BWB to share this plan with IR.</li> <li>Reflected on the discussion held with regards to the study area may potentially change as a result of the iterative modelling process/mitigation once this has been undertaken, which may even reduce the study area if traffic is drawn back to the SRN.</li> <li>BWB commissioned AECOM to provide the cordoned matrices for the purposes of furnishing the traffic flows for junctions in VISSIM, which has since been received.</li> <li>BWB are currently furnishing the traffic flows in line with the agreed methodology set out in the traffic flow furnishing technical note, albeit reviewing the traffic flows on a junction by junction basis.</li> <li>Agreed base VISSIM model was sent to the TWG.</li> <li>Next steps are to understand the impacts of the development at the initial 15 junctions from a capacity point of view in the first instance.</li> </ol> <p>b. No responses were received on the previous actions.</p>	<p>BWB/IR</p> <p>BWB</p>
4	<p><b>Review of previous emails from HH and GN</b></p> <p>a. PW shared the emails from HH and GN on screen.</p> <p>b. PW confirmed that the modelling scenarios will include:</p> <ul style="list-style-type: none"> <li>2022 Without Development AM and PM (Base)</li> <li>2025 Without Development AM and PM</li> <li>2025 With Development AM and PM (DfT Circular 01/2022 Opening Year Assessment)</li> <li>2035 Without development AM and PM</li> <li>2035 With development AM and PM</li> <li>2035 Without development + Isley Woodhouse and EM Freeports AM and PM</li> <li>2035 With development + Isley Woodhouse and EM Freeports AM and PM</li> </ul>	



	<p>c. The focus will be to understand the impacts of the EMGP2 development first off, but there is a commitment to understanding the impacts of the wider Freeport and Isley Walton schemes that are included in the sensitivity scenario.</p> <p>d. GN confirmed that the 2022 base VISSIM model has been signed off and then asked when the 2025 without and with development scenarios are being derived as these are the key comparisons from a NH perspective.</p> <p>e. GN confirmed that the TWG have not seen the forecast traffic flow matrices. The principle of the methodology has been seen but the detail hasn't been provided, which could be complicated and so GN confirmed he is happy to support BWB on deriving these. PW thanked GN and confirmed that BWB would liaise with GN on this if required and can indeed provide further information in the New Year.</p> <p>f. MC confirmed that there are two parts to BWBs current work, the first is the traffic flow furnessing and deriving future forecast flows. BWB are working through this in line with the methodology set out and will be issuing a Technical Note explaining the process and the final traffic flow matrices. However, BWB noted GN's kind offer and will liaise with him directly if required.</p> <p>g. The other part is validating the individual LinSig and Junctions 10 models using the observed traffic flow data. For signal junctions this will be done by comparing the Degree of Saturation (DoS) of all arms with the aim of having modelled vs observed DoS within +/-5%. For priority junctions the validation process will review the queues on each arm with the aim of having them within 2 pcus, again modelled vs observed. So far, 13 of the 15 junctions are validating well and BWB are currently making tweaks to the final two junctions before producing a Technical Note and issuing this to the TWG. This is the next piece of work being completed, hopefully by 22 December 2023, if not, in early January.</p> <p>h. GN confirmed the above sounds reasonable and for the details to be issued to the TWG. PW confirmed all details will be shared albeit BWB may have a review of the modelling results ahead of the next TWG to get an initial understanding but reiterated that BWB will be following the agreed procedures.</p> <p>i. IR asked whether a sequence of tasks could be provided to understand what order things are being worked on for the TWG to then plan broad timescales for reviewing etc. PW confirmed that a sequencing schedule can be provided. GN also confirmed that sequencing would be useful.</p> <p>j. GN summarised where the current work is at from a NH perspective:</p> <p>i. base VISSIM is agreed</p>	<p><b>BWB</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>
--	---	---

	<p>ii. the base position with off-site junctions is being worked on by BWB</p> <p>iii. before building the forecast matrices, GN is happy to support BWB. GN reiterated that the matrices are shared before being input to the models to avoid abortive work.</p> <p>k. GN confirmed that for NH purposes, the Circular 01/2022 directs us to 2025 as the opening year and then the forecast focuses on 2035. Developing the sensitivity test forecasts could be tricky as it is likely to be a congested scenario, so GN is committed to working with BWB to derive the traffic flows. PW confirmed BWB will keep everyone updated on the steps but made it clear that BWB/SEGRO are committed to completing the sensitivity test scenario.</p> <p>l. GN asked if there is a timeframe for commissioning AECOM to extract the sensitivity flows within the first quarter of next year. PW confirmed that BWB are working on bitesize chunks and at the moment the focus is on understanding the impacts of the EMGP2 development in the first instance. However, fees have been agreed for AECOM to undertake additional work on the sensitivity testing, but nevertheless BWB are committed to looking at this as it is crucial to understand the capacity of the network at the 'end game' with all wider schemes in place.</p> <p>m. GN thanked PW and confirmed that his feedback to NH will be that the 2035 sensitivity assessment is committed to being undertaken, albeit at a later stage.</p> <p>n. PW summarised the discussions and next steps:</p> <ul style="list-style-type: none"> <li>i. BWB will consider the sensitivity test discussions.</li> <li>ii. BWB will set out the game plan and sequencing for next steps.</li> <li>iii. First of all, BWB will aim to get back on the junction model validation and initial traffic flow furnessing and side of things.</li> <li>iv. BWB will liaise with AECOM to sense check the information that's outstanding.</li> <li>v. Any discussions on mitigation and sensitivity test assessments are committed to being undertaken.</li> <li>vi. BWB will set out the meetings for 2024 so that these are booked in.</li> </ul> <p>o. PW asked if anyone had anything to add. GN asked about the sustainable transport strategy being led by SM (ITP) and if this element is still being taken forward at this stage.</p> <p>p. PW confirmed that ITP have done quite a bit of work to date, including having discussions with bus operators and how these would serve the site, supported by dedicated shuttle services, which was documented in previous minutes. ITP are continuing with the Travel Plan side of things following the success at EMGP2, which acts as a great case study for EMGP2.</p> <p>q. GN suggested whether consideration should be given to the level of incentivisation, building on EMGP1 to achieve modal shift. This will be drawn to ITP's attention.</p>	<p><b>BWB</b></p> <p><b>BWB/ITP</b></p>
--	--	---

	r. PW thanked GN and all attendees for their assistance.	
--	--	--

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 11 JANUARY 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Catherine Townend (CT) – National Highways (NH)  
 Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Ian Rigby (IR) – Segro  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES/ALSO ISSUED TO:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 George Nock (GN) – Jacobs; NH transport consultant  
 Steve Freek (SF) – NH  
 Lisa Guest (LG) – NCityC  
 Alex Gray, Laura Good, Tom Baker and Sonny Tolofari – LCountyC Network Data Intelligence  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM

**MINUTES:**

Agenda item	Action
<p><b>1 Review of December minutes/actions</b></p> <p>a. PW reviewed the December 2023 minutes and actions:</p> <ul style="list-style-type: none"> <li>i. TWG meetings have been scheduled for 2024.</li> <li>ii. A revised programme has been produced which will be discussed as part of this agenda.</li> <li>iii. BWB issued IR a plan showing the 17 junctions in the study area.</li> <li>iv. BWB are in the process of furnishing the traffic flows so will issue these and the Technical Note once complete.</li> <li>v. The base Junctions 10 and LinSig model validation note was issued on 05/01/24.</li> <li>vi. BWB are committed to the sensitivity test but beforehand are considering the EMGP2 development impacts in isolation.</li> <li>vii. BWB have spoken to AECOM about the additional information and will revert back to IR with their fees.</li> <li>viii. ITP have drafted a Sustainable Transport Strategy and Framework Travel Plan as far as practically possible, which BWB have had sight of and will be incorporating into the Transport Assessment.</li> </ul>	
<p><b>2 Base Model Validation Note</b></p> <p>a. MC summarised the base model validation note, the purpose of which was to demonstrate how the Junctions 10/LinSig models validate against observed surveys:</p> <ul style="list-style-type: none"> <li>i. This included the initial 15 junctions, excluding the two on the A453</li> </ul>	

	<p>near Ratcliffe on Soar under NCountyC's remit at this stage of the process, and the junctions in VISSIM which were included in the base VISSIM note.</p> <ul style="list-style-type: none"> <li>ii. For the Junctions 10 priority junctions, the validation process compares queue lengths from the surveys against those in the model, with the aim of queues being within 2 pcus on all arms. The results show that observed vs modelled queues are within 2 pcus for all junctions and hence are validating well.</li> <li>iii. For signal junctions in LinSig, the validation process compares the Degree of Saturation (DoS) from the model against the surveys with the aim of having the DoS within 5%, in line with TfL modeling guidelines.</li> <li>iv. Part of the validation process required adjustment of the signal timings particularly where certain junctions have varying cycle times given LinSig models on fixed timings. It also considered lane usage to ensure that traffic flows within each lane mirrored the surveys as closely as possible.</li> <li>v. The results show that DoS on all arms are within 5% of observed values and hence the LinSig models are validating well.</li> </ul> <p>b. PW confirmed that BWB would not chase the TWG for comments but would appreciate any feedback at this stage if there are any queries.</p>	<b>LCountyC/ NH/NCountyC</b>
<b>3</b>	<p><b>Initial Modelling Exercise of EMGP2 Impacts</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed BWB have ran an initial assessment of the LinSig and Junctions 10 models to get an understanding of the EMGP2 impacts.</li> <li>b. MC shared a spreadsheet on screen showing a summary of the initial modelling work: <ul style="list-style-type: none"> <li>i. The majority of junctions on the A453 to the west of the site (A453/EMA signals to A453/Walton Hill signals) are expected to operate within capacity, except for the A453/The Green priority junction which is exceeding capacity at the 2035 future year in the AM peak. However, it is likely that as part of the wider mitigation at the Strategic Road Network, traffic would be drawn away from this junction.</li> <li>ii. There appears to be capacity issues at A50 Junction 1 however there is a lot of traffic routing through Castle Donington to A50 Junction 1 because of congestion at M1 Junction 24 so this could also change as part of the wider mitigation strategy.</li> <li>iii. Once the traffic flows have been furnished for the remaining junctions, BWB will complete the modelling and share the findings with the TWG.</li> <li>iv. Overall, the initial findings show that the focus is likely to be on the VISSIM junctions which we've always expected and perhaps A50 Junction 1, but we will revert back when further modelling has been undertaken.</li> </ul> </li> </ul>	

4	<p><b>Programme for 2024</b></p> <ul style="list-style-type: none"> <li>a. PW shared the revised programme on screen which has been updated from the programme shared with the TWG back in 2023. <ul style="list-style-type: none"> <li>i. The programme keeps a running tab on when key pieces of information were issued and when responses were received from the authorities, which helps provide a reminder on key milestones. It goes right back to when the scoping note was issued and agreeing the EMFM proforma.</li> <li>ii. The base junction validation note has been added onto the completed tasks section and BWB will welcome any comments from the TWG.</li> <li>iii. The upcoming tasks to be completed include the furnishing Technical Note and issue of the matrices, building on the methodology already set out.</li> <li>iv. It also includes understanding initial modelling results for the 17 junctions, preparation of initial mitigation designs for EMGP2 before sharing these with the TWG and them being coded into the EMFM to understand the wider benefits.</li> <li>v. Complete the sensitivity assessment to understand the mitigation needed for the wider freeport and Isley Waltons schemes.</li> </ul> </li> <li>b. PW confirmed that BWB have already looked at mitigation at Finger Farm and also have ideas for what can be done at M1 Junction 24 (noting there is less land available) which we will test initially, as this may draw traffic back to the Strategic Road Network and remove the need to look at the local junctions in as much detail. There will be an iterative process in finalising the mitigation to achieve nil detriment from an EMGP2 perspective and also consideration for the wider sensitivity test afterwards.</li> <li>c. PW confirmed that following mitigation being agreed/finalised, BWB would undertake Road Safety Audit and WCHAR associated work.</li> <li>d. PW confirmed that the programme would be shared with the TWG.</li> <li>e. IR provided an update on the Freeport and that the Governments time period has been extended from 2026 to 2031. SEGRO are working with the Freeport to show the progress that has been made and demonstrating that a credible plan is in place. The Freeport plan is due to be submitted in February.</li> <li>f. IR also confirmed that SEGRO are preparing a letter to support a Section 35 Agreement to get permission to go down the DCO route, which is to be submitted by the end of January. There is a 28 day turnaround on a getting a response to the letter, so hopefully we will know where we are heading by the end of February.</li> <li>g. IR confirmed that SEGRO are looking for seed funding to get more power to the site for electric vehicle charging points and should hear back in February on this. Therefore, SEGRO should have a good idea of where the scheme is heading by the end of February.</li> </ul>	<p><b>BWB</b></p> <p><b>BWB</b></p>
---	--	-------------------------------------

5	<p><b>Isley Walton Scoping Opinion</b></p> <ul style="list-style-type: none"> <li>a. PW mentioned that BWB have been sent a copy of the Isley Walton scoping opinion via NWLDC. The scheme comprises a residential mixed-use scheme of: <ul style="list-style-type: none"> <li>i. 4,250 dwellings.</li> <li>ii. Combined primary and secondary school.</li> <li>iii. 2 new primary schools</li> <li>iv. New local centre</li> <li>v. 2 neighbourhood centres</li> <li>vi. 16 hectares of employment space of 16 hectares</li> <li>vii. Battery plant</li> <li>viii. Green and associated infrastructure</li> </ul> </li> <li>b. PW mentioned the Isley Walton timescales are for development to commence in 2027 with first occupation (opening year) in 2029 and completion date of 2049. Many of the authorities in this TWG will no doubt be involved in the Isley Walton TWG.</li> <li>c. PW mentioned that NWLDC are included in the Isley Walton TWG, which hasn't been the case for EMGP2. albeit DG and SS are in regular contact with them but there could be scope to invite NWLDC to future meetings should this be considered beneficial.</li> <li>d. TBe mentioned that NCountyC, NCityC, DCountyC and DCityC transport authorities will be passing responsibility to the new East Midlands County Combined Authority. TBe asked to be kept informed on any updates on Isley Walton, which PW confirmed would be the case.</li> <li>e. PW mentioned that time has passed since the first TWG meeting and as it stands the EMGP2 modelling assesses a 2025 opening year and 2035 future year. There could perhaps be further conversations about the opening/future years in later TWG meetings but in the meantime BWB will continue on the current agreed basis and associated modelling work.</li> </ul>	
6	<p><b>AoB</b></p> <ul style="list-style-type: none"> <li>a. ACH was pleased to hear that mitigation designs will go through an iterative process. However, the furnishing traffic flow spreadsheets have not yet been issued, so Jacobs will need sight of these before reviewing any mitigation. PW confirmed that these will be issued shortly.</li> <li>b. ACH thanked PW for the validation report and that Jacobs will review this once the final two junctions have been validated. ACH asked for the signal data and model input files in order to carry out a review. PW confirmed that BWB can provide the models and signal data.</li> <li>c. ACH queried the manipulation of the LinSig model validation and whether the discussion on lane usage was to do with removing illegal</li> </ul>	<p><b>BWB</b></p> <p><b>BWB</b></p>

	<p>movements. MC confirmed that this is the partly case but also confirmed that models have been adjusted where lanes in the same direction are not being equally used to try and reflect the surveys as best as possible.</p> <p>d. PW confirmed that BWB would look at each junction at face value and input the usual geometry and hope that this would reflect the surveys, although this isn't always the case and so the in these instances the models have been adjusted to make sure they represent what takes place on the ground. ACH thanked BWB for their clarification.</p> <p>e. PW thanked the attendees for their time and ended the meeting.</p>	
--	---	--



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 8 FEBRUARY 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – Jacobs; NH transport consultant  
 Ian Rigby (IR) – Segro  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES/ALSO ISSUED TO:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Lisa Guest (LG) – NCityC  
 Alex Gray, Laura Good, Tom Baker and Sonny Tolofari – LCountyC Network Data Intelligence  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM

**MINUTES:**

Agenda item	Action
<p><b>1 Review of January minutes/actions</b></p> <p>a. PW reviewed the January 2024 minutes and actions:</p> <ul style="list-style-type: none"> <li>i. The base junction validation note was revised on 01.02.24 and issued to TWG.</li> <li>ii. Furnessing technical note and spreadsheets were issued on 05.02.24.</li> <li>iii. The programme was shared with the TWG.</li> <li>iv. BWB will be looking at wider mitigation in due course and re-running this through the strategic model at the appropriate time.</li> <li>v. Signal plan data and model input files have been issued.</li> </ul> <p>b. SF mentioned that a consented mitigation scheme is designed at A50J1 involving the signalisation of the Trent Lane arm.</p> <p>c. PW confirmed that BWB is unaware of this scheme and asked for a copy of the drawing.</p> <p>d. SF mentioned that the scheme is still under the Stage 1 RSA stage and so will issue a copy of the current drawing, which are available on the planning portal. The Stage 1 RSA relates to a variation of condition application.</p> <p>e. PW asked if everyone else was comfortable with the January 2024 minutes.</p> <p>f. CT mentioned that in Section 5 of the January 2024 minutes 'Isley Walton Scoping Opinion' it states that the scheme is within the East</p>	<p align="center"><b>NH</b></p>

	Midlands County Combined Authority (EMCCA) area. This is not the case as the scheme is located in Leicestershire who are not part of the EMCCA.	
<b>2</b>	<p><b>SEGRO project update</b></p> <p>a. IR provided an update on the EMGP2 project. The main three strands of work are:</p> <ul style="list-style-type: none"> <li>i. Section 35 note has been submitted, which is a request to go down the DCO route.</li> <li>ii. Seed funding application has been submitted to the Freeport.</li> <li>iii. SEGRO are providing support to the Freeport timescales extension.</li> </ul> <p>b. All three strands of work should come together by March and so at the next TWG meeting, the strategy should be confirmed.</p>	
<b>3</b>	<p><b>Base Junction Model Validation Note</b></p> <p>a. PW confirmed BWB issued the note on 01.02.24 which was updated to include the last two junctions on the A453.</p> <p>b. GN confirmed NH have instructed Jacobs on reviewing the note and the junctions on the SRN in particular (7 locations altogether). The aim is to send something to NH for issue next week. There are a few typical comments on certain models relating to saturation flows, lane configuration, signal timing etc.</p> <p>c. GN said with regard to M1J25 there are comments on the supply side, such as how it is coded, free flow lanes, bus stop lanes etc. There will be an exercise for BWB to go through the comments and re-submit the models for sign off.</p> <p>d. PW thanked GN and confirmed BWB would work through the comments when they are issued.</p> <p>e. GN acknowledged the difficulty in BWB sending the video footage because of the size of the file and confirmed that he would be in touch if footage is required of certain arms/time periods. PW confirmed that BWB would aim to assist where possible with supplying video footage and this could involve a Teams call if that is more efficient.</p> <p>f. MC confirmed that from a NH perspective, the junctions in VISSIM have been validated which are more key and closer to the site, whilst M1J5 lies slightly further afield, albeit appreciates a valid model is still required.</p>	<p><b>NH</b></p> <p><b>BWB</b></p>
<b>4</b>	<p><b>Furnessing Technical Note</b></p> <p>a. PW confirmed that the revised furnessing Technical Note and spreadsheets were issued on 05.01.24. BWB have received comments from GN which we can talk through in the meeting.</p>	

	<p>b. MC confirmed that the note was revised to set out the methodology adopted to furnish the traffic flows, in line with Option 4 as previously agreed. The junctions in VISSIM were furnished using cordoned matrices because of differences in the volume of traffic entering vs exiting the network.</p> <p>c. MC confirmed that BWB have now received new matrices from the EMFM from AECOM including the 2025 PM peak hour scenario where anomalies were previously identified. However, there are very minor differences in the flows across all scenarios from the original issued information because of the way the model works when extracting information but it is limited to a few PCUs so BWB will set this out and compare, rather than re-running the numbers through VISSIM as the differences would not affect the results. BWB will therefore re-issue the latest spreadsheets.</p> <p>d. MC thanked GN for his comments and confirmed that BWB will work through these. They appear to be more on technicalities rather than comments that will significantly change the numbers.</p> <p>e. GN agreed and asked for a final check on mathematics and for labels to be added to clarify things where needed. The labelling convention should be consistent i.e. 1, 2, 3 vs A, B, C. The first review undertaken was on the technicalities and once NH are happy with that a more thorough review on the demand side will be undertaken.</p> <p>f. ACH confirmed that Jacobs do not expect traffic flows to materially change from the comments raised but want to double check this once the changes have been made to the spreadsheets. There was an F to F movement in the spreadsheet that needs checking. MC confirmed that this has been checked and the 0 movement is correct.</p> <p>g. GN asked if the spreadsheets will be revised to the TWG once changes have been made. PW confirmed that everything will be reissued to all.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>5</b>	<p><b>Initial Modelling Summary</b></p> <p>a. PW mentioned that BWB have undertaken an initial modelling exercise of EMGP2 in isolation to get an initial understanding of where impacts are likely to occur and where mitigation may need to be focused.</p> <p>b. MC confirmed that modelling has been undertaken with the current furnished flows, which may change, but provides a guide at this stage.</p> <p>c. MC shared the modelling summary spreadsheet for both 2025/35 future years during both the AM and PM peak hours. The initial results are identifying impacts triggered by EMGP2 at:</p> <ul style="list-style-type: none"> <li>i. M1J24</li> <li>ii. EMGP1 signals</li> <li>iii. Finger Farm</li> <li>iv. A50J1</li> </ul>	

	<p>v. A453/The Green priority junction (leading to Diseworth)</p> <p>d. MC mentioned that capacity problems are identified at M1J25 but there are no impacts from EMGP2 and the performance actually improves in that scenario, possibly due to background traffic re-distribution.</p> <p>e. MC confirmed that mitigation will therefore be focused on the above five junctions initially where the designs can be coded into the EMFM to understand the wider benefits and whether traffic re-routing through villages is drawn back to the SRN. BWB have been instructed to look at mitigation between now and the end of March/start of April.</p> <p>f. PW confirmed there is logic in what the findings are showing and the locations where mitigation is needed. BWB have ideas of what mitigation can be delivered:</p> <ul style="list-style-type: none"> <li>i. BWB have options designed at Finger Farm</li> <li>ii. EMGP1 signals might be more minor and limited to MOVA adjustments.</li> <li>iii. M1J24 has less public highway available but BWB have ideas for mitigation, so we will make a start testing things to refer back next month with headline updates/suggestions.</li> <li>iv. BWB can also take on board SF comments with regard to A50J1 and there is also scope to signalise the A453/The Green junction if needed.</li> </ul> <p>g. CT confirmed NH are looking forward to what can be done at M1J24. She asked whether BWB are aware of the scheme being proposed as part of the Ratcliffe on Soar LDO, albeit there are concerns with the mitigation. PW confirmed that BWB are aware and will review this and build on it where possible.</p> <p>h. GN confirmed that as a guide the initial results are useful. The strategic model showed high levels of re-distribution of light vehicles away from the SRN, hence the principle of where mitigation is being focused aligns with results of strategic modelling.</p> <p>i. GN confirmed that the base models will however need amending first of all as this could change the base position for some of the junctions. In terms of VISSIM modelling, clarification will be needed as to how the matrices have been developed and NH can then review this.</p> <p>j. GN suggested that caution is given the models where they are operating well over 100% and so the review will be focusing on queue lengths, delays, journey times etc. to understand whether they are material and if there is storage space to accommodate the expected levels of congestion.</p> <p>k. GN asked that before BWB go too far with modelling, if NH could see the VISSIM modelling to ensure that abortive work is not undertaken. PW confirmed that BWB would continue liaising with the TWG and</p>	
--	---	--

	<p>sharing information to make sure we work collaboratively as it will only provide benefit further down the line.</p> <p>l. TBe confirmed that NCityC's main concerns relate to capacity at M1J25 and the parallel routes on the A453, A52 and A50 where drivers may switch between routes to avoid congestion. If there is congestion on the M1, then this will spill back onto more local roads towards Nottingham and Derby.</p> <p>m. PW acknowledged TBe concerns and understands that rat-running through villages is expected to occur as shown in strategic modelling. However, BWB do not consider that EMGP2 is causing a significant impact at M1J25, albeit this may not be the case when we assess the impacts cumulatively with the other sensitivity schemes.</p> <p>n. TBe suggested whether bus priority could be introduced as part of the mitigation to ensure that bus routes aren't impacted by the congestion. PW confirmed that various options can be looked at.</p> <p>o. GN mentioned that in previous meetings discussions were held about a sustainable transport strategy. PW confirmed that ITP are leading on the Sustainable Transport Strategy and Travel Plan on the back of the success from EMG Phase 1, so BWB are working in tandem with them. SM of ITP will be joining back in the meetings from March 2024, however the Travel Plan and Sustainable Transport Strategy are drafted, which remains a key part of the mitigation strategy.</p> <p>p. GN asked whether details of the Sustainable Transport Strategy can be shared now, as this is front and centre of the overall strategy. PW confirmed that BWB would liaise with SEGRO to understand the status of these document and whether they can be shared.</p> <p>q. MC asked whether BWB should be looking at the benefits of the Travel Plan and Sustainable Transport Strategy on reducing traffic and whether this should be taken into account in the modelling and subsequent mitigation.</p> <p>r. GN confirmed that his comments were more from a national policy perspective and that whilst he is pleased to see that physical mitigation is being delivered, this is in parallel to a Sustainable Transport Strategy.</p>	<b>BWB</b>
<b>6</b>	<b>NWLDC Local Plan</b> <p>a. PW gave an update on the NWLDC Local Plan as it is directly related to the sensitivity testing that BWB have committed to undertake.</p> <p>b. PW confirmed IR went to a meeting with the Freeport and AECOM on 12.01.24 and AECOM have been commissioned to undertake strategic modelling on behalf of NWLDC to assess the Local Plan. BWB understand they are looking at 2041 and 2051 with full scale of Freeport and Isley Walton sites. There is then focus on looking at</p>	

	<p>mitigation on the SRN.</p> <p>c. PW confirmed that given the slight delay with the EMGP2 application due to the land ownership issues, work has been undertaken elsewhere. NWLDC are looking at May/June 2024 timescales for their findings, which can then be compared with BWB's on behalf of EMGP2. Hence, it could distance BWB from potentially doing the sensitivity work. However, BWB will keep liaising with IR to understand progress on this.</p> <p>d. CT suggested there could be two pieces of work as the NWLDC Local Plan excludes the Freeport sites at Ratcliffe on Soar as it is in a different local authority area. The second piece could be looking specifically at the Freeports but this would be outside the Local Plan work.</p> <p>e. GN queried PW comments on how this could distance BWB from the sensitivity test.</p> <p>f. PW responded saying that if the work is being undertaken elsewhere and NWLDC are potentially taking ownership of testing the wider Freeport and Isley Walton sites then the work will be done separately, hence no point doubling up, however if this is not the case, then BWB can still undertake this and would be happy to do so.</p> <p>g. GN asked about timescales for receiving the sensitivity test scenario results from BWB</p> <p>h. PW confirmed that BWB have received the strategic modelling results for the sensitivity test from AECOM which has been shared with the TWG. In terms of detailed modelling, BWB haven't gone into as much detail yet, so will share this once it is available after testing the impacts of EMGP2. BWB have been looking at this initially to advise SEGRO on the impacts of EMGP2 in isolation before then considering the sensitivity assessment.</p> <p>i. GN asked whether BWB are still committed to running the sensitivity test scenario through the VISSIM model and feeding the results back to the TWG.</p> <p>j. PW confirmed yes, albeit BWB have not had fees agreed to do that work yet because we're working on a phased approach. If the work undertaken by NWLDC does not cover all the sites we need to look at from the Freeport, then BWB will undertake this.</p> <p>k. GN summarised his thoughts in that he understands BWB may draw on other resources where possible to understand the wider impacts of the sensitivity test, however if this is limited then BWB would undertake this work. PW agreed that this is correct as the authorities will need the answers to the wider sensitivity assessment to make the conclusions on the EMGP2 development.</p> <p>l. PW thanked everyone for their time and closed the meeting.</p>	
--	--	--



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 14 MARCH 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Harry Horsley (HH) – Leicestershire County Council (LCountyC); for part  
 Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
 George Nock (GN), Alain Chandler-Hurst (ACH) & Fiona Ahmed (FA) – Jacobs; NH transport consultant  
 Paul Wilson (PW) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES/ALSO ISSUED TO:**

Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Alex Gray, Laura Good and Sonny Tolofari – LCountyC Network Data Intelligence  
 Ian Rigby (IR) – Segro  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 Matt Corner (MC) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

Agenda item	Action
<b>1 Introduction</b>  a. FA introduced herself who works at Jacobs and will be supporting GN on the project.	
<b>2 Review of February 2024 Meeting Minutes</b>  a. PW went through the February 2024 meeting minutes: <ul style="list-style-type: none"> <li>i. A50 Junction 1 consented mitigation scheme has been received from NH. SF mentioned that it includes the signalisation of the Tamworth Road arm as well as the Trent Lane arm. PW confirmed that BWB would pick this up.</li> <li>ii. PW thanked GN for his comments on the base junction models, which BWB have been working on. BWB will come back to GN on those comments shortly.</li> <li>iii. PW confirmed that the Sustainable Transport Strategy has been drafted internally by ITP. The document is not ready to be issued yet but lots of work has been undertaken, which BWB will be feeding into.</li> </ul> b. PW asked if anyone had any further comments on the February 2024 minutes. No further comments were received hence they are agreed.	<b>BWB</b>



3	<p><b>Latest Position from SEGRO</b></p> <p>a. PW confirmed IR is on leave but caught up with him prior. SEGRO has received confirmation that the project can go down the Development Consent Order (DCO) route and is waiting on seed funding for the application. The wider Freeport project timescales are also hopefully to be extended.</p> <p>b. The draft NWLDC Local Plan has been issued which includes the EMGP2 site. Segro support said plan.</p>	
4	<p><b>NWLDC Local Plan Modelling Work</b></p> <p>a. PW reiterated that wider modelling work is being undertaken by AECOM on behalf of NWLDC as part of the Local Plan, which includes all the Freeport site and Isley Walton. BWB will seek an update on progress on this modelling work via Ian, to ensure that work is not being doubled up, but BWB are willing to assist with the sensitivity testing as previous proposed if that is ultimately still required at the appropriate point.</p> <p>b. PW confirmed that letters have been received from SEGRO between Ruth Jones (MP for Rushcliffe) and Guy Opperman (MP and Minister for Roads and Local Transport) enquiring about upgrading M1 Junction 24 using redirected funds from HS2. The letter confirms that:</p> <p style="padding-left: 40px;"><i>“National Highways have agreed to work closely with the East Midlands development company to provide technical advice and assurance on the proposals. Discussions have already begun to ensure a robust Transport Assessment is provided including understanding the impacts of the proposals on the strategic road network in order for National Highways to ensure its continued safe and efficient operation”</i></p> <p>c. PW summarised that from discussions held with SEGRO, further work is being undertaken from a modelling perspective to understand the impacts of the wider Freeport and Isley Walton schemes and BWB will continue to receive feedback on this work to ensure that the sensitivity assessment is being undertaken one way or another.</p>	BWB/IR
5	<p><b>Modelling Validation Note</b></p> <p>a. PW thanked GN for providing BWB with comments on the base model validation note.</p> <p>b. VD confirmed that BWB have reviewed GN's comments and have subsequently included additional detail highlighting any assumptions made on the base models.</p> <p>c. VD said in terms of furnishing the flows for the VISSIM model it was noticed that movements between A50 and M1 North were currently included in the furnishing spreadsheet but excluded from VISSIM and</p>	

	<p>so these movements have been removed from the furnessing spreadsheet to avoid overestimating flows.</p> <p>d. VD confirmed that some movements travelling southbound on the M1 to the A50 are using Junction 24 instead of Junction 24A. Hence, BWB's intention is to retain what was observed in the surveys and exclude the additional flows from that movement, on the assumption that the majority of vehicles would use Junction 24A instead.</p> <p>e. ACH agreed this sounds reasonable but if this could be sent in writing. VD confirmed that the revised information will be issued, setting out any assumptions.</p> <p>f. GN also confirmed this sounds reasonable. GN asked for clarification as to what information will be sent. VD confirmed that the re-furnished spreadsheets will be sent within the next few working days (<i>subsequently issued on Monday 18/3/24</i>).</p> <p>g. GN asked whether the LinSig and Junctions 10 base model comments have been looked at. VD confirmed that BWB have gone through all comments and are creating an Excel tracker explaining how each comment has been addressed. The Technical Note will also be updated with these details.</p> <p>h. GN asked if the Excel tracker could be sent with an additional column for GN to add comments to and when this tracker will be issued. VD suggested that the tracker will be sent early next week latest with a column for GN comments as well as the revised furnished flows and base LinSig and Junctions 10 models.</p> <p>i. PW thanked Jacobs for their comments and confirmed that BWB will send through all the information to hopefully reach an agreement on the furnessing methodology and base models.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>6</b>	<p><b>AOB</b></p> <p>a. GN reverted back to the sensitivity test and clarified the planning requirements ask for an assessment of the impacts of the proposed development . This is against the relative backdrop from any changes at the with development scenario. The other Freeport and Isley Walton sites would represent the 'reference case' and then the comparative case would be the 'do something' which includes the EMGP2 development on top. The expectation is for the residual cumulative impacts to be mitigated against this backdrop against which the EMGP2 development can be assessed.</p> <p>b. PW confirmed that he sees the process as being step by step as BWB are interested in understanding the impacts of the EMGP2 development but appreciate the wider need to understand the mitigation requirements with all planned development in place. GN confirmed that he is interested in understanding the impacts of the EMGP2 development in isolation and appreciates the</p>	

	<p>sequential process of testing the wider planned growth.</p> <p>c. GN asked whether we are likely to be in a position over the next few weeks to start looking at the impacts and mitigation. PW confirmed that BWB's current position is to understand the impacts and mitigation requirements for EMGP2 and then summarise this within a Technical Note to circulate to the TWG.</p> <p>d. GN confirmed that this would give us a theoretical understanding only given base models have not been signed off and the building of VISSIM forecasting still needs agreeing. However, GN appreciates the step-by-step process.</p> <p>e. PW asked if anyone has AOB. No further comments received, so PW thanked everyone and ended the meeting.</p>	
--	--	--

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 11 APRIL 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Harry Horsley (HH) – Leicestershire County Council (LCountyC); for part  
 Catherine Townend (CT) – National Highways (NH)  
 George Nock (GN), Alain Chandler-Hurst (ACH) & Fiona Ahmed (FA) – Jacobs; NH transport consultant  
 Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultant

**APOLOGIES/ALSO ISSUED TO:**

Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Steve Freek (SF) – National Highways (NH)  
 Alex Gray, Laura Good and Sonny Tolofari – LCountyC Network Data Intelligence  
 Ian Rigby (IR) – Segro  
 Jon Parker (JP) & Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 Paul Wilson (PW) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

Agenda item	Action
<p><b>1 Review of March 2024 Meeting Minutes</b></p> <p>a. MC went through the March 2024 meeting minutes:</p> <ul style="list-style-type: none"> <li>i. GN sent comments on the base Junctions 10/Linsig models, which VD has actioned and re-issued on 5 April 2024.</li> <li>ii. BWB are still in discussion with Segro on the wider transport modelling and it appears further modeling is being undertaken by the Freeport and Midlands Connect.</li> <li>iii. Jacobs query has been clarified regarding the movement from M1 north to A50 using Junction 24 instead of Junction 24a.</li> <li>iv. An Excel tracker has been sent to Jacobs with amendments to the base junction models.</li> </ul> <p>b. MC presented the comments received from GN on the March 2024 minutes confirming BWB have no concerns with the changes but asked for clarification as to what the base position is for BWB to then assess the impacts of EMG2 against i.e. 2035 without development, or 2035 without development sensitivity (including Freeport and Isley Walton).</p> <p>c. GN referred to minutes on 10<sup>th</sup> November 2023 and the scenarios that BWB agreed to undertake, which include:</p> <ul style="list-style-type: none"> <li>i. Base</li> <li>ii. Opening year</li> </ul>	

	<p>iii. Future year forecast</p> <p>iv. Additional scenarios including 2035 Freeport and Isley Walton (without development)</p> <p>v. Additional scenarios including 2035 Freeport and Isley Walton (with development)</p> <p>d. GN said that this was the agreed position and reflected in the programme on 11<sup>th</sup> January 2024. GN asked if BWB are committed to the programme.</p> <p>e. MC confirmed that BWB are committed to undertaking the above scenarios. The EMFM has already been run for scenario v. however not iv. The focus at the moment has been on EMG2 impacts but BWB will be commissioning this final modelling scenario run.</p> <p>f. MC mentioned that a key part of the DCO process is fixing the red line, which includes all off-site highway mitigation. At the moment, mitigation is being considered to address significant impacts triggered by EMG2 on top of the 2025/35 without development scenario, however, questioned whether mitigation should be considered where significant impacts of EMG2 are identified on top of the 2035 sensitivity assessment (without development) scenario.</p> <p>g. GN deferred to the local highway authority. HH questioned why the additional sensitivity scenario (excluding EMG2) has not been commissioned yet as it was requested in summer 2023, given the Freeports are emerging. It is a scenario that is required for the authorities to assess the impacts.</p> <p>h. MC confirmed this is because of how BWB have been commissioned but also because of the delay in submitting the application noting that the opening year of 2025 is next year so conscious that the opening year/future year may need extending. However, as the Freeport and Isley Walton schemes aren't committed, MC questioned whether this would meet TAG requirements?</p> <p>i. HH confirmed that the Freeport sites are designations and the NWLDC Reg 18 identifies these as future growth aspirations and so have formal status. This also includes the Castle Donington residential development and so all of these need to be considered in line with the NPPF. If a cumulative delivery strategy is identified to accommodate the planned growth then this would be welcomed by LCountyC.</p> <p>j. MC acknowledged HH comments and confirmed that BWB would be considering EMG2 impacts over and above the base position, whichever that is.</p> <p>k. HH confirmed that future infrastructure needs identifying to accommodate the planned growth in the area. BWB would then consider the proportionate impact of the EMG2 development, noting it is a smaller scheme compared to the other developments.</p>	
--	---	--

	<p>l. GN suggested that the process BWB are taking is useful. We need to make sure a meaningful output is obtained. The current scenarios being undertaken builds up this profile and the TWG feed into the process. In terms of the 2025 opening year, which may need shifting to 2026/27 for example, BWB would need to consider the additional growth during this period. It doesn't mean the modelling needs re-running, however a critical approach to understanding the difference in the base position is needed. This is something that the TWG can assist with.</p> <p>m. MC confirmed that BWB would need to check the uncertainty log to understand what schemes would be included in the higher opening year/future year and whether this is material or if the difference is small. GN agreed this is correct.</p> <p>n. GN asked whether the above confirms the core scenario. MC confirmed BWB would liaise with Segro and the team on the outstanding modelling scenario. BWB will continue working on the initial mitigation strategy with the aim of finalising this by the end of April.</p> <p>o. GN mentioned that in terms of wider modelling, at this stage there are a lot of unknowns about who is doing this, what schemes are included etc. and so BWB would not want to be reliant on that being undertaken correctly, hence the above scenarios give BWB control.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>2</b>	<p><b>Revised traffic flow furnessing spreadsheets.</b></p> <p>a. MC summarised the current position; BWB received initial comments from GN on the furnessing spreadsheets at the beginning of February 2024 and BWB issued revised spreadsheets at the end of February 2024. The latest comments received from GN were in April 2024 querying high growth for certain turning movements, particularly at M1 Junction 25.</p> <p>b. VD confirmed that GN comments related to the standalone junction furnessing spreadsheets. The query related to significant growth in turning movements at M1J25. This appears to be a result of the forecast year without development scenario and hence by the introduction of committed developments.</p> <p>c. GN confirmed that generally Jacobs are content with the furnessing methodology adopted and the derived forecast traffic flows. However, advised for BWB to be critical of any significant changes in flows and to be mindful of this when running the models.</p> <p>d. VD confirmed that BWB will review the outputs and justify any potential re-routing issues.</p> <p>e. GN agreed with the above and suggested this is particularly crucial for the Linsig models.</p> <p>f. MC asked whether the furnessed traffic flows for the junctions in VISSIM are acceptable.</p>	

	g. ACH confirmed that with the clarification received regarding the M1 to A50 movements at M1 Junction 24, Jacobs are happy with the furnished flows. Hence, these are now agreed.	
<b>3</b>	<p><b>Revised base model validation note</b></p> <p>a. MC summarised the current position; BWB issued base models in early 2024 and comments were received from GN in mid-February which have been updated and re-issued on 5 April. MC asked whether GN has reviewed the models and BWB's comments within the excel tracker.</p> <p>b. GN confirmed that Jacobs have downloaded the base models and have been instructed by NH to review them.</p> <p>c. MC mentioned that with the base VISSIM model being agreed, BWB can focus on the initial mitigation strategy for the junctions within this part of the network. Once BWB receive comments on the base Junctions 10/Linsig models BWB can then expand on the mitigation strategy.</p> <p>d. GN expects to have comments on the base models before the May TWG meeting. GN also asked if BWB would be presenting the modelling results to the TWG.</p> <p>e. MC confirmed that BWB will be combining the initial modelling results and mitigation strategy within a Technical Note that can be shared with the TWG. The aim is to share this internally to the Client by the end of April before it is shared with the TWG.</p>	<p><b>Jacobs</b></p> <p><b>BWB</b></p>
<b>4</b>	<p><b>Next steps</b></p> <p>a. MC summarised the next steps:</p> <ul style="list-style-type: none"> <li>i. GN to review the base junctions models.</li> <li>ii. BWB to continue working through the modelling and initial mitigation strategy for the EMG2 scenario.</li> <li>iii. BWB to liaise with Segro/AECOM about running the additional sensitivity test scenario that excludes EMG2.</li> <li>iv. BWB to review the revised opening and future years and the significance of any changes.</li> </ul>	<p><b>GN</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>
<b>5</b>	<p><b>AOB</b></p> <p>a. MC mentioned that the focus of recent TWG meetings has been on the Transport Assessment, however BWB are starting to gear up with the transport ES Chapter. This will start with the sifting criteria to agree the study area, taking a critical approach to this. BWB can set out an initial methodology for the sifting criteria and share this with the TWG for agreement before agreeing the study area.</p> <p>b. VD expanded on the above confirming BWB would start with setting</p>	

	<p>out the criteria for the ES study area sifting process.</p> <p>c. GN confirmed that there are different regulations guiding the ES, but it is good to see that these things are now being considered. GN reiterated that a critical item is the outstanding modelling scenario run for the sensitivity assessment and for this to be commissioned sooner rather than later.</p> <p>d. MC confirmed BWB would take this action away and remain with the 2025 opening year and 2035 future year as a direct comparison. In terms of the quantum of development included for the Freeport and Isley Walton schemes this has been agreed so it will be a case of simply removing EMG2 from this scenario.</p> <p>e. HH confirmed that this is correct, however the modeling might not include the NWLDC Reg 18 growth and therefore this needs considering within any re-runs.</p> <p>f. MC confirmed that the model currently includes all of the Freeport schemes and part of the Isley Walton scheme that is expected to be built by 2035 (circa 1,000 homes plus some employment/education development).</p> <p>g. HH confirmed this is fine, however the Castle Donington scheme in particular that is included in the Reg 18 might not be included which comprises 1,000 dwellings. As the forecast years have not been run as agreed, it is reasonable for this site to be considered and a rationale provided one way or another. The best way to check is to review the uncertainty log and compare this to the Reg 18 document to identify what is missing from what could come forward through the NWLDC Local Plan process.</p> <p>h. VD suggested whether the additional Reg 18 developments could be manually added on to the base scenario.</p> <p>i. HH advised that this may not be suitable based on the quantum of development but that it is an iterative case as to what developments are not included and then consideration as to whether models need re-running, in discussion with NWLDC.</p> <p>j. GN agreed and that discussions should be held with the TWG and AECOM to understand what sites are excluded from the uncertainty log and then consider the significance of this and how any differences are dealt with in the modelling. MC confirmed that BWB will take this away as an action.</p> <p>k. MC thanked everyone for their time and ended the meeting.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
--	---	-------------------------------------



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 9 MAY 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Daniel Sullivan (DS) & Tom Boylan (TB) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Catherine Townend (CT) – National Highways (NH)  
 George Nock (GN), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Paul Wilson (PW), Simon Hilditch (SH), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Steve Freek (SF) – National Highways (NH)  
 Alex Gray, Laura Good and Sonny Tolofari – LCountyC Network Data Intelligence  
 Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojasavljevic (SS) – Delta Planning  
 Kit Tang (KT) & Clare Norris (CN) – AECOM  
 Alain Chandler-Hurst – Jacobs

**MINUTES:**

Agenda item		Action
1	<p><b>Review of April 2024 Meeting Minutes</b></p> <p>a. GN introduced FA who is part of the Jacobs team and also JB, who is a specialist consultant working on behalf of Jacobs for National Highways. Both will be strong contributors throughout the DCO process.</p> <p>b. PW thanked GN and confirmed that JB will be added to the mailing list and meeting invites moving forward.</p> <p>c. PW introduced SH who is Director of the Transport and Infrastructure Design team at BWB overseeing highway design related matters. SH had significant input on EMG1 and in particular the design of the off-site highway improvements in the area, who will be joining the TWG meetings moving forward and to be added to the mailing list/meeting invites.</p> <p>d. PW went through actions from the April 2024 meeting minutes:</p> <p>i. Discussions have since been held on the assessment years and uncertainty log information, which will be discussed in today's meeting.</p> <p>ii. The initial EMG2 modelling and mitigation work has been carried out and will be shared in today's meeting.</p> <p>iii. GN issued further comments on the base junction models, which BWB are working through.</p>	<p></p> <p><b>PW</b></p> <p><b>PW</b></p>

	<p>e. PW highlighted one final amendment to the April 2024 minutes, where reference is made to a '2025' future year, rather than '2035', which will therefore be updated.</p> <p>f. PW asked if there were any further comments on the April 2024 minutes. No further comments received, hence the revised version will be issued.</p>	<b>BWB</b>
<b>2</b>	<p><b>Client project update</b></p> <p>a. IR confirmed that a full project design team launch meeting is scheduled for Wednesday 15 May 2024. BWB will be key to determining timeframes, which are currently being dictated by the Freeport and have already been extended from 2026 to 2031, hence Segro need to build out as much as possible during that time. The programme shows that statutory consultation is being aimed for September/October 2024 with the DCO submission in February 2025. The meeting on Wednesday is to ensure that all disciplines are aligned and that information will be available to tie the programme together. Therefore, the TWG is instrumental in allowing that process to happen and ensure that when we reach examination, Statement of Common Grounds are aligned.</p> <p>b. JB thanked IR but suggested that timescales will be challenging particularly when accounting for time to review outputs. JB asked who is project managing the DCO application. IR confirmed that he is project manager. Throughout past DCO's, Segro have not commissioned external project managers.</p> <p>c. IR set out that SH has a lot of DCO experience and so will help with that process. SH agreed that BWB will be the engineering interface between the lawyers and Segro as the Client.</p> <p>d. FA picked up on the timescales for the statutory consultation and how this aligns with BWB's programme (which currently excludes statutory consultations). Will a Transport Assessment therefore be delivered after the consultation and if so, what information will be available?</p> <p>e. IR suggested that not all information will be available, nor should it be required, but sufficient information should be available for the purposes of hosting a productive consultation event.</p> <p>f. PW confirmed that BWB have been drafting the Transport Assessment during the pre-application process but won't have a complete draft available for the consultation. However, as to be discussed later in the meeting, BWB should have a good understanding of the modelling work and highway mitigation before the consultation. There will be a series of notes, discussions and agreements between now and then, so we are confident where we are heading from a mitigation perspective to allow us to sufficiently consult. A first note on the 'pure' EMG2 mitigation is to be issued imminently.</p> <p>g. PW confirmed that BWB would add the consultation into the</p>	<b>BWB</b>

	programme.	
<b>3</b>	<p><b>Base model position</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed that BWB have received further comments from GN on the base junction models. BWB will be working through those and issue revised models with an updated tracker/report to GN shortly.</li> <li>b. VD suggested that revised information should be available next week. GN suggested that BWB revise the models and tracker and issue those for agreement prior to updating the Technical Note for expediency and in case there are any further comments. GN asked whether they could be issued early w/c 13<sup>th</sup> May 2025, which VD agreed to.</li> </ul>	<b>BWB</b>
<b>4</b>	<p><b>Update on current commission re 'pure' EMG2 impacts and associated mitigation</b></p> <ul style="list-style-type: none"> <li>a. PW provided an update and confirmed that whilst initial mitigation has been considered for the EMG2 impacts in isolation, there is still an importance for a coherent Sustainable Transport Strategy to be at the forefront of any final mitigation and SM at ITP, who is leading on this aspect, will be re-joining the TWG meetings moving forward. We are currently proposing a new bus interchange and a new pedestrian/cycle link on the A453 between EMG1 and EMG2, for example, as well as other infrastructure improvements.</li> <li>b. PW said that in the meantime, mitigation has been considered for the 2035 future year whereby EMG2 traffic has been manually added onto the without development scenario to avoid background traffic reassigning away from congested areas, to show a true and worst-case understanding of the impacts.</li> <li>c. PW mentioned that the mitigation schemes are merely a starting point and BWB appreciate that further work is required to look at the sensitivity assessment which would include for a much higher volume of traffic within the study area.</li> <li>d. PW reminded the TWG that 17 junctions are currently included in the study area, of which 5 were originally expected to require mitigation, including A50 Junction 1. Since receiving information from SF on the committed improvement scheme at A50 Junction 1, capacity has improved at said junction, meaning BWB are of the opinion that this junction can be excluded from further mitigation as part of this exercise at this stage of the process.</li> <li>e. PW shared general arrangement drawings of mitigation schemes on his screen and VD summarised the details: <ul style="list-style-type: none"> <li>i. A453/The Green priority junction would be signalised. Further consideration is required of forward visibility because of level differences along the carriageway.</li> </ul> </li> </ul>	

	<p>ii. A453/EMG1 gyratory requires two lanes for right turning movements into EMG1 from A453 north to limit queues on the circulatory.</p> <p>iii. At Finger Farm, partial signalisation of the junction is proposed, with the M1 northbound Slip and A453 western arm and their respective adjacent circulatory carriageway to be signalised. The M1 northbound slip would be widened to 4 lanes on the approach to the junction, and the A453 northern exit is proposed to be widened to three lanes which subsequently merges into two lanes to tie in with existing highway arrangements. The western circulatory carriageway will be widened to four lanes prior to A453 western exit and three lanes adjacent to A453 approach to the junction. In addition, the EM point scheme has been included for in the mitigation design. There are also further opportunities to increase capacity by providing a segregated left turn lane, if ultimately required.</p> <p>f. SH asked NH whether they could provide an update on the status of the EM point scheme and timescales for building the access. CT agreed to provide this.</p> <p>g. In terms of M1 Junction 24, VD summarised the current proposed mitigation scheme:</p> <ul style="list-style-type: none"> <li>i. The VISSIM model shows lots of weaving between the A50 and M1 southbound merge on approach to the gyratory . Therefore, the carriageway has been widened from the A50 diverge and joining with the M1 merge to three lanes all the way along the A50 approach.</li> <li>ii. Lane markings have been reallocated along Remembrance Way (eastern approach) to balance flows towards M1 and A50 across three lanes.</li> <li>iii. The M1 northbound off-slip flare has been extended to provide more vehicle stacking capacity. The circulatory has been widened at the western side of the gyratory to provide more lanes towards the M1 north.</li> <li>iv. Lanes on the A453 northbound approach have been reallocated to allow for two lanes heading onto the M1 northbound.</li> <li>v. The A50 exit slip has been widened to have a longer distance of three lanes before merging back to two lanes (circa 150m to 200m).</li> </ul> <p>h. VD reiterated that the mitigation described above could accommodate development traffic manually added onto the 2035 without development scenario as a worst-case.</p> <p>i. PW confirmed that these drawings will be included in a Technical Note that can be shared with the TWG. Whilst more work is still required for the sensitivity assessment, the next key steps are to agree the details for the revised modelling, following which the above mitigation can</p>	<p><b>NH</b></p> <p><b>BWB</b></p>
--	--	------------------------------------

	be re-checked to understand whether it would cause any changes.	
<b>5</b>	<p><b>Updated programme</b></p> <ul style="list-style-type: none"> <li>a. PW presented the programme on screen. This now includes the base junction models and we have a strategy to finalise those with GN.</li> <li>b. PW summarised key steps of the programme. <ul style="list-style-type: none"> <li>j. The initial modelling of 17 junctions has now completed from a BWB perspective with the report to be issued to the TWG shortly.</li> <li>ii. A key step is to agree the modelling requirements for any revised strategic modelling. This is to account for a delay to the planning application and increasing the 2025 opening year/2035 future year.</li> <li>iii. The modelling sensitivity assessment then needs looking at and the wider mitigation to accommodate these schemes and what level of mitigation will be tied to EMG2.</li> <li>iv. Other key areas of ES chapter, HGV routing strategies, Construction Traffic Management, WCHAR, RSA and completing formal reports, SoCG etc. in preparation of the DCO submission.</li> </ul> </li> <li>c. PW confirmed that BWB have a meeting scheduled for Thursday 16 May with LCC NDI team/AECOM to discuss the revised modelling and the uncertainty log changes etc.</li> <li>d. CT mentioned that in terms of mitigation on the SRN, the process has recently been updated and so any schemes need to be designed to more detail in accordance with the preliminary design standard in DMRB. NH has a guide that can be provided. Any departures from standard should be identified on the drawings and Approval in Principle(s) will be required prior to planning being granted, which typically take 4 months to process.</li> <li>e. SH thanked CT and confirmed that BWB have worked through these processes in the past, including for EMG1. Fundamentally, if there is mitigation that Segro will be delivering, we need to understand boundaries, earthworks, geometry, visibility, signage etc. and anything that dictates red lines and order limits for the DCO. BWB will produce Technical Notes setting out what BWB will be providing in terms of detail for the DCO and if there is a need for investigation to confirm the viability/deliverability of the schemes or AiPs for structures etc. BWB will prepare a first draft of that report.</li> <li>f. JB commented on the programme and that it looks as though September/October 2024 could be busy with lots of activity being undertaken around that time near the consultation. Therefore, it would be useful to have a more 'granular', week-by-week programme, including time for reviews and meeting dates to help plan resourcing. PW confirmed this could be provided at the appropriate time.</li> <li>g. GN pointed out that timescales will also be dependent on third parties</li> </ul>	<p><b>BWB</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>

	<p>providing information, such as AECOM on the modeling side of things and hence to be mindful of this. GN asked whether the EMG2 mitigation designs are for 'information only'. PW suggested they can only really be for information only at this stage of the process because the modeling will need to be updated with the latest EMFM outputs and so the schemes may change. The schemes will not be sufficient in accommodating the sensitivity test assessments. GN raised concerns that the previous forecasting will be superseded and developing mitigation on that basis is abortive work.</p> <p>h. GN reiterated that base models have not been agreed yet, although notes these will be received from VD. On the forecasting element the TWG have not seen this yet. PW confirmed BWB can provide the information however it builds on previous agreements made (VISSIM base model, furnessing methodology etc.).</p>	
<b>6</b>	<p><b>Assessment years (2029 opening and 2039 future)</b></p> <p>a. PW mentioned that with the passage of time since the TWG began, BWB have been reconsidering the opening and future years. This has now been confirmed as 2029, with a revised future year of 2039. BWB have been reviewing the uncertainty log and it appears that most of the information will remain unchanged, however there are certain schemes that may now need including.</p> <p>b. PW asked whether it is a fair assumption for BWB to update the assessment years?</p> <p>c. GN suggested that given it is a shift of four years the uncertainty log will no doubt need revising, however the methodology for furnessing traffic flows etc. has been agreed. GN suggested that the methodology will be to update the EMFM proforma with NDI for agreement with the TWG before commissioning the modelling.</p> <p>d. PW confirmed that BWB would provide an update following the meeting with LCC NDI and AECOM on Thursday 16 May 2024. What BWB are already aware of is that the Park Lane, Castle Donington scheme, is now a draft allocation in the NWLDC Local Plan and needs to be included in the sensitivity assessment. Furthermore, whilst we agreed a quantum of development to be assessed for Isley Walton, this may need amending to account for the higher 2039 future year.</p> <p>e. PW confirmed that BWB have checked with Delta Planning and with the exception of those two schemes, there do not appear to be too many other changes required, but this will be confirmed with LCC NDI and AECOM. AECOM have agreed to liaise with NWLDC and get an agreement to use available planning data for any additional schemes and check in on other schemes such as the 'Newlands', Mercia Park Phase 2 and A50 Junction 1 signalisation scheme (which BWB understand are already included).</p> <p>f. GN agreed with the approach of meeting LCC NDI and AECOM, but</p>	<b>BWB</b>

	<p>asked that the TWG are provided with the assumptions to be included in the forecasting and copies of the uncertainty log. PW confirmed that this information will be provided and is the best way to agree the details before commissioning the modelling.</p> <p>g. GN asked whether preference is for comments to be received on the revised inputs (modelling uncertainty log etc.) or the high-level mitigation schemes to be issued. PW confirmed that the priority should be given to the modelling inputs to allow AECOM to be commissioned swiftly.</p>	
<b>7</b>	<p><b>Vision and Validate</b></p> <p>a. IR provided a summary of a recent meeting with LCountyC and confirmed that 'vision and validate' came about at an event Kate Bedson (Segro) attended whilst speaking to Ann Carruthers (Director of Environment and Transport at LCountyC) who was keen to see vision and validate implemented at EMG2. Segro are keen to have a detailed Sustainable Transport Strategy and Travel Plan, following the success at EMG1, to provide evidence that seeks to reduce the amount of traffic and how this changes the physical highway mitigation required.</p> <p>b. PW reiterated that the EMG2 Transport Assessment currently adopts the original agreed EMG1 Transport Assessment trip rates for 0800 to 0900 and 1700 to 1800 hours (to match the hours considered in EMFM), which were higher compared to more recent TRICS data. The information provided by ITP of traffic surveys at EMG1 showed that the actual trip rates are circa half of what we are assessing, which is due to the success of the Sustainable Transport Strategy and Travel Plan. Whilst LCountyC would still like to see the worst-case trip rates assessed, BWB could run a separate scenario with reduced trip rates that mirror those recorded from EMG1 assuming there will be similar success at EMG2.</p> <p>c. GN agreed with PW and that the DfT position recommends vision and validate. However, a monitor and manage strategy is required along with a strategy for harnessing the Active Travel and public transport strategy, with input from ITP.</p> <p>d. PW agreed that the vision needs to align with the Travel Plan and Sustainable Transport Strategy which would then be monitored and managed appropriately. There is no reason why the success achieved at EMG1 cannot be replicated at EMG2. GN agreed and suggested that there could even be further improvements given the data and knowledge we have.</p> <p>e. SH mentioned that the Sustainable Transport Strategy is fundamental and to be delivered from the outset. However, there could in effect be two mitigation options; the first to accommodate the worst-case trips, and a second assuming that the Travel Plan benefits work. BWB confirmed that they would liaise with the lawyers about how this is</p>	<b>BWB</b>



	dealt with legally through the DCO, however there will be options, including the potential to secure funds through a S106.	
<b>8</b>	<p><b>Next steps/AoB</b></p> <ul style="list-style-type: none"> <li>a. PW set out the next steps, the key being to agree the revised EMFM proforma, uncertainty log etc. for the revised modelling work required because of the passage of time.</li> <li>b. PW suggested if EMG2 is operational by 2032, for example, would an interim mitigation scheme be needed to accommodate EMG2? Consideration would then be given to determining whether any further mitigation above that could be proportioned between all the sites within the sensitivity assessment. There will be a significant amount of traffic that needs considering, noting BWB will be looking at the difference with EMG2 on top, which would be minimal compared to Isley Woodhouse and the Ratcliffe Freeport site, for example.</li> <li>c. GN suggested that we reach an agreement first of all on the items discussed earlier in the meeting before we consider mechanisms, but referred to Paragraph 51 of DfT Circular 01/22 which states the developer should identify when mitigation is required and this should form part of the scenario testing.</li> <li>d. PW asked if there was any other business. No other comments received. PW thanked the TWG and ended the meeting.</li> </ul>	



**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 13 JUNE 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Harry Horsley (HH) & Adrian Whiteman (AM) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Kit Tang (KT) & Jonathan Morrow (JM) – AECOM  
 Laura Good (LG) – LCountyC Network Data Intelligence  
 Steph Meyers (SM) & Phillip Coe (PC) – ITP  
 Steve Harley (SHa) – Oxalis Planning  
 Paul Wilson (PW), Simon Hilditch (SHi), Matt Corner (MC) & – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Catherine Townend (CT) & Steve Freek (SF) – National Highways (NH)  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Alain Chandler-Hurst (ACH) – Jacobs  
 Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item		Action
<b>1</b>	<p><b>Introductions and New Attendees</b></p> <p>a. PW welcomed everyone and asked for brief introductions from new attendees:</p> <ul style="list-style-type: none"> <li>i. AW works with Harry Horsley within LCountyC Highways Development Management.</li> <li>ii. PC works at ITP on sustainable transport.</li> <li>iii. JM is supporting KT at AECOM and has previously met a few people on the call.</li> <li>iv. SHa is another one of the planning consultants working with Segro on the EMG2 scheme. He mentioned his role on the TWG is to mainly to stay updated on relevant matters and assist where possible considering his experience of working in the local area.</li> </ul> <p>b. PW thanked AW, PC, JM and SHa and discussed the format of future meetings, proposing to stick with the second Thursday of the month at 10:00 AM but extending the meetings to at least an hour and a half. PW confirmed he would update the meeting invite and remove people who no longer attend regularly.</p>	<p><b>PW</b></p>

2	<p><b>Review of May's meeting minutes</b></p> <p>a. PW shared May's meeting minutes.</p> <ul style="list-style-type: none"> <li>i. JB and SHi were added to the emailing list.</li> <li>ii. BWB have produced a programme which will be discussed further in this meeting.</li> <li>iii. The base model validation report was re-issued.</li> <li>iv. BWB have not received any further comments on the status of the EM Point scheme. FA/JB both don't know the current position, but JB is speaking to CT Monday and can refer back. SHa confirmed that he can also review the EM Point scheme and also refer back.</li> <li>v. BWB met with LCC NDI and AECOM to inform updating the Proforma and uncertainty log information.</li> <li>vi. SM is on the call today to discuss the Sustainable Transport Strategy.</li> </ul> <p>b. PW confirmed BWB will update May's minutes with GN comments. PW asked if there were any further comments on May's meeting minutes. No further comments received.</p>	<p><b>JB/CT/SHa</b></p> <p><b>PW</b></p>
3	<p><b>Client Update</b></p> <p>a. IR provided an update on the project:</p> <ul style="list-style-type: none"> <li>i. Public consultation planned from Autumn 2024 onwards</li> <li>ii. DCO submission planned for Q1 2025.</li> <li>iii. Continued modelling throughout the year.</li> <li>iv. Public consultation on current mitigation plans, with the assumption that they are effective.</li> <li>v. Potential risk if modelling does not align with mitigation, but committed to adapting as needed and if significant changes are identified then a re-consultation will be undertaken. At the end, as a group we will get to where we need to ahead of the examination.</li> </ul> <p>b. IR emphasised the need for collaboration similar to two other successful projects in the past. The planning teams will be working on other topics in the background.</p> <p>c. JB expressed support for the strategy but emphasised the importance of agreeing on the modelling as soon as possible due to its inherent challenges. There is a significant risk that agreements can be made in principle, but the modelling shows something different, which then needs further work.</p> <p>d. IR accepted that whilst there is a risk we would not have a mitigation scheme that does not support the modelling and therefore if further time is needed later on to refine the mitigation, then that will be undertaken. Segro would not be cutting corners on the modelling/mitigation.</p>	

	<p>e. IR also confirmed that Segro are bringing developers together to look at a strategic solution at M1 Junction 24 which is progressing. Once further information can be shared then it will be.</p> <p>f. FA picked up on an email sent earlier in the week about changes to floor areas affecting the basis for the modelling and mitigation strategy, which is another risk as NH won't be clear on the impact and trip generation from the site.</p> <p>g. HH questioned the commissioning of new modelling and whether this will account for changes in floor areas. PW confirmed that the revised modelling will take into account changes in floor areas.</p> <p>h. PW reiterated that the current mitigation is based on development traffic manually added on top of forecast without development flows and so is robust but appreciates the risk.</p> <p>i. HH mentioned that if there are changes to the forecast years then the planned growth and cumulative impacts will also change and hence this could affect the current mitigation strategy. Hence, there are concerns with the suitability of the previous suggested mitigation.</p> <p>j. PW acknowledged HH comments but clarified that the previous mitigation aimed to maximise capacity using land within the highway boundary, albeit appreciates it needs reviewing and sense checked. As IR alluded to, there is also work going on behind the scenes to look at things holistically which will be shared in due course.</p> <p>k. HH asked whether there are details of the sustainable transport strategy so that we're not just focusing on highway mitigation. PW confirmed that work has been undertaken which is a top agenda item at the meeting.</p> <p>l. SHi confirmed that the sustainable transport strategy is actually ahead of the highway mitigation because the team recognise the importance of getting it right; lots of work has been undertaken by SM who will provide an update.</p>	
<b>4</b>	<p><b>Programme</b></p> <p>a. SHi shared the programme on screen and summarised the key milestones. Fundamentally it achieves the 2025 Q1 submission assuming that the TWG work together and with big assumptions on the mitigation and modelling, which BWB have tried to de-risk as much as possible.</p> <p>i. Towards the end of next week, the hope is that we have the revised PRTM modelling details signed off to instruct AECOM, which is a priority task.</p> <p>ii. Once AECOM is commissioned there are a whole series of other things we can then work on such as vision and validate.</p> <p>iii. By August, the aim is to have an updated set out PRTM data.</p>	

	<p>(line 30 of the programme shows this) along with updated junction models, meaning we will be back at the same position as where we are now to re-consider mitigation.</p> <ul style="list-style-type: none"> <li>iv. Before then we will progress some of the mitigation design but won't go to consultation until we have re-modelled the mitigation schemes and confirmed that it is still the right solution or not.</li> <li>v. PRTM modelling of the with mitigation scenario will then run in parallel to the consultation, which is planned for November through to January.</li> <li>vi. Once BWB are comfortable with the modelling and mitigation there are then the Road Safety Audits and finalisation of the DCO plans before making the actual submission.</li> </ul> <p>b. SHi said there is a lot of detail, but the programme will be shared and everyone can review in their own time and provide comments.</p> <p>c. HH asked when the red line would be fixed. SHi said ideally the red line will be fixed at the public consultation stage but that it goes back to the risk point that if something different comes out of the modelling it will need changing and there are programme implications to this. The need for any re-consultation/changes to the red line will depend on the significance of any changes to the mitigation, if they are minor then changes to the red line may not be required but if they are major then this could require changes.</p> <p>d. HH highlighted that the authorities review of detailed designs could impact the red line and so this needs consideration. SHi agreed that this is a risk item but that the authorities will have a chance to review the details before submission.</p> <p>e. SHi suggested that having early comments on the principles will be key and once we have more confidence on the modelling then BWB will have more confidence on the mitigation. Therefore, receiving comments on a without prejudice basis would be appreciated.</p> <p>f. JB thanked BWB for producing the programme and will review it once it is sent and asked what BWB will be consulting on.</p> <p>g. SHi confirmed that BWB would consult on the mitigation schemes that have been designed at that point. There will also be as much ES information available as possible.</p> <p>h. SHa added that there will be draft ES chapters and other documents tied to the legal sides of the DCO. We will therefore consult on a wide range of documents, including non-transport related documents but it will be a comprehensive pack of information.</p> <p>i. IR questioned whether some targeted re-consultation was required on Northampton Gateway. SHi confirmed this was required and can be targeted to specific people if changes are incurred to the schemes post consultation, which is the risk.</p>	<b>BWB</b>
--	--	------------

	<p>j. SHa said that if there are concerns about changes ahead of the examination then this will be dealt with beforehand.</p> <p>k. HH asked if there will be a modelling sign off process within the programme. SHi said there will be in effect a live Statement of Common Ground that keeps a log of when agreements have been made. BWB can work on this in the coming weeks and months.</p> <p>l. HH asked whether a SharePoint page can be made where documents can be shared and accessible to everyone. SH said BWB will take that away as an action and consider accordingly.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>5</b>	<p><b>Sustainable Transport Strategy</b></p> <p>a. SM shared a presentation and went through key headline points:</p> <ul style="list-style-type: none"> <li>i. Lots of work has been undertaken behind the scenes on sustainable transport, a lot of which feeds in from experience at EMG1, which is seeing great benefits.</li> <li>ii. Postcode locations of existing staff have been obtained (large proportion of staff live in Nottingham, Derby, Leicester).</li> <li>iii. Direct engagement has taken place with occupiers at EMG1 to maximise opportunities, particularly car sharing.</li> <li>iv. The single occupancy car Travel Plan targets across all five years are ahead of the 10-year target, hence with the right measures there are no reasons why similar success can't be achieved at EMG2.</li> <li>v. Year on year increases have been seen in the use of the on-site bus shuttle service (slight seasonal differences, with spikes in winter months)</li> <li>vi. The existing bus routes provide high frequency services connecting the key cities/towns in East Midlands.</li> <li>vii. Stakeholder engagement was undertaken and comments taken on board. We are now proposing a single point of access with the shuttle bus near the northeast corner close to Pegasus Business Park, which removes the need for buses to exit the site back onto the A453.</li> <li>viii. There would be two route options for pedestrians (Hyams Lane and a shared footway/cycleway along the main industrial road).</li> </ul> <p>b. SHi mentioned that the public transport interchange and shuttle service is similar to EMG1 and so people can go visit the existing arrangement if that would be useful.</p> <p>c. HH said that the changes pick up on a lot of the queries raised by LCountyC previously. It has been identified to increase capacity on certain services so questioned whether conversations have been held with other developers to understand future growth and ensure that a plan is in place to accommodate all developments in the area.</p>	

	<p>d. IR confirmed that public transport is part of those conversations but just not to the level of detail as SM has set out on EMG1. HH asked whether conversations could continue as it is important but it's positive to see that the sustainable transport strategy is being developed holistically. IR confirmed conversations would continue.</p> <p>e. AA asked whether bus pinch points on the wider network have been considered to ensure maximum efficiency of public transport? SM said from a capacity perspective, ITP have been liaising with Trent Barton and the strategy is to focus investment where capacity is needed and there are issues within parts of the network so more services may be needed. In terms of congestion on the network I'll have to revert to BWB</p> <p>f. SHi suggested that this is raised with the operators and whether they have experience of congestion. BWB will be looking at increasing capacity around M1 Junction 24 and the site to ensure that journey times are not significantly affected.</p> <p>g. SM confirmed that Trent Barton have raised comments about the configuration of the bus interchange at EMG1 which will be taken on board at EMG2. ITP can liaise with them about pinch points on the wider network during next meetings.</p> <p>h. PW asked SM if she could send the presentation which will be circulated to the TWG (this has since been sent and issued to the TWG).</p> <p>i. SM asked that if anyone has any questions then she is happy to arrange separate meetings to discuss matters further.</p> <p>j. <i>FA in leaving the meeting asked for the following items to be considered, which SM has provided a subsequent response to:</i></p> <ol style="list-style-type: none"> <li>1. <i>Bus priority at Pegasus will be reviewed as part of the modelling mitigation measures along with AA's point about pinch points on the bus network. ITP will discuss with operators where there are constraints on the network.</i></li> <li>2. <i>Hours of operation of the Skylink services mean there are already a good base level of evening and weekend services. The Skylink Derby and Skylink Nottingham operate 24/7 and Skylink Express operates from 4am – 11pm. This can be enhanced as required.</i></li> <li>3. <i>In terms of Travel Plan monitoring, ITP will be proposing a similar approach to EMG1 where we have:</i> <ul style="list-style-type: none"> <li>• <i>Annual employee travel surveys.</i></li> <li>• <i>Annual vehicle counts.</i></li> <li>• <i>Monitoring patronage of internal shuttle bus.</i></li> </ul> </li> </ol>	<p><b>SM</b></p> <p><b>SM</b></p>
--	---	-----------------------------------

	<ul style="list-style-type: none"> <li>• An annual employee focus group.</li> <li>• Public transport satisfaction surveys.</li> <li>• Whilst not transport related, we will also propose monitoring employee headcount monthly and shift pattern monitoring.</li> </ul> <p>4. In terms of enforcement, at EMG1 the Sustainable Transport Working Group oversees the delivery of the Travel Plan and Public Transport Strategy. This group is conditioned within the DCO for the site to meet every 6 months. SEGRO / the Travel Plan Co-ordinator would report process regarding sustainable commuting. If the site is failing to meet targets, the fallback measures would be reviewed by the group and allocated from the ring-fenced Travel Plan Fund. ITP would suggest expanding this Sustainable Transport Working Group to cover EMG1 and EMG2 to look holistically at sustainable transport co-ordination across both sites.</p>	
<b>6</b>	<p><b>Base Model Validation</b></p> <p>a. PW confirmed BWB have received agreements from GN (on behalf of NH) and TBo regarding the two junctions on NCountyC's network. GN undertook a review of all 17 junctions including those on the local road network, so whether HH or AW are comfortable with that or if they have any questions.</p> <p>b. HH asked if PW can re-send the documents. PW will follow up.</p> <p>c. HH said there is a risk that because the modelling is being re-visited there is a risk that the junctions in the study area may change. PW agreed that the study area could change but that the list covers a number of key junctions in the area.</p> <p>d. HH said that LCountyC need to review previous discussions about junctions requested before committing to reviewing base models.</p>	<p><b>BWB</b></p> <p><b>HH</b></p>
<b>7</b>	<p><b>Trip rates</b></p> <p>a. PW confirmed that mezzanines are to now be included in the assessment work with an assumed 33% uplift on the floor area. The development GFA would therefore be increased to 400,000sqm with the 100,000sqm mezzanine floorspace applied to the B8 use only.</p> <p>b. PW mentioned in terms of trip rates for the mezzanines, traffic data was received for EMG1 in 2022 which showed that even with mezzanines built out, the surveyed trip rates are still lower than what was originally assessed in the Transport Assessment. In addition, for the Amazon scheme at Bardon, Leicestershire, it was agreed that a 50% reduction to the trip rates could be attributed to the mezzanine, which also followed through on the Northampton Gateway Segro scheme with NH.</p> <p>c. HH suggested that if we have traffic data for EMG1 (which includes</p>	



	<p>mezzanines) then have BWB considered adopting those surveyed trip rates? PW suggested BWB can provide a comparison between the 2022 and 2023 surveyed data at EMG1. The current trip rates are from the Transport Assessment for EMG1 and BWB would not want to change at this stage because of timescales.</p> <p>d. HH questioned why BWB would not use the surveyed rates at EMG1 given the similarities in the developments/mezzanines? SHi suggested that the surveyed trip rates can be used for the vision and validate assessment.</p> <p>e. PW confirmed that whilst it would be relevant to use the EMG1 surveyed trip rates, timescales are critical and so BWB would prefer to retain the agreed EMG1 Transport Assessment trip rates and then run a vision and validate assessment using the surveyed trip rates.</p> <p>f. PW said that the difference between the agreed trip rates and those surveyed at EMG1 is approximately 20% based on the network peaks.</p> <p>g. HH asked if BWB have looked at the shoulder peaks and whether surveyed data can be provided for earlier hours? PW confirmed that such information is available and can be considered further.</p> <p>h. HH asked what BWB are looking to receive sign off on in terms of the trip generation. PW said that ideally BWB were seeking in principle agreement to continue using the previously agreed trip rates and the reductions for the mezzanine element.</p> <p>i. HH suggested that whilst the EMG1 Transport Assessment trip rates were agreed previously, this was because other data sources were not available at that time, which has now changed.</p> <p>j. PW confirmed that BWB will provide the data from EMG1 but will take a view on the trip generation given the timescales. HH suggested that timescales may not be too different because evidence is still required to sign off the 50% mezzanine reduction and referencing historic planning applications is not sufficient evidence.</p> <p>k. MC suggested that as part of the Scoping Note, BWB presented a variety of different trip rates, and LCountyC confirmed that they would want to see the original EMG1 TA trip rates adopted given this was previously agreed and because we don't know whether the benefits of the Sustainable Transport Strategy at EMG1 will have the same impact at EMG2.</p> <p>l. PW suggested therefore whether we continue with the agreed trip rates but provide a comparison using the EMG1 surveyed data including the shoulder peaks.</p> <p>m. GN recapped on an email from 18/01/23 (MC to GN) with a trip rates profile throughout the day. An email was also sent earlier on 27/07/22 setting out NH views on the 2022 snapshot data to inform</p>	<p><b>SM/BWB</b></p> <p><b>BWB</b></p>
--	--	--



	<p>the mezzanine and hence GN would refer back to those for NH position. Overall, NH has concerns with not assessing the full GFA and does not have evidence on the impacts of mezzanines, but in terms of differences applying the full GFA would only equate to around 80 additional trips, so questioned whether this should be adopted for robustness and expediency. PW confirmed that BWB will consider this and revert back.</p> <p>n. DS position of using theoretical data vs actual data is that the original (theoretical) data is more robust. There are also questions whether the Sustainable Transport initiatives at EMG1 would continue and replicated at EMG2 as if not then the surveyed trip rates may not be suitable.</p> <p>o. SM said in terms of the buses, there is a commitment to continue the shuttle beyond the Travel Plan period. The proposal for EMG2 would be for it to operate in a similar way.</p>	<b>BWB</b>
<b>8</b>	<p><b>PRTM Proforma/Uncertainty Log</b></p> <p>a. PW said BWB have received comments from LCityC and NCountyC and asked whether LCC NDI/AECOM have reviewed them.</p> <p>b. KT questioned the St Margarets scheme in LCityC and whether this needs including because it does not have funding. AA said that levelling up funding has been agreed but the money has not been received. However, it is suggested it is included because of the side of the city it is on and because it is planned to happen.</p> <p>c. KT asked if AECOM can have a copy of the scheme drawing. AA said that the final design has not been agreed, but there is a concept design available which she can provide.</p> <p>d. AA questioned the Western Park Golf Course that is currently included in the uncertainty log. The site has not yet been allocated and therefore this should be clarified and potentially removed.</p> <p>e. KT asked if BWB could liaise with TB to get drawings of the A52 schemes.</p> <p>f. KT asked GN about Local Plan sites in Kegworth which may need including and AECOM can add them into the uncertainty log. There are also comments on Ratcliffe which has consent and therefore needs including in the without/with development scenario.</p> <p>g. GN agreed, but in terms of Ratcliffe it is heavily restricted by planning conditions and so we would not want the full development included but partial development should be,</p> <p>h. GN asked AECOM whether they will be provided with a forecasting report showing the modelling implications and a narrative etc. similar to before. KT confirmed AECOM would provide this.</p>	<p><b>AA</b></p> <p><b>AECOM</b></p> <p><b>TB/BWB</b></p> <p><b>SHa</b></p> <p><b>KT</b></p>

	<p>i. GN also asked that consideration is given to how traffic is loaded onto the network from the Isley Walton scheme and ensure that there is no congestion in the model.</p> <p>j. GN also raised another scheme 'Land north of Remembrance Way' and whether this should be included which is included in the Local Plan. PW confirmed BWB will review and take a view whether this scheme should be included. PW asked SHa to review and provide details.</p> <p>k. KT set out the approach for the modelling, the EMFM model will be used which has a base year of 2019. The WebTAG databook would be updated to the latest available. The base model validation work would not be repeated but checks will be taken to ensure there have been no significant changes. The forecast years have been changed as well as the access strategy and development trips, all of which will be updated.</p> <p>l. PW thanked KT and confirmed BWB's priority action is to confirm the development trip rates.</p> <p>m. HH asked whether the previous LMVR is still suitable. KT confirmed the model is the same, however flow difference plots will be provided within an Addendum to the previous LMVR so the TWG can see the differences. If there are large differences, then further conversations may be required but AECOM do not believe this will be the case.</p> <p>n. HH suggested that now the application is going down the DCO process, whether National Policy changes the modelling approach being undertaken and if this should be checked. PW confirmed that planning policy will be reviewed to ensure that the background growth and assessment methodology changes. SHa confirmed he can assist with this and review the legal/policy side of things.</p>	<p><b>KT</b></p> <p><b>SHa</b></p> <p><b>SHa</b></p>
<b>9</b>	<p><b>Mitigation</b></p> <p>a. SH said that a report has been circulated on the current mitigation scheme. Whilst this was previously 'for information only' it would be useful to have comments on the principle of the design on a without prejudice basis.</p> <p>b. GN confirmed he can feedback but asked whether this would come ahead of the trip rates. SH confirmed we need to get the modeling running so to prioritise this and then review the mitigation once the modeling has been commissioned.</p>	<p><b>NH/LCountyC</b></p>
<b>10</b>	<p><b>Covid Sensitivity Testing</b></p> <p>a. KT reiterated the base model is 2019 and so pre-Covid. The guidance suggests that the impacts of Covid is taken into account which an Inspector may ask. The approach options are fairly vague and amount of work varies but is something to think about.</p>	

	b. PW asked what the next steps would be. KT suggested that changing the base year is out of the question because of timescales. Instead, changes can be made to the forecast demand. AECOM can put together options and circulate those to the TWG for consideration.	<b>AECOM</b>
<b>11</b>	<b>AoB</b>  a. PW asked if there is any other business. No further comments were raised.	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 11 JULY 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Steve Freek (SF) – National Highways (NH)  
 Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Tom Boylan (TBo) & Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 George Nock (GN), Alain Chandler-Hurst (ACH), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Kit Tang (KT), Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Steph Meyers (SM) – ITP  
 Steve Harley (SHa) – Oxalis Planning  
 Paul Wilson (PW), Simon Hilditch (SHi), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Catherine Townend (CT) – National Highways (NH)  
 Adrian Whiteman (AM) – Leicestershire County Council (LCountyC)  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning

**MINUTES:**

Agenda item		Action
1	<p><b>Review of June's meeting minutes</b></p> <p>a. PW shared June's meeting minutes</p> <ul style="list-style-type: none"> <li>i. EM Point scheme is being included in the modelling. JB confirmed that the approach being undertaken is acceptable. IR confirmed that the scheme has been implemented. SF has no further knowledge of the scheme.</li> <li>ii. Revised May meeting minutes have been re-issued.</li> <li>iii. Programme has been produced and shared.</li> <li>iv. BWB to produce a SoCG that can be signed off once agreements are made.</li> <li>v. SharePoint page to be discussed internally at BWB.</li> <li>vi. SM will be giving another update on the public transport strategy taking on board FA comments from June's meeting.</li> <li>vii. PW to give an update on the shoulder peak hours in July's meeting.</li> <li>viii. It was agreed previously that the previously agreed trip rates will be applied to the entire mezzanine floorspace.</li> <li>ix. TBe provided drawings of A52 schemes.</li> <li>x. Discussions have been held over the sites to be included in the uncertainty log.</li> <li>xi. SHa provided an update hat the approach follows policy requirements for the DCO.</li> <li>xii. Covid sensitivity testing to be discussed at July's meeting.</li> </ul>	<p><b>BWB</b></p> <p><b>BWB</b></p>

	<p>b. HH said that the sign off process within the SoCG is for the whole project and not just tied to the modelling. PW confirmed BWB would produce that in a cover sheet format.</p> <p>c. IR asked for a template showing how documents can be signed off. This can then be circulated to the TWG before being finalised.</p> <p>d. PW asked if anyone had any changes to June's minutes. HH confirmed there are a couple of amendments which will be sent in writing.</p>	<b>HH</b>
<b>2</b>	<p><b>Client update</b></p> <p>a. IR gave an update on the strategic highways solution which is developing. A presentation was carried out to NH last week which is being presented to LCountyC once Rebecca Henson is back from leave. So far, the strategy seems to be well supported by everyone.</p> <p>b. IR also gave an update on the MAG application which Segro has commented on. In summary, Segro believes it is better for the entire site to come forward as one rather than individually to get the benefits of the masterplan. If the site comes forward as separate developments, then it would not receive the Freeport benefits.</p> <p>c. HH said it is positive that strategic highway improvements are being looked at but asked whether this includes public transport strategies. IR confirmed it includes public transport and active travel.</p> <p>d. JB questioned how the two planning applications and proposals would work in terms of the DCO. IR confirmed Segro are still communicating with the airport to try and agree commercial terms and bring the scheme forward as one single scheme. If there ends up being two applications, then legal planning advice will be needed.</p>	
<b>3</b>	<p><b>PRTM Proforma</b></p> <p>a. PW confirmed that to date Revision 10 has been sent, with NH and NCountyC confirming agreement to. Rev 11 has since been created taking on board LCountyC comments. PW shared Rev 11 on screen.</p> <p>i. A single point of access is now proposed for the modelling, which would be modelled with unconstrained capacity and would provide worst-case for the design of the roundabout. It should also have no bearing at any other off-site junctions. HH understood but highlighted it as a project risk and if the access strategy changes it should be included as part of mitigation model runs.</p> <p>ii. PW made some changes to references to the WebTAG data in line with comments raised by AECOM.</p> <p>iii. PW included reference to a '2022 forecast year' in line with comments raised by AECOM.</p>	

	<ul style="list-style-type: none"> <li>iv. PW made some changes to the modelling scenarios to keep consistency between 'with' and 'without' development.</li> <li>v. PW confirmed that construction traffic would be shared with the TWG prior to being modelled in PRTM. HH confirmed he would like to see construction traffic numbers prior.</li> <li>vi. PW deleted any reference to 'sensitivity tests'.</li> <li>vii. The 'project specific study area model validation report' box was ticked on the basis that AECOM will provide an Addendum to the previous LMVR.</li> <li>viii. The 'mode share reporting, PT, car, active' box was unticked as AECOM confirmed it is irrelevant as the EMFM is a highways assignment model only.</li> </ul> <p>b. PW thanked everyone for the comments and confirmed that he would share the final proforma later today.</p>	<b>PW</b>
<b>4</b>	<p><b>Uncertainty log</b></p> <ul style="list-style-type: none"> <li>a. PW asked whether there were any further comments on the uncertainty log above the comments received to date, noting NH and NCountyC have confirmed agreement.</li> <li>b. HH asked for a summary of the correspondence with NWLDC. PW confirmed that Ian asked for the Isley Woodhouse trajectory to mirror the Reg 18 document, meaning no employment development until after 2038. The land north/south of Park Lane, Castle Donington trajectory has been pushed back two years. The land north and south of Remembrance Way is now included for. HH confirmed the uncertainty log is acceptable from LCountyC perspective.</li> <li>c. PW confirmed BWB would send out Rev 7 of the uncertainty log and Rev 11 of the proforma which should now be agreed.</li> </ul>	<b>BWB</b>
<b>5</b>	<p><b>Site access and public transport update</b></p> <ul style="list-style-type: none"> <li>a. PW shared the latest site access drawing. SHi summarised that it now involves constructing a fourth arm of the existing A453/Hunter Road roundabout. To get enough capacity two lanes will be needed on the A453 in both directions. However, BWB will be consulting on both the single and dual access options.</li> <li>b. SHi confirmed that the proposals include for a new Toucan crossing on the A453 between Pegasus Park and Finger Farm, which is on the desire line for pedestrians and cyclists travelling along the A453.</li> <li>c. PB asked whether the Toucan crossing will be included in the strategic modelling. PW said that whilst we don't have numbers on future demand, using the EMG1 modal split data there is not expected to be a high demand for cycling and therefore the crossing should not have a major impact on the modelling.</li> </ul>	

	<p>d. HH asked whether the A453/Hunter Road roundabout could need signalling in the future to accommodate all planned growth, as it could be incorporated at the junction if so. SHi suggested the junction should not need signalling for the purposes of EMG2.</p> <p>e. HH said if this is the case, the Toucan crossing could need including in the PRTM modelling even as part of the future mitigation runs. VD suggested it is better to include the crossing within VISSIM to avoid further traffic re-routing away from the Strategic Road Network and because VISSIM is more accurate from an operational perspective.</p> <p>f. KT confirmed AECOM can include the toucan crossing in the PRTM but would need a steer on demand.</p> <p>g. HH asked if any work has been undertaken to look at the demand at the crossing. PW confirmed that modal split calculations have been undertaken but will follow up in more detail. HH said that LCountyC will need to know that the crossing location and type is suitable from a safety perspective. SHi confirmed that BWB will validate it once traffic data has been received, but in terms of speeds these should be limited because of the roundabouts either side and BWB has speed data available for that section of the A453.</p> <p>h. SM shared a presentation with the TWG and has been in touch with the bus operators to inform them of the latest access design and location of the interchange. Trent Barton, who operate the Skylink services, are happy with the interchange location but would like to see priority given to buses leaving the site to reduce delays.</p> <p>i. SM confirmed Trent Barton are happy with the configuration of the interchange and having separate areas for the public buses and shuttle services. They are also comfortable with two bus stops and believe this should be fine from a capacity perspective, which mirrors EMG1. Any future capacity improvements could be changes to vehicle types.</p> <p>j. SM said that Trent Barton asked for the turning circle to be big enough to accommodate coaches/articulated buses and to be surfaced with a material that can withstand regular use.</p> <p>k. SM reiterated that previously there were capacity concerns on the Skylink service between Derby and Leicester. A costing exercise was undertaken to see how much money Segro could put aside in a fund to improve capacity. Since then, the Skylink service has increased from a 20 minute frequency to a 15 minute frequency, meaning the focus may now be more on the Nottingham Skylink services to ensure capacity remains.</p> <p>l. TBe asked whether the site lends itself to a coach way for National Express or Megabus to use and whether it is worth having discussions with the operators to see if they would be interested.</p>	
--	--	--



	<p>m. SM said that conversations have not been held with these operators because of the catchment area of staff but questioned whether National Express services would be used for commuter trips or whether they are intended for longer distance leisure trips.</p> <p>n. TBe suggested that some people may want to use them for commuter trips and there are examples in Milton Keynes where coach trips have been incorporated into the public transport strategy but is happy to discuss this separately. SM agreed to take this off-line.</p> <p>o. SM discussed strategic connections in the area and has explored the potential for enhancing the shuttle services and having e-charging depots at both EMG1 and EMG2. The idea is that there would be four electric shuttle services (two at each site) which could be charged at the sites rather than having to send them off-site.</p> <p>p. SM said in terms of wider connectivity a hub and feeder model has been explored, where wider developments can feed into the hubs and other settlements to improve access to employment areas.</p> <p>q. SM provided an overview on management and coordination and how travel plan delivery can be enforced. At EMG1 a Sustainable Transport Working Group was created by Segro and attended by local stakeholders to oversee the delivery of the two sustainable transport documents. The group holds the travel plan coordinators to account as a requirement of the DCO and get together every 6 months for a period of 10 years up to 2028. Members are split into two groups (voting members include Segro and local authorities, whilst non-voting members include occupiers, bus operators and airport). The group comes together to discuss and track progress and to understand how funds are being spent. This has been really successful and has led to funding being invested in Skylink Derby/Leicester services. The group is intending on ending by 2028 but could time well with EMG2 so that it continues for a further 10 years.</p> <p>r. FA asked whether voting members are restricted to local authorities and whether NH would be part of the non-voting members. SM confirmed voting members are restricted to local authorities, but that NH do not currently attend but would be welcome to join in the future. FA confirmed she would refer back, but suggested NH would most likely want to be part of the group to check that targets are being achieved.</p> <p>s. FA asked if SM could circulate the presentation slides. PW confirmed BWB would issue the slides.</p>	<p><b>SM/TBe</b></p> <p><b>BWB</b></p>
<b>6</b>	<b>PRTM covid sensitivity update</b>	
	<p>a. PW shared a report produced by AECOM which shows that through a variety of data sources, applying a covid factor would actually reduce traffic and therefore whilst a global factor could be applied to the flows, retaining the current flows from the model would provide a</p>	



	<p>worst-case position. AECOMs report could be appended to provide the evidence as to why covid factors have not been applied.</p> <p>b. SF asked for clarification that the covid sensitivity factor would actually reduce flows, as his understanding is that traffic flows have returned to pre covid levels.</p> <p>c. KT confirmed that the flow comparison is between 2019 and 2023 data. The data shows that 2023 flows are higher than 2019 flows.</p> <p>d. SF suggested that the pre covid flows are used, PW agreed that this is the proposed strategy.</p> <p>e. GN said that he would read the information and refer back.</p> <p>f. HH said he would also refer back but that this could be the time to do it as it could be asked for by an examiner during the hearing, hence it might want to be fully considered.</p>	<p><b>GN</b></p> <p><b>HH</b></p>
<b>7</b>	<p><b>Vision and Validate</b></p> <p>a. PW shared a table showing the traffic generation for both the main modelling scenarios compared to the vision and validate assessment. Using surveyed data from EMG1, there would be a 27% reduction in development traffic in the AM peak and a 21% reduction in the PM peak, when accounting for 100,000sqm of mezzanine floorspace.</p> <p>b. PW questioned whether there would be benefits of running a vision and validate scenario based on the above flow reductions.</p> <p>c. GN asked that information as to how the information has been collated is shared with the TWG for them to comment on the calculations. PW confirmed that ITP have produced a report explaining this.</p> <p>d. PW mentioned that consideration has been given to the shoulder peak hours, again using EMG1 data. In summary, 0700 to 0800 period generates less traffic than 0800 to 0900 and 1600 to 1700 period generates less traffic than 1700 to 1800 hours. Therefore, BWB are comfortable that the traditional peak hours are suitable to assess the development on, but BWB can provide the evidence behind this.</p> <p>e. HH asked whether the purpose of the vision and validate exercise is to test the lower trip rates using EMG1 surveyed data or to consider the lower trip rates associated with mezzanines.</p> <p>f. PW confirmed it is both as the EMG1 surveyed trip rates includes for the benefits of the Sustainable Transport Strategy but also includes for mezzanines as these exist in some of the units, so it is a hybrid assessment.</p>	<p><b>BWB</b></p>

	<p>g. HH asked that as part of the evidence base whether the quantum of mezzanines at Swan Valley from 2014 can be provided to compare against the EMG1 information. PW suggested it might be difficult to get hold of this information but would have a think as to how this information can be obtained.</p> <p>h. HH asked whether hourly traffic flow data throughout the day can be provided as it might explain why certain peaks have reduced. SM said that daily values are available but if hourly breakdowns are required then this might take more time. HH suggested that the daily totals are provided initially as this would give a guide as to whether the same trips are still occurring overall but at different times.</p> <p>i. DS asked whether the survey data is broken down into half hourly periods. SM confirmed she would double check but believes it is hourly. If further information is needed on shift patterns, then this information is collated from occupiers of EMG1. Most shifts seem to start on the hour and many occupiers try starting shifts at different times to each other to avoid congestion.</p>	<b>SM</b>
<b>8</b>	<b>AoB</b> <p>a. PW asked that the TWG provide comments on the initial mitigation strategy.</p> <p>b. PW mentioned that tied with the above, it would be appreciated if the TWG can provide comments on the scope of highway design pre DCO document. AM has provided comments on behalf of LCountyC but if NH and NCountyC can comment that would be appreciated.</p> <p>c. PW confirmed that BWB would update the programme to account for the delay in commissioning the modelling.</p> <p>d. PW said BWB will issue the final proforma and uncertainty log. BWB have received a fee proposal from AECOM based on V9 of the proforma so this will need comparing against V11. After that, we can get an inception meeting agreed to top and tail the inputs for the modelling work.</p> <p>e. PW asked KT for timescales for a meeting. KT asked PW to send through available dates with the aim of getting a date that all can agree to.</p> <p>f. PW thanked everyone for their time and ended the meeting.</p>	<p><b>NH, LCountyC, NCountyC</b></p> <p><b>NH, NCountyC</b></p> <p><b>BWB</b></p> <p><b>BWB, AECOM</b></p> <p><b>BWB</b></p>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 8 AUGUST 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Harry Horsley (HH) & Adrian Whiteman (AM) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Steph Meyers (SM) – ITP  
 Steve Harley (SHa) – Oxalis Planning  
 Simon Hilditch (SHi), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Alain Chandler-Hurst (ACH) - c/o Jacobs; NH transport consultants  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Steve Freek (SF) – National Highways (NH)  
 Tom Boylan (TBo) - Nottinghamshire County Council (NCountyC)  
 Kit Tang (KT) – AECOM  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Paul Wilson (PW) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of July's meeting minutes</b></p> <p>a. MC shared June's meeting minutes</p> <ul style="list-style-type: none"> <li>i. The Statement of Common Ground and sign off sheet have been produced and is an agenda item in this meeting.</li> <li>ii. The SharePoint page has been discussed with colleagues at BWB and a link will be sent around the TWG shortly.</li> <li>iii. PW issued the agreed PRTM proforma v11 and uncertainty log v7.</li> <li>iv. PW issued SM presentation slides updating on the sustainable transport strategy.</li> <li>v. PW issued further information on the shoulder peak periods and daily traffic flows from EMG1, which show that the traditional peak hours provide a robust assessment.</li> <li>vi. PW issued further information on trip rates for the Vision &amp; Validate assessment based on surveyed data from EMG1.</li> <li>vii. JB issued a note with comments on the programme, modelling, sustainable transport strategy and mitigation strategy, which is an agenda item in this meeting.</li> </ul>	

	b. MC asked if anyone had any further comments on July's meeting minutes. No further comments received.	
<b>2</b>	<p><b>Client update</b></p> <p>a. IR confirmed that the wider modelling strategy has been communicated with other stakeholders including NH, LCountyC and more recently Midlands Connect. An implementation plan is being put in place but Segro need to be have more confidence that their package of work is suitable before sharing further information.</p>	
<b>3</b>	<p><b>Sustainable Transport Strategy update</b></p> <p>a. SM provided an update on the sustainable transport strategy following the previous update in July 24.</p> <ul style="list-style-type: none"> <li>i. Meeting planned with NCountyC on 09/08/24 regarding Notts Bus on Demand.</li> <li>ii. ITP have met with Diamond Bus who operate a service from Burton to EMG1 at a 60-minute frequency who are keen to expand this to serve EMG2. The operator is also looking to implement electric buses after funding being received. Diamond Bus currently receive subsidies from DCountyC, which will continue to 2026. Diamond Bus have flagged an issue that timescales are currently tight (with only 5 minutes of flexibility) so would need to consider impacts of additional stops at EMG2 but there is scope to introduce more buses to increase frequencies to every 30 minutes.</li> <li>iii. There is currently good coverage from the bus services towards EMG1 and the site, so any funding would likely go towards increasing the frequencies of existing services.</li> <li>iv. ITP will be forecasting bus passengers taking into account the additional patronage from EMG2, alongside other developments in the area. The distribution of additional passengers will need to be considered using existing home postcode data for staff at EMG1 (ITP currently hold 4,000 home postcodes locations).</li> <li>v. ITP will collate the above information into a Technical Note so the TWG can understand the work and methodologies adopted to forecast bus passenger increases and how this will be accommodated.</li> </ul> <p>b. HH questioned the way bus improvements would be secured, ideally LCountyC would want it via obligations rather than financial contributions.</p> <p>c. IR confirmed that ITP have a commission on EMG2, and whilst there is also a remit on the broader strategy, the EMG2 strategy needs to tie in with this.</p>	

	<p>d. HH said that there are various planning applications coming forward in the area that rely on the same bus services so LCountyC would need to understand how these buses serve all developments and then how the strategy is tied down, which should be an obligation.</p> <p>e. IR said that ultimately relying on other sites coming forward may mean the obligations aren't deliverable. In the past funding has been made available by Segro, which can then be used flexibly towards bus improvements, where required.</p> <p>f. SM said that currently the money is ringfenced but managed by Segro and parties vote on how that money is spent. The money is not passed on to the local authorities, it still sits with Segro and the voting members have an influence on how it is spent. The timescales for when plans are prepared and bus improvements being delivered can be quite significant so having a pot of money that can be spent flexibly provides greater benefits.</p> <p>g. HH was pleased to hear that LCountyC would not be provided with the money and that having a pot managed by voting members would work better but questioned whether other developers could input into this as part of a wider TWG.</p> <p>h. IR said that other developers could join the party and actually having a wider strategic transport strategy with wider funding would be beneficial.</p> <p>i. GN asked if indicative fare calculations would be included in ITP's work, noting current fare caps on buses.</p> <p>j. SM said that indicative fare calculations have been included in terms of establishing the amount of funding needed to support the services and how long it would take commercially for them to become ticket fares.</p> <p>k. GN asked about capacity constraints and whether this relates to timetable capacity constraints or network delays. SM said it is to do with how many people would be on the buses and if additional vehicles are needed to accommodate the future demand.</p> <p>l. GN said from a technology perspective, whether bus priority measures are needed/signal technology etc. as part of a wider strategy particularly with timetable constraints. SM said she is happy to work with BWB on that.</p> <p>m. AA asked about bus priority measures and whether this would be included in the Technical Note.</p> <p>n. MC said bus priority will be considered after the modelling and once we have an understanding of the benefits gained from the highway mitigation, particularly around the site access.</p>	
--	---	--

	<ul style="list-style-type: none"> <li>o. HH asked whether the public transport strategy sits within the wider vision led strategy as well as the core strategy. MC said it will be both as the modelling of all forecast scenarios would need to take account of bus accessibility and ensuring there are no delays to services, particularly if different mitigation schemes are proposed based on different traffic modelling scenarios.</li> <li>p. GN suggested the bus strategy will be front and centre of the vision and validate assessment. MC agreed given the calculations are based on EMG1 survey data which inherently include for the sustainable transport strategy and bus strategy that is implemented there.</li> <li>q. SM suggested that bus strategy is included in the forecasting because the travel plan targets will be informed by the modeling work so when calculating the number of bus passengers they will be informed by the travel plan targets so everything should tie together.</li> </ul>	
<b>4</b>	<p><b>EMFM Modelling Update</b></p> <ul style="list-style-type: none"> <li>a. MC summarised that in July we reached an agreement on PRTM proforma v11 and uncertainty log v7 and AECOM have been commissioned on the modelling. This is being looked at in two stages; stage 1 comprising the core scenarios (2022 forecast base and 2028/38 forecast with/without development scenarios), and Stage 2 comprising the covid sensitivity test, vision and validate and construction traffic scenarios.</li> <li>b. MC summarised AECOMs presentation from July on the PRTM base model validation using the latest TAG databook and that the model validates well in terms of screenline, cordon performances, link performance etc. AECOM are comfortable with the base model.</li> <li>c. JM said KT is on leave and that JM/AD will be taking over the project moving forward. The TAG databook updates made little difference to the base year model performance. The only thing that is still missing is the A52 junction improvement signal timings. There is still work that can be done to code the junction improvements in.</li> <li>d. MC and CT are liaising with the relevant person at NH involved in the A52 junction improvements to obtain signal timing information so are hoping to have this soon but it is good to know that other work can continue in the background.</li> <li>e. MC asked JM whether the delay in receiving the A52 signal timing information has affected AECOMs programme.</li> <li>f. JM said he would check the programme but if any time has been lost then it should be no more than a week, which could be made back up. He will liaise with KT next week and refer back.</li> </ul>	<p><b>MC/CT</b></p> <p><b>JM</b></p>

	<p>g. CT said it is the major projects team that hold the signal timing information. Jeremy Dixon is the major projects liaison who is querying what the information is for before it is released. There are also three smaller schemes along the A52 which he has asked whether we would also like data for which were completed over recent years (Silverdale, Stragglethorpe and Bingham Road).</p> <p>h. MC said he would look at the locations of these junctions and the significance of the schemes to see whether it will be critical to include them in the stage 1 modelling or if they can be included later on within the mitigation runs.</p> <p>i. CT said that they are smaller schemes located further around the A52 near Radcliffe on Trent. MC said he would look and refer back.</p> <p>j. JM said that the uncertainty log can be checked to see whether they are included and even if so the coding may be slightly different to what has been built. MC said he would liaise with JB directly.</p> <p>k. MC queried the traffic flows coming out of EMG1 within the original modelling, which is circa 2,900 pcus and much higher than expected. JB said he would review this and refer back.</p> <p>l. GN asked whether the updated base model LMVR addendum will be issued sooner rather than later so that it can be agreed before the forecasting scenarios are run.</p> <p>m. JM said AECOM can provide the LMVR addendum sooner or in parallel to running the forecast year scenarios.</p>	<p><b>MC</b></p> <p><b>MC</b></p> <p><b>JM</b></p> <p><b>JM</b></p> <p><b>JM</b></p>
<b>5</b>	<p><b>Wider Strategic Modelling Update</b></p> <p>a. IR said that work is still going on in relation to the strategic modelling, but the strategy still needs formalising with the other parties.</p> <p>b. MC said that BWB are currently obtaining trip generation/distribution information for all sites being included in this assessment before a proforma and uncertainty log will be compiled prior to further PRTM modelling being carried out.</p> <p>c. MC said that similar to the EMG2 approach, the traffic from all strategic developments will be manually added on top of the furnished forecast year without development flows to avoid background traffic re-assigning and to ensure that the full impacts of all strategic developments are mitigated.</p> <p>d. HH asked whether once the above modelling has been run and mitigation has been identified whether it would be run in PRTM. MC confirmed that the mitigation would be tested in PRTM.</p> <p>e. GN asked for clarification about the modelling being undertaken; so Stage 1 relates to the core scenarios (2022/2028/38 with/without</p>	



	<p>development), Stage 2 relates to the covid sensitivity testing and vision and validate scenarios and then the strategic assessment is a separate piece of modelling that relates to the wider developments in the local area that IR gave an update on previously. IR/MC confirmed this is correct.</p> <p>f. SHi said that the fundamental principle is that EMG2 mitigation aligns with the strategic work/mitigation being undertaken separately. The purpose of the wider strategic approach is to ensure that a more comprehensive scheme is proposed that offers greater benefits, rather than each developer proposing piecemeal improvements that offer less of a benefit.</p> <p>g. IR said that it also avoids the highway authorities being sent various different mitigation designs and instead this approach would mean there is one overarching mitigation strategy that accommodates all planned development.</p>	
<b>6</b>	<p><b>Covid Sensitivity Testing</b></p> <p>b. MC referred back to July's meeting and GN information on traffic counts on the M1 and A42 for 2019, 2023 and 2024. This showed that traffic on certain parts of the SRN has increased from 2019 to 2023/24 particularly in the evening peak hour and given PRTM has a 2019 base whether traffic flows need increasing to account for this.</p> <p>c. MC asked JM whether any further thought has been given to this, such as whether we apply a global factor or go into more detail for different road types.</p> <p>d. JM said that the global factor would be the better option rather than updating the base model. JM will catch up with KT next week and advise on the best approach. MC said that is fine particularly as it does not hold up the stage 1 modelling.</p>	<b>JM</b>
<b>7</b>	<p><b>Jeremy Bloom Note</b></p> <p>a. MC thanked JB for a note issued on 23/07/24 with initial thoughts on the programme, modelling, sustainable transport strategy and mitigation strategy. So far, BWB have gone through each of the comments and provided thoughts against each one but asked whether a response is needed or if BWB/ITP just take the comments on board as we progress through the work.</p> <p>b. JB said he is happy to have a discussion off-line to talk through things if that would help, as there is a lot of detail. The biggest concern at this stage is around the programme and the mitigation being designed around the modelling, albeit appreciate why this is happening.</p> <p>c. SHi suggested it would be useful to have a separate discussion around some of the points, where there may be some</p>	<b>SHi</b>



	<p>misunderstanding such as comments on the A50 Junction 1 scheme which relate to a separate application.</p> <p>d. MC also said that the comments on programme timescales have been included in a revised version which will be shared with the TWG.</p> <p>e. GN asked if a revised programme will be shared with new start dates for the modelling etc. JM will update on programme timescales.</p> <p>f. FA reiterated the importance of having the latest programme for internal resourcing purposes. MC said that the programme will be shared.</p> <p>g. HH asked about the SharePoint page and an update on this. MC confirmed that the SharePoint page is being looked at and a link will be available soon.</p>	<p><b>MC</b></p> <p><b>MC</b></p>
<b>8</b>	<p><b>Vision&amp; Validate</b></p> <p>a. MC said the vision and validate assessment forms part of the stage 2 modelling work. PW circulated ITP's report containing surveyed information of EMG1 and in summary the data shows that surveyed trip rates vs those from the original Transport Assessment (based on Swan Valley) are approximately 28% lower in the AM peak and 21% lower in the PM peak.</p> <p>b. HH asked whether the ITP report includes the methodology for the modelling such as the manual assignment of trips etc. or does it simply focus on the trip generation. MC confirmed the note focuses on the trip generation comparison and any further details on the modelling methodology will need to be set out separately.</p> <p>c. HH said that there will be risk incurred if we do not agree the methodology for the modelling so recommended that this is discussed beforehand.</p> <p>d. GN queried the strategy for the modelling and whether this is different to what was agreed before.</p> <p>e. VD said that the modelling strategy will be consistent between both stages and follows previous agreements i.e. PRTM will be run and then development traffic manually assigned as a worst-case on top of the forecast without development scenarios. Traffic flow furnessing will be carried out beforehand for the forecast years (with and without development scenarios) but there is very little difference in the flows because of congestion in the area, hence why a manual assignment of development trips is also being carried out.</p> <p>f. GN thanked VD and suggested that a separate modelling focused meeting is held outside of the monthly TWG to iron out any gaps in the modelling. MC to organise.</p>	<p><b>MC</b></p>

	<p>g. HH asked whether the 2028/38 with/without development scenarios will be included in the PRTM forecasting report. MC confirmed this is correct. VD said that the manual assignment is carried out after PRTM as part of the microsimulation modelling.</p> <p>h. HH said that thought will be needed as to how manually assigned development traffic is applied to a congested network. VD thoughts are that PRTM typically re-assigns background traffic hence the distribution of development traffic should be via the preferred route choices.</p> <p>i. JM said that there PRTM re-assigns both background and development traffic depending on route choices etc.</p> <p>j. HH suggested that this is taken off-line at the appropriate time. MC agreed and suggested that the development distribution pattern is agreed once outputs have been received from AECOM.</p>	
<b>9</b>	<p><b>Statement of Common Ground</b></p> <p>a. MC said that a working draft SoCG and sign off sheet have been produced by BWB.</p> <p>b. MC shared the sign off sheet and summarised the layout. It lists all the various documents that will be submitted and then outlines which highway authority needs to provide approval. It then keeps a log of where agreements are made and those that are still outstanding.</p> <p>c. MC said the SoCG will then allow the highway authorities to sign off groups of documents (i.e. stage 1 modelling reports, stage 2 modelling reports etc.) rather than asking for signatures every time a report is submitted.</p> <p>d. SHa said it is helpful to have a sign off sheet and that it is good to get the SoCG going early as it will become a critical document.</p> <p>e. MC said that when BWB share the sign off sheet, this will be accompanied by an explanation as to how various documents have been grouped together.</p> <p>f. JB said it would be useful to have the sign off sheet and note at the same time. It will be good to see what is being signed off as we progress through the work to keep track, but it may be better to have the SoCG as an outcome document rather than a sign off of technical work. The tracker will then allow the SoCG to be prepared.</p> <p>g. IR suggested that we call the document a 'sign off process' and then towards the end we can create SoCG for the highway authorities to sign off.</p> <p>h. FA suggested that documents are split down so that it is easier to get agreements/sign offs on smaller tasks. IR confirmed this is the approach being taken. SHi reiterated this and said that different elements of the</p>	

	Transport Assessment will be agreed in smaller parts, so that the final Transport Assessment is in effect a 'wrapper' document that summarises each of the key submissions agreements.	
<b>10</b>	<p><b>Next steps</b></p> <ul style="list-style-type: none"> <li>a. MC summarised the next steps: <ul style="list-style-type: none"> <li>i. Obtain A52 signal timing information is on the critical path.</li> <li>ii. Continue with the PRTM modelling and arrange an off-line meeting to ensure that agreements are made.</li> <li>iii. Share the revised programme and sign off sheets.</li> <li>iv. Share a link to the sharepoint page.</li> </ul> </li> <li>b. MC thanked everyone for their time and ended the meeting.</li> </ul>	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 12 SEPTEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN), Alain Chandler-Hurst (ACH), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Steve Harley (SHa) – Oxalis Planning  
 Paul Wilson (PW), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Tim Bellenger (TBe) – Nottingham City Council (NCityC)  
 Steve Freek (SF) – National Highways (NH)  
 Tom Boylan (TBo) - Nottinghamshire County Council (NCountyC)  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Steph Meyers (SM) – ITP  
 Simon Hilditch (SHi) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of August's meeting minutes</b></p> <p>a. PW shared August's meeting minutes on screen and summarised the following actions:</p> <ul style="list-style-type: none"> <li>i. BWB issued A52 signal timing information and provided justification for excluding the three smaller schemes raised by NH.</li> <li>ii. AECOM confirmed that EMG1 flows have been updated to match the original Transport Assessment.</li> <li>iii. AECOM issued the PRTM base model validation addendum report.</li> <li>iv. A meeting has been scheduled on 25/09/24 to discuss Jeremy Bloom's note.</li> <li>v. BWB has created a SharePoint page.</li> <li>vi. A separate meeting took place on 05/09/24 to recap on the modelling work, which will be scheduled monthly moving forward.</li> </ul> <p>b. PW asked if anyone had any comments on August's meeting minutes. No comments received hence they are agreed.</p>	

2	<p><b>Client update</b></p> <ul style="list-style-type: none"> <li>a. IR recapped on a meeting at Radison Blue by Midlands Connect and the wider consortium which set out the current position for the wider strategic developments, focusing on transport modelling. There is another meeting scheduled for 12//09/24 to finalise the modeling strategy.</li> <li>b. IR said that further thought has been made to improve infrastructure at EMG1 for the benefit of both EMG1 and EMG2, given they are intrinsically linked. This includes additional bus charging facilities to avoid buses having to travel back to the depot, increasing the size of the management suite and the raising the heights of the cranes at the Rail Freight Terminal (RFT).</li> <li>c. IR confirmed that the proposals now include for industrial development on Plot 16 (c.30,000sqm GFA). The programme remains unchanged with DCO submission planned to be scheduled for Q1 2025.</li> <li>d. SHa said that the ES Scoping is ongoing and being led by PINS and that comments can still be received on all disciplines, not just transport. No comments received.</li> </ul>	
3	<p><b>Sustainable Transport Strategy update</b></p> <ul style="list-style-type: none"> <li>a. PW confirmed ITP have issued draft Travel Plan and Sustainable Transport Strategy documents to BWB. BWB will be reviewing before they are shared with the TWG.</li> </ul>	<b>BWB/ITP</b>
4	<p><b>EMFM Modelling Update</b></p> <ul style="list-style-type: none"> <li>a. PW recapped on the strategic modelling work: <ul style="list-style-type: none"> <li>i. July TWG – PRTM proforma v11 was signed off by the TWG.</li> <li>ii. An ES scoping note was issued subsequently, which triggered comments from HH in particular. The only impact is how we deal with Plot 16 on EMG1 as the RFT 'expansion' will not have any operational impacts that cause changes to traffic generation.</li> </ul> </li> <li>b. PW confirmed the revised PRTM proforma v12 includes Plot 16 on EMG1 (30,000sqm B8 industrial use) on top of the 400,000sqm on EMG2, hence 430,000sqm development altogether, which is slightly larger than what is being applied for via the DCO.</li> <li>c. AW confirmed that the additional floorspace being modelled at Plot 16 would not cause any problems from LCountyC perspective given what is being modelled is higher.</li> <li>d. GN confirmed Jacobs have received emails on this matter along with trip rates information so will review this and come back in writing.</li> <li>e. PW confirmed that BWB has issued information disputing the 4-5pm</li> </ul>	<b>Jacobs</b>

	<p>shoulder peak. Based on Swan Valley trip rates being from 2007, recent TRICS information, surveyed information at EMG1, recorded background traffic flows, and the times periods modelled within PRTM, BWB are of the opinion that there is no 'shoulder peak' in reality and intend to continue adopting the previously agreed 5-6pm trip rates as part of the upcoming modelling work.</p> <p>f. MC provided an overview of the EMG1 RFT details. The RFT 'expansion' will not increase the number of trains/storage space, so whilst there could be movements between EMG2 and EMG1 RFT, there will be no increase in total HGVs. BWB has considered the likely number of movements between the two sites and believe numbers will be low (and are already assigned externally to the network in PRTM anyway) and so do not need considering in PRTM but can be considered as part of the VISSIM modelling if required by way of manual alteration.</p> <p>g. PW confirmed that an email has been sent to HH summarising MC comments which can be shared with the TWG (sent 12/09/24)</p> <p>h. IR confirmed that the EMG1 Transport Assessment originally considered up to 16 trains per day and there are only 6 trains visiting EMG1 per day at present.</p> <p>i. SHa confirmed that there are no plans to breach or exceed the approved level of activity at EMG1 RFT. The additional crane height would improve efficiency and capacity in terms of storage containers but would not have any implications on traffic generation.</p> <p>j. IR pointed out that other developments outside of EMG1 and EMG2 could also use the terminal. PW reiterated that it is a positive story nonetheless as the RFT removes HGVs from the highway network, albeit the numbers that we would be considering from EMG2 would not be significant and do not need considering in PRTM.</p> <p>k. AW suggested that LCountyC may have been misled by the wording of the ES Scoping document and the changes to the RFT. The numbers suggested by MC are low and therefore LCountyC can review the information and confirm whether an assessment is required or not. There could however be more recent best practice to calculate the number of HGVs such as the methodology adopted for the HNRFI.</p> <p>l. MC confirmed that BWB have ATC data from EMG1 which shows how many HGVs are generated by EMG1 externally compared to how many visit the RFT internally to understand the proportion. This shows a relatively low percentage of HGVs visit the RFT.</p> <p>m. PW confirmed that BWB will forward the email sent to Harry on 06/09 to the wider TWG (sent 12/09/24).</p> <p>n. JB interpreted the text in the ES Scoping as an increase in capacity on the RFT so asked what the implications of the additional handling</p>	
--	---	--

	<p>capacity are and development of the site.</p> <ul style="list-style-type: none"> <li>o. PW said from a transport planning perspective, 16 trains per day were previously assessed/approved, which would remain unchanged. There could be HGV movements between EMG1 and EMG2 but they would not be significant and are already accounted for on the wider highway network in PRTM anyway. This would result in small changes to turning movements at the EMG1 roundabout.</li> <li>p. AW confirmed LCountyC will review the RFT trips sent to HH.</li> <li>q. MC discussed the Covid sensitivity assessment and that this is currently included in Stage 2 modelling but that conversations have been had as to whether it should be included in Stage 1 with global factors applied to the base traffic to account for increases in traffic since covid.</li> <li>r. JM confirmed that applying a global factor is the preferred approach. There are local counts and NTS/WebTRIS factors that show 7%-11% changes in traffic that can be applied to the base flows. This can be undertaken at either Stage 1 or 2, which is up to the wider stakeholders.</li> <li>s. GN referred to a Jacobs note in response to AECOMs presentation which showed that flows on the SRN have increased hence recommended for covid sensitivity to be undertaken at Stage 2. JM confirmed AECOM would revisit this email and advise accordingly. PW confirmed that BWB would forward the email to JM (sent 12/09/24).</li> <li>t. MC mentioned that EMG1 flows in PRTM have been amended to reflect what was assessed in the original Transport Assessment but that this would have no effect on the base model validation addendum. JM added that as the PRTM has a base year of 2019 and EMG2 became operational in 2020 that this would have no effect to the base model validation. GN asked for confirmation of this by email.</li> </ul>	<p><b>LCountyC</b></p> <p><b>AECOM</b></p> <p><b>BWB/AECOM</b></p>
<b>5</b>	<p><b>Statement of Common Ground (and SharePoint)</b></p> <ul style="list-style-type: none"> <li>a. PW said that BWB issued information on 02/09/24 regarding SharePoint and whether people have managed to gain access. No issues were raised with access to SharePoint.</li> <li>b. PW shared the list of people who have access to SharePoint, which can be extended to others if required.</li> <li>c. IR asked if anyone has any comments on the structure or text within the SoCG. No comments were received but for the TWG to review and comment at the appropriate time.</li> </ul>	<p><b>All</b></p>
<b>6</b>	<p><b>Vision &amp; Validate Assessment</b></p> <ul style="list-style-type: none"> <li>a. PW said that BWB has issued information on the EMG1 2022/2023</li> </ul>	<p><b>Jacobs</b></p>

	<p>survey information that forms the basis of the vision and validate assessment, noting that the 2023 survey was undertaken during LCountyC half term, although not within other counties across the East Midlands. The idea is to model the lower vision and validate flows as part of the 'with mitigation' scenarios as the travel planning measures are linked to the wider mitigation strategy. Survey information has been sent to GN to inform this, so BWB will await comments in due course. GN confirmed they will prioritise the trip rate work and then come back on the observed data. PW confirmed that information has been shared with wider authorities too for consideration.</p>	
<b>7</b>	<p><b>Wider Strategic Modelling Update</b></p> <ul style="list-style-type: none"> <li>a. PW provided a general update that work is continuing and that a further meeting is taking place on 12/09/24. However, in the meantime BWB has produced a PRTM proforma for the wider strategic modelling, without prejudice to the wider decision making, which was shared on screen: <ul style="list-style-type: none"> <li>i. Development details for each scheme is included.</li> <li>ii. Trip generation details have been provided by the respective transport consultants where agreed or based on best known information at present.</li> <li>iii. 2041/2051 assessment years are being considered.</li> <li>iv. Access details have been provided from the respective transport consultants, albeit further information required for the Land West of Castle Donington scheme.</li> </ul> </li> <li>b. PW confirmed that BWB has been liaising with AECOM about planning data assumptions and uncertainty log information to inform the wider PRTM assessment and are awaiting to hear back with regards to this, if PRTM is progressed with.</li> <li>c. SHa asked whether the core traffic generation data would be valid for different strategic modelling packages. PW confirmed that the trip generation details would be the same whatever model is chosen.</li> </ul>	
<b>8</b>	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>a. PW summarised the key actions: <ul style="list-style-type: none"> <li>i. BWB to issue details on trip generation (Plot 16, EMG1 RFT, Covid sensitivity etc.) to get the modelling back on track (sent 12/09/24)</li> <li>ii. BWB to schedule further modelling meetings and look to include AECOM</li> <li>iii. BWB to check in with SM about the meeting with JB (confirmed 16/9/24 she can join).</li> </ul> </li> </ul>	<b>BWB</b>
<b>9</b>	<p><b>AOB</b></p> <ul style="list-style-type: none"> <li>a. AW asked that the trip generation details are set out within a</li> </ul>	<b>BWB</b>



	<p>standalone note that can be signed off. PW confirmed BWB can do this but after the details have been agreed so as not to hold up the modelling any further. AW agreed this is acceptable.</p> <p>b. MC said that BWB has produced a sign off template sheet that can be circulated for signatures once documents have been approved. BWB can share the template for comments.</p>	<b>BWB</b>
--	--	------------

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 10 OCTOBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Adrian Whiteman (AW) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) & Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – East Midlands Combined County Authority (EMCCA)  
 George Nock (GN), Alain Chandler-Hurst (ACH), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) – LCountyC Network Data Intelligence  
 Steve Harley (SHa) – Oxalis Planning  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW), Matt Corner (MC) & Simon Hilditch (SHi) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Steve Freek (SF) – National Highways (NH)  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Laura Good (LG) – LCountyC Network Data Intelligence  
 Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of September's meeting minutes</b></p> <p>a. PW shared September's meeting minutes on screen and summarised the following actions:</p> <ul style="list-style-type: none"> <li>i. ITP to provide an update on sustainable travel at October's meeting.</li> <li>ii. BWB will update September's minutes with AW comments.</li> <li>iii. BWB confirmed that the EMG1 flows in PRTM would not change the PRTM base validation.</li> <li>iv. Draft SoCG has been issued in draft</li> <li>v. A modelling meeting was held on 03/10/24, which was also attended by AECOM</li> <li>vi. BWB will be issuing trip generation details in a note for formal sign off.</li> </ul> <p>b. MC confirmed that previously agreed documents have been added to the 'Approved Information' folder on SharePoint. A folder system has been created that groups documents together as per BWB email of 03/09/24. Sign-off sheets will also be issued to get agreement on documents (issued on 10/10/24)</p> <p>c. GN asked if a comments box will be added to the sign off sheet. MC confirmed this had already been added.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>

	<p>d. HH asked if Rebecca Henson can be added to the SharePoint page. MC confirmed Rebecca can be added (since completed)</p> <p>e. IR asked if the folder structure for the grouping of comments can be added to SharePoint. MC confirmed he would add the folders (since completed)</p> <p>f. PW asked if anyone has any comments on September's meeting minutes above those received by AW. No comments received, hence the updated version should be agreed.</p>	
<b>2</b>	<p><b>Client update</b></p> <p>a. IR provided an update on the strategic highways solution. A scheme has now been designed and the consortium are content that this will alleviate capacity problems on the SRN. The consortium includes EMG2, Isley Woodhouse, Uniper and Coaker land.</p> <p>b. IR suggested that it is critical that no other planning applications come forward that cause problems to the wider mitigation strategy being planned unless they form part of the solution.</p> <p>c. IR confirmed that the public consultation is planned for January/February 2025 with the DCO submission at the end of Q1 2025.</p> <p>d. CT asked if modelling has taken place of the strategic highways solution. IR confirmed that work has been undertaken internally within the consortium which will need to be formally tested via an agreed route using strategic transport modelling. The modelling considers all developments in the consortium.</p> <p>e. PW confirmed that strategic modelling has not been undertaken of the wider assessment yet using the EMG WISSER model, hence the modelling undertaken so far uses the 2035 PRTM flows from the original EMG2 modelling work, with traffic from all four sites added manually.</p> <p>f. JB asked if dates are set for statutory consultation. IR confirmed January/February 2025 over a six week period.</p> <p>g. HH asked if the TWG may have sight of the mitigation schemes prior to consultation. IR confirmed drawings will be shared prior.</p>	
<b>3</b>	<p><b>Sustainable Transport Strategy update</b></p> <p>a. SM provided an update on the sustainable transport measures. The aim of the STS is to ensure EMG2 is served by sustainable transport at first stage of development and employees have reasonable alternatives to the private car. There will also be a series of mode specific objectives.</p> <p>b. TBe said it is difficult to get a bus from EM Parkway to EMG1 or EM</p>	

	<p>Airport and asked whether improvements to bus connections can be explored. SM agreed and confirmed that demand responsive buses are available but appreciates this requires planning ahead. SM confirmed that ITP are working with other partners such as Uniper and there are proposals to divert the Skylink Express into Uniper which will be close to EM Parkway and should improve onward connections.</p> <p>c. GN asked if measures can be improved by the Client to provide heavily discounted tickets to get the most out of the Travel Plan. This could even include penalties for parking or rewarding people who car share/use sustainable modes.</p> <p>d. SM confirmed that at EMG1, occupier Travel Plans do include some incentives. Amazon offer a point scheme whereby people who car share can earn points to spend on Amazon gifts. GN agreed the Amazon incentive is a good example of what can be implemented at EMG2.</p> <p>e. SM set out the targets for the Travel Plan that balance both Census information and EMG1 surveys. The proposed targets aim for a 65% car mode share, 18% bus mode share, 8% public transport mode share, 6% active travel mode share and 2% other.</p> <p>f. SHi said that there is a positive story with public transport which has seen significant improvements at EMG1 and whether there were any reasons for this. SM suggested it could be a factor of the £2 bus fare and continued promotion of the services.</p> <p>g. SM said in terms of car share, some occupiers such as Amazon have strong car share levels because the business has set shift patterns which are consistent across all staff.</p> <p>h. GN suggested that with the positive mode shift, parking levels could be reduced at EMG2 plots. IR confirmed that Segro have noticed this with occupiers at other sites requesting less parking because of changes in shift patterns/travel behaviors.</p> <p>i. TBo asked whether the targets could be set to mirror the current surveyed mode share at EMG1. SM said that the proposed targets balance both the targets at EMG1 and what is currently being recorded. The targets are an improvement on EMG1 but they need to be realistic given EMG1 is still only a short way through the Travel Plan process.</p> <p>j. SM provided an overview of the monitoring strategy, which includes various surveys, focus groups, formation of a Sustainable Transport Working Group with reporting to EMG and the Segro Park Manager.</p> <p>k. FA asked what happens if targets are not achieved. PW said that the modelling/mitigation is based on robust trip rates so there should be no issues in terms of impacts on the network. FA acknowledged this however if targets are not being met then this should not be ignored.</p>	
--	--	--

	<p>SM said this is the role of the STWG and Travel Plan Co-ordinators and every 6 months they meet to review the travel data and decide whether new measures are needed to improve certain areas.</p> <p>l. GN said that not achieving targets is a planning compliance matter and asked in the longer term whether there a designated fund that can be drawn down upon to improve mode share. SM said there are two ring fenced funds at EMG1 that are available for the 10-year travel plan and used to deliver measures. This year ITP have run campaigns to improve car sharing, hence if the targets are not being met at EMG2 then the group would meet to agree where funds need spending to improve things. The fund will be calculated as part of the DCO.</p> <p>m. SHa said that the funding requirements for the DCO will be planning obligations that are to be agreed and a mechanism will be stated when funds need implementing. If a similar approach to EMG1 is adopted, then the mode share data is constantly reviewed to understand how funds can be spent to maximise the benefits.</p>	
<b>4</b>	<p><b>Modelling Meeting Summary</b></p> <p>a. SHi shared a presentation about the wider mitigation strategy. In summary:</p> <ul style="list-style-type: none"> <li>i. The access strategy remains the same with a fourth arm off A453/Hunter Road roundabout (possibility of still considering a new roundabout further west, but the proposal is what the development is aspiring to provide).</li> <li>ii. The initial mitigation strategy included for works at Finger Farm, EMG1 roundabout, M1J24 and A453/The Green. The works at M1J24 were substantial in parts.</li> <li>iii. The strategic highway solution involves significant works at M1J24 including a new free flow lane with a bridge from M1(S) to A50. The mitigation works have been split between the consortium with EMG2 delivering the package shown in green.</li> <li>iv. Initial modelling has been undertaken which shows that the mitigation scheme would accommodate all developments within the consortium and each individual part of the mitigation should hopefully be suitable for each individual development, albeit aside from EMG2 this needs to be tested.</li> <li>v. A new pedestrian/cycle connection is being proposed between EMG1 and Castle Donington as well as a new footway/cycleway link between EMG1 and EMG2 along the A453.</li> <li>vi. A new car drop off area and bus depot to charge and park buses is also proposed at EMG1.</li> </ul>	

	b. SHi confirmed that the presentation slides will be shared with the TWG (since issued on SharePoint)	
<b>5</b>	<p><b>PRTM Proforma discussion</b></p> <p>a. PW went through the proforma and confirmed that the strategic assessment will be tested using the EMG WISSER model at a 2041 future year. The EMG2 development will be tested in PRTM and BWB have issued proforma v13. This includes the scenarios already agreed including the Freeport and Isley Woodhouse developments, as well as adopting the evening shoulder peak trip rates.</p> <p>b. PW asked if anyone had any further comments on PRTM proforma v13 other than comments already received from GN. AW said there are no further comments but before LCountyC provide formal sign off they still need sight of a note about the EMG1 RFT trips. PW confirmed this will be issued w/c 14/10.</p> <p>c. PW suggested that additional modelling scenarios are required that remove the Isley Woodhouse scheme to test the EMG2 part of the mitigation (shown as the green package). This is because with Isley Woodhouse included, the modelling would still show capacity problems with the green package in place (which would then be alleviated with Isley Woodhouse's part of the mitigation). Hence, there is a step by step process needed to the mitigation strategy demonstrating how EMG2 can mitigate its impacts with or without the other developments in the consortium. A Memorandum of Understanding will be put in place between the consortium to deliver each individual part of the mitigation and the highway authorities.</p> <p>d. HH raised concern with the wider strategic modeling not using PRTM. PW said that a decision has been made higher up that PRTM will not be used and instead EMG WISSER model will be used. IR caveated that agreement to use the EMG WISSER model is still to be confirmed, there are validation issues with the EMG WISSER model that need rectifying before a decision is made with which model is used. This therefore needs to be bottomed out.</p> <p>e. JB thoughts are that the EMG2 Transport Assessment would be split into two parts; part 1 looking at the EMG2 scheme in isolation and what mitigation is needed, and then part 2 looking at the mitigation holistically with the other schemes in the consortium.</p> <p>f. CT suggested that unless trigger point testing is planned to be undertaken of the mitigation scheme, NH may have to include a condition for the work to be undertaken pre-occupation of development and whether this would cause any issues.</p> <p>g. IR confirmed Segro will be asking BWB to carry out trigger point testing work to understand timings for the work.</p>	<p><b>BWB</b></p> <p><b>IR</b></p> <p><b>BWB</b></p>

	<p>h. HH said that a critical part of the programme is agreeing the wider mitigation strategy. However, as there are Departures from Standard whether there is any benefit sharing the drawings sooner rather than later so that they can be reviewed earlier. SHi said that the drawings can be shared before BWB go through the Approval in Principle process to reach an agreement on any departures.</p>	<b>BWB</b>
<b>6</b>	<p><b>Programme</b></p> <p>a. PW re-iterated IR comments on the programme and that the plan is for a January/February 2025 public consultation with the DCO submission planned for the end of Q1 2025, albeit a lot of work remains required between now and then.</p>	
<b>7</b>	<p><b>Next steps</b></p> <p>a. PW summarised the key next steps:</p> <ul style="list-style-type: none"> <li>i. BWB to issue the EMG1 RFT note</li> <li>ii. BWB to update the proforma to address GN comments and get AECOM back up and running with modelling (since issued).</li> <li>iii. BWB can populate SharePoint and details for the SoCG.</li> <li>iv. BWB to produce another proforma to test alternative scenarios and any trigger point testing, in parallel to Segro determining if the wider strategic solution modelling is to remain to be considered using the EMG WISSER model.</li> </ul> <p>b. PW confirmed that BWB would still like to explore the Vision and Validate assessment focusing on mezzanines and associated trip generation. PW asked if GN could review an email sent of 04/9 as a result, to help inform said process.</p>	<p><b>BWB</b></p> <p><b>BWB/Segro</b></p> <p><b>GN</b></p>
<b>8</b>	<p><b>AoB</b></p> <p>a. SHi confirmed that the presentation of the strategic mitigation scheme is on the SharePoint folder. From a NH perspective, the scale of works could fall within a Nationally Significant Infrastructure Project and the Clients legal advisers are going to establish this. It doesn't change anything physically but it does change the structure of the DCO and underpinning policies.</p>	

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 14 NOVEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Tim Bellenger (TBe) – East Midlands Combined County Authority (EMCCA)  
 Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) – LCountyC Network Data Intelligence  
 Steve Harley (SHa) – Oxalis Planning  
 Paul Wilson (PW) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Steve Freek (SF) – National Highways (NH)  
 Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
 Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN) & Alain Chandler-Hurst (ACH) – c/o Jacobs; NH transport consultants  
 Steph Meyers (SM) – ITP  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning  
 Laura Good (LG) – LCountyC Network Data Intelligence  
 Matt Corner (MC), Simon Hilditch (SHi) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of October's meeting minutes</b></p> <p>a. PW shared October's meeting minutes on screen and summarised the following actions:</p> <ul style="list-style-type: none"> <li>i. September meeting minutes updated with AW comments.</li> <li>ii. Trip generation details issued.</li> <li>iii. Proforma v14 agreed and modelling now being undertaken by AECOM.</li> <li>iv. Trigger point testing is noted and to be considered further.</li> <li>v. SHi has NH/LCountyC comments on the design scoping note and will refer back.</li> <li>vi. Rail Freight Terminal note issued.</li> <li>vii. Vision and Validate was covered at the modelling meeting but is also an agenda item to be covered further.</li> </ul> <p>b. PW asked if anyone has any further comments on the minutes. No comments received hence these are agreed.</p>	<p align="center"><b>BWB</b></p>
<p><b>2 Client update</b></p> <p>a. IR provided an update on the DCO. Timescales for public consultation</p>	



	<p>remain as January/February 2025.</p> <p>b. The strategic solution with regards to M1J24 is a top priority for the consortium. Segro have been struggling to receive clarity and updates with regards to the modelling, and were initially looking to use the WISSER model (as per the conversations led by Midlands Connect) but progress/agreement have stalled, so the proposal is to now use the 2019 PRTM model. BWB produced a proforma several months ago which has been updated and will be shared.</p> <p>c. CT confirmed she has been asked to attend a meeting on 25/11/24 about strategic modelling and which model to use. TBe has received the same invite from the East Midlands Freeport. IR acknowledged the meeting, which he was unaware of, but Segro has made the decision to use PRTM because of timescale pressures.</p> <p>d. SHa asked if the 25/11/24 meeting invite had been sent to the local highway authorities. CT confirmed that it has been sent to LCountyC, NCountyC and DCityC. DS was not aware of the meeting but will speak to Kevin Sharman.</p> <p>e. JB set out that he considers this to be the right decision. HH also confirmed that the use of PRTM is positive as there were concerns about how the two modelling outputs would tie together.</p> <p>f. PW suggested that given EMG2 and Isley Woodhouse are using PRTM then there should be logic in the wider strategic modelling using PRTM.</p>	<b>DS</b>
<b>3</b>	<p><b>Wider Strategic Modelling</b></p> <p>a. PW shared the PRTM proforma v3 on screen, which covers the wider strategic assessment. The assessment will consider all planned development at a 2041 future year, which aligns with the end of local plan period. The proforma includes the following information:</p> <ul style="list-style-type: none"> <li>i. Access details have been obtained for each of the developments.</li> <li>ii. Trip generation data has been received for each of the developments individually. BWB are not representing all of the developments and therefore do not want to get into protracted discussions about the trip rates as these should have been largely agreed elsewhere.</li> <li>iii. In terms of Land West of Castle Donington and Coaker Land schemes, it is understood that trip rates/traffic have not been agreed with the TWG, but the details set out reflect the best information available. There will already be assumptions in PRTM that can be used as a comparison.</li> <li>iv. As well as traffic impacts, the mitigation could also include other sustainable transport measures such as the extension to the tram, which is therefore referred to.</li> <li>v. The pre-modelling output boxes have been ticked and whilst they require agreement, PW set out that we do not want</li> </ul>	

	<p>protracted discussions to agree these details, again given the significant work that has been provided to date by all the various schemes, and the fact that Segro have taken this on themselves to unlock this current impasse, and should be supported in doing so.</p> <p>b. IR asked if the authorities could therefore agree the content as quickly as possible to help keep momentum going.</p> <p>c. PW asked if anyone had any initial comments. PB mentioned that AECOM will need traffic data in vehicles rather than pcus. PW suggested that the current proforma should be acceptable but will check and circulate a final version for agreement (subsequently sent later in the day).</p>	<p><b>NH/LCountyC /NCountyC</b></p> <p><b>BWB</b></p>
<b>4</b>	<b>Sustainable Transport</b> <p>a. PW confirmed BWB issued draft reports on behalf of ITP on 10/10/24 via SharePoint and would be grateful for any comments. SM has since suggested an end of November deadline (with comments received from AA on 15/11/24).</p>	<p><b>NH/LCountyC /NCountyC</b></p>
<b>5</b>	<b>Modelling Meeting Actions</b> <p>a. PW went through the actions from the modeling meeting that took place on 06/10/24.</p> <ul style="list-style-type: none"> <li>i. Trip generation and rail freight terminal notes have been issued and we would be grateful for agreement on those.</li> <li>ii. It is understood that CT is best placed to sign off information from a NH perspective.</li> <li>iii. In terms of Stage 1 modelling, BWB are happy to schedule a meeting with AECOM to discuss modelling outputs.</li> <li>iv. PW touched on proforma v14a and uncertainty log v7a, the difference being that they include additional scenarios that remove the Local Plan sites. These are required for both transport and noise/air quality.</li> <li>v. The purpose of the Vision and Validate assessment has changed because we are now on a fixed path for mitigation. It will now focus on mezzanine floorspace to understand how much additional floorspace could be built without compromising the agreed traffic generation being tested in the modelling and evidenced using the information from EMG1. The current trip generation applies 100% of the trip rates to the 100,000sqm mezzanine floorspace, which is significantly robust. The parameters plan for the DCO will then be amended to include the final GFA to be applied for. We would welcome feedback on the information BWB issued on behalf of ITP.</li> <li>vi. BWB had a conversation with JM and PB about Covid sensitivity factors and await further clarification on the best approach for this.</li> </ul>	<p><b>NH/LCountyC /NCountyC</b></p> <p><b>JM</b></p> <p><b>NH, LCountyC, NCountyC</b></p> <p><b>JM/JB</b></p>

	<p>vii. BWB will be going through the programme and will issue a revised version once available.</p> <p>b. PW asked if anyone had any questions on the modelling meeting actions. No comments received.</p>	<b>BWB</b>
<b>6</b>	<p><b>Next steps</b></p> <p>a. PW confirmed the next steps are mainly related to the modelling meeting notes, set out under Item 5.</p> <p>b. That is aside from the strategic traffic modelling requirement set out in items 2 and 3, progress of which now needs expediting post the decision to use the 2019 PRTM model. Hence agreeing to the Proforma is a top priority.</p>	
<b>7</b>	<p><b>AoB</b></p> <p>a. CT said in terms of mezzanine, would BWB provide evidence for reductions in trips associated with mezzanines. PW referred to information sent on 23/10/24 in response to questions raised by GN which is what should be referred to.</p> <p>b. FA has received the information and will draft a response by email (email since received by CT on 18/11/24).</p> <p>c. HH said that in terms of mezzanine floorspace, the Hinckley NRFI DCO proposed 850,000sqm GFA, of which 650,000sqm was ground floorspace and 200,000sqm was mezzanine, with no reduction in trip rates for the latter.</p> <p>d. HH asked whether the modelling meeting notes will be submitted with the DCO because they are in email format. PW said that BWB can formalize the notes into formal meeting minutes so they can be submitted.</p> <p>e. PW summarised the information that is forthcoming. The base VISSIM model was agreed with NH and it is understood LCountyC are happy to follow NH advice on this. A lot of further VISSIM modelling work has been undertaken using the previous 2035 outputs to inform decision making about mitigation. This has flagged up a couple of things that will need updating and will therefore be shared with the TWG.</p> <p>f. HH asked what the updates are. PW confirmed that colleagues have said they are simple updates but will revert back with the detail.</p> <p>g. At the start of the meeting, PW asked TBe about NCityC's involvement. TBe suggested PW speak to Chris Carter. PW subsequently spoke to Chris Carter on 14/11/24 who confirmed that he was happy for the TWG to continue as is, albeit would be happy to receive any key updates, should we consider it necessary.</p>	<p><b>Jacobs</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 12 DECEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Harry Horsley (HH) & Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) & Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 George Nock (GN), Alain Chandler-Hurst (ACH), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Steve Harley (SHa) – Oxalis Planning  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW), Matt Corner (MC), Simon Hilditch (SHi) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Steve Freek (SF) – National Highways (NH)  
 Tim Bellenger (TBe) – East Midlands Combined County Authority (EMCCA)  
 David Green (DG) & Stefan Stojasavljevic (SS) – Delta Planning

**MINUTES:**

Agenda item	Action
<p><b>1 Review of November's meeting minutes</b></p> <p>a. PW shared November's meeting minutes on screen and summarised the following actions, the majority of which are included in the agenda for this meeting:</p> <ul style="list-style-type: none"> <li>i. The highway design pre DCO scoping note was issued by BWB.</li> <li>ii. DS will catch up with TBo about the latest Midlands Connect meeting.</li> <li>iii. Draft STS and FTP documents have been issued on behalf of SM, and comments have been received from AW and JB.</li> <li>iv. A number of notes have been issued within the Stage 1A modelling pack and signed off by NH, with comments received from AW yesterday.</li> <li>v. BWB have liaised with AECOM about PRTM modelling outputs.</li> <li>vi. BWB/AECOM have reviewed traffic data to inform the covid sensitivity test.</li> <li>vii. A revised programme has been issued by BWB.</li> <li>viii. Information has been received from CT regarding mezzanines and the vision and validate assessment for BWB to review and respond to.</li> <li>ix. Further information will be provided by VD on the base VISSIM model.</li> </ul> <p>b. PW asked if anyone has any further comments on the minutes. No comments received hence these are agreed.</p>	

2	<p><b>Client update and PRTM 2019 vs 2023 models</b></p> <p>a. IR confirmed that the public consultation has been delayed to February 2025 because the transport modelling programme has been extended and because there are various notices/letter drops and procedural issues that need to happen prior to the consultation, which will be difficult to undertake around Christmas.</p> <p>b. IR summarised the current position in that an agreement has been made with the TWG to use the PRTM model but LCountyC have advised that a 2023 version is now available, although we have received different views from AECOM, hence appear to be going round and round in circles. IR asked if an update could be provided on when the 2023 model will be available, if it is validated, and how it would affect the current programme if it was used?</p> <p>c. PB said that if Segro has been told the 2023 model is available from those higher up within LCountyC then it is available. The confusion over availability comes down to corporate reasons, but progression has been quicker than expected, meaning a base year model should be close to being signed off and is 'pretty much good to go' and 'exciting'. A general LMVR needs to be produced by AECOM followed by a site specific LMVR to inform the EMG2 modelling, if a decision is made to use the 2023 version. However, PB cannot comment on programme implications which he will defer to AECOM on.</p> <p>d. AD said that AECOM defer to LCountyC on which version of the model is to be used and when it is available for use on specific planning applications. IR reiterated the concerns with delays to the project, which Segro simply cannot afford, hence queried what impacts it would have on the programme. AD confirmed he is not clear as to whether this relates to the current EMG2 commission or wider strategic modelling work.</p> <p>e. PW suggested that further information is needed from LCountyC rather than AECOM on the status and requirement for using the 2023 model, seeing as it is their model.</p> <p>f. HH said that LCountyC's position is that the best model available should be used and so if the 2023 version is ready then that would be the preference. It is fair to consider implications on the programme.</p> <p>g. PW sought confirmation whether the 2023 model is indeed available to use as of tomorrow, as intimated, and asked if NH are happy for that version to be used? CT confirmed that NH have not seen or heard anything with regards to the new 2023 PRTM model, hence prior to running it for EMG2 they would need to review the model to check it validates. This would therefore have timescale implications on the programme.</p> <p>h. JB view, based on experience working on a lot of other DCO's, is that this issue crops up regularly and it will delay the project if we use the</p>	
---	---	--

	<p>2023 PRTM model. We therefore need to weigh up the benefits against the implications on programme and take a considered view as to whether it would make that much of a difference, especially if we all have comfort with the 2019 model. NH are comfortable to maintain with the 2019 PRTM model but suggested IR obtains lawyers opinions and to possibly carry out a sense check in the future to understand whether there are any fundamental differences between the 2019 and 2023 PRTM models to cover ourselves at the Examination and take a considered view. JB would however counsel against revising everything and starting again.</p> <p>i. IR said that the Freeport timescales require units to be occupied by 2031 and the current programme is already challenging and cannot afford for it to slip anymore. IR therefore asked what the time implications are of using the 2023 PRTM model and whether this would be weeks or months. JB said that in his experience it would incur months of delays on the programme.</p> <p>j. HH asked if the PRTM 2023 model has been discussed with the Freeport Board? IR said that it has not formed part of conversations, but the Freeport timescales are based on occupying units which need to be completed by 2031. EMG2 is the only scheme that is likely to meet the Freeport timescales; they are totally reliant on this site, hence is of significant importance.</p> <p>k. HH asked whether the PRTM 2023 version would be used for the wider strategic work. IR said that if it aligns with the programme timescales then this is possible but timescales need confirming before a decision can be made; he is not against the principle, but it has to align timescales wise.</p> <p>l. PW referred back to discussions held and documented in the November meeting minutes where an agreement was made to use the 2019 PRTM model, at considerable expense to Segro, and we are days away from starting to receive the outputs. Whilst it was highlighted at said meeting that by the time we reach examination, PRTM will have a version with a 2023 base year (item 5b of said meeting minutes) it was discussed that this would not be available until 'summer 2025'. The Covid sensitivity test work has also compared 2019 and 2023 traffic data which shows a reduction in traffic and so the PRTM update may not be a significant issue. Therefore, undertaking a sensitivity test using the 2023 PRTM model at the appropriate time may be the best option, which IR agreed with.</p> <p>m. PW reminded everyone that the PRTM modelling has already been re-visited once, which was previously due to project delays. However, this issue is different because it is out of the Clients control who has gone through all the necessary steps on an agreed basis to get to the current position, with BWB expecting outputs from AECOM in the next few days, hence the frustration, which we hope can be appreciated. This issue about the 2023 PRTM model had only been raised this week (only 5 weeks after it was suggested that it would not be ready until 'summer</p>	<p><b>AECOM</b></p>
--	--	---------------------



	<p>2025' at the November modelling meeting).</p> <p>n. IR said the overall message appears to be that we are too far along using the 2019 model. If we now move to the 2023 version then this would add months onto the programme because the model needs to go through the validation process and agreement with relevant stakeholders before it can be used. Therefore, the plan is to remain with the 2019 model and if there is time to carry out a sensitivity test using the 2023 model prior to Examination then this can be undertaken, asking if anyone disagreed?</p> <p>o. HH raised concerns with this approach. HH suggested that it would be in nobodies interest to be questioned by an Inspector on the decision to not use the 2023 PRTM model without seeing the evidence on timescales/programme implications and therefore asked if this information can be provided and considered before a decision was made.</p> <p>p. IR therefore asked if AECOM could confirm whether the 2023 PRTM model is ready to use now, what they would need to revisit with regards to the work completed to date and how much it would cost. In addition, clarification is required from everyone on their views of using the 2023 model and whether they are comfortable with it, within the next few days. IR continued by stating that in the meantime we need to continue with the 2019 version, and that any delay is unacceptable.</p> <p>q. SHi suggested that similar to JB comments, we could run a sensitivity test using the 2023 PRTM model at a later stage to validate the work undertaken and hopefully allay HH's concerns. The hope being that this could be agreed between submission and examination.</p> <p>r. AD said AECOM can compare the performance of the 2019 and 2023 models in the local area and put together a revised programme to set out the implications of using the 2023 model.</p> <p>s. IR reiterated that we need to continue with the 2019 work in the meantime but we need evidence with regards to validation, to allow us to set out the modelling journey story, including the 2023 sensitivity testing, PW confirmed that it will be a simple process to set out the story up until now with regards to the process which has been adopted.</p> <p>t. SHa asked if AECOM's note will also pick up on the points CT made about NH reviewing the model validation, as this will also impact programme/timescales. IR suggested this would be separate to AECOM's works to that but agreed the timescales for this also need to be understood. SHa set out that we cannot go into Examination with the potential for LCountyC to say late in the day that they were never comfortable with us using the right model; it won't help anybody. We need to be clear as to what we are doing.</p> <p>u. IR was of the opinion that he cannot see how the approach adopted to date can be challenged, seeing as agreements have been reached</p>	<p><b>AECOM</b></p> <p><b>AECOM</b></p>
--	--	---

	<p>on everything, which, up until a few days ago, as reiterated by PW, was a non issue. The right decisions were made at the right time, and that should hopefully continue to be the case.</p> <p>v. IR asked AECOM how long it would take to provide the evidence on timescales. AD said that he cannot provide fixed timescales now, but the work will involve a base year model review and prepare a note for relevant stakeholders, would be mid January. IR suggested that at the very least this exercise would not be completed until February/March 2025 as a result, which does not work with the current programme and Freeport timescales.</p> <p>w. JB said that if a decision is made to carry out a sensitivity test using the 2023 model either just before or during the Examination process, then there are risks involved the later matters are agreed, and it will also incur further costs. Therefore, we need to be pragmatic about the decision and obtain legal advice before going into the Examination however understanding the time implications of the 2023 model would be useful to know now. IR agreed and said that if we can run models in the summer once it is ready then this is an option.</p> <p>x. AA asked whether there are concerns with running the 2023 model and presenting the findings at the Examination because it involves submitting new evidence.</p> <p>y. SHa said that presenting new evidence at Examination could be an issue and we are best going into the examination process knowing the implications of the 2023 model. The evidence is typically front loaded so there is a significant risk running models after the Examination.</p> <p>z. GN asked if the LMVR for the 2023 base model is written so that Jacobs can resource this immediately. PB said that this is still being written and not available right now. AD confirmed this is the case.</p>	
<b>3</b>	<p><b>Wider strategic modelling planning data assumptions/proforma</b></p> <p>a. PW said that from the last meeting a number of actions were set to obtain revised planning data to inform the wider strategic modelling, however questioned whether this would also affect the release and validation of the 2023 PRTM model, which surely would have to take into consideration such matters?</p> <p>b. SHa asked if the planning data assumptions are gaps in the PRTM model. PW said that it is outstanding information required for the uncertainty log and base model assumptions but that a lot of work has been undertaken in the background to deal with this over the last week, with the programme assuming that the proforma for the strategic modelling work would have been agreed today.</p> <p>c. TBo said that his email sent on 26/11/24 regarding Nottinghamshire and Nottingham City data remains valid. The Greater Nottingham Strategic Plan has now been published and is going to Examination in Spring</p>	



<p>2025. The updated values reflect planning data across Rushcliffe, Gedling, Broxtowe and Nottingham City. If AECOM has any queries, then they can liaise directly. It was however agreed that PW would contact Matt Gregory at NCityC to check all is in order from their perspective (email sent later that day).</p>	<p>PW</p>
<p>d. PW went through updates on the Leicestershire planning data received from PB, summarised as follows:</p>	
<ul style="list-style-type: none"> <li>i. All data has been received from Blaby, Melton and Oadby.</li> <li>ii. Data from Charnwood and North West Leicestershire is to arrive in January 2025.</li> <li>iii. Requests have been made to Harborough and Hinckley and Bosworth but any changes are likely to be trivial.</li> <li>iv. No feedback has been received from Leicester City but AA agreed to liaise directly with the planning department to try and get an update (PB to confirm details as to who he liaised with to assist).</li> </ul>	<p>AA/PB</p>
<p>e. PW asked AECOM if they have any updates from South Derbyshire District Council. JM said the last response was from April 2023 (sent by Richard Groves) but will follow that up (they have not as yet been contacted post the December modelling meeting).</p>	<p>AECOM</p>
<p>f. PW has contacted Derby City and is waiting for a reply, which he will follow up on. A response has been received from Erewash and there should be no changes needed to the current assumptions.</p>	<p>PW</p>
<p>g. SHa said that he and IR are meeting North West Leicestershire tomorrow so can assist if required. PB thanked SHa but said that the information is unavailable at the moment so there is no need to chase.</p>	
<p>h. AA asked when the planning data is needed. PW said the hope was that an agreement could be made today but that won't now happen and other districts in Leicestershire can't provide information until January so we have until early in the New Year.</p>	
<p>i. PW thanked everyone for their efforts and that good progress has been made to receive updated planning data assumptions but asked if a final push can be made to obtain any outstanding information.</p>	
<p>j. PW went through the development details for all the strategic sites to inform the proforma, including the quantum and land uses. There are aspirations to extend the tram route to EMG2 with stops in between at key locations. BWB have liaised with AECOM to understand how this can be modelled in PRTM, which is possible but requires a number of assumptions being made. PW asked what else is required to get the proforma agreed.</p>	
<p>k. No further comments received but FA said that Jacobs will review the email from PW setting out the development quantum and land uses so will respond to that. BWB can append that email to the proforma if</p>	<p>FA/AW/TBo</p>

	required. Comments also remain required from LCountyC and NCountyC.	
<b>4</b>	<b>Stage 1 modelling outputs (proformas v14 and v14a)</b> <ul style="list-style-type: none"> <li>a. JM apologised for the delay in issuing model outputs which was due to an issue identified on Sunday. The models are running but it will be next week until outputs can be issued.</li> <li>b. JM did say that his colleague has drafted an email setting out the format of how the outputs will be sent that can be shared upfront. PW thanked JM and said that would be useful, for BWB to look at this afternoon (an email has since been received from AECOM).</li> <li>c. GN asked for clarification on the tram extension and certainty about its delivery and how it will be modelled in PRTM. PW said that BWB have been asked to include it as a scenario, however in terms of certainty there is no fixed path/information. The tram can however be included in PRTM using a number of assumptions, but we will be commissioning a with and without tram scenario to cover both bases.</li> <li>d. GN thanked PW and said that Jacobs will wait for the details about how the tram will be modelled.</li> <li>e. IR confirmed that the highway mitigation will not hamper the future expansion of the tram. The work Steve Johnstone is undertaking includes land to deliver the tram so the infrastructure will be there to allow it to happen but there are many unknowns about how or when it will happen.</li> </ul>	<b>AECOM</b>
<b>5</b>	<b>Sustainable Transport Strategy and Framework Travel Plan update</b> <ul style="list-style-type: none"> <li>a. SM thanked AW and JB for comments on the two documents and confirmed that emails have also been exchanged with AA. ITP will update the documents once all comments have been received and produce a log to show how they have been addressed.</li> <li>b. SM asked if there will be any further comments from any other authorities. TBo said that NCountyC will comment so will take this away as an action. SM said she would wait for NCountyC's comments before issuing revised documents to cover everything in one go.</li> </ul>	<b>NCountyC</b>
<b>6</b>	<b>Vision and validate assessment</b> <ul style="list-style-type: none"> <li>a. PW referred to CT email sent on 18/11/24. BWB are working with ITP to look at the difference in the findings with Unit 4 (Kuehe + Nagel West) removed, which was identified as an anomaly. BWB will refer back once this has been undertaken.</li> </ul>	<b>BWB</b>
<b>7</b>	<b>Covid sensitivity assessment</b> <ul style="list-style-type: none"> <li>a. MC said that AECOM and BWB have compared Webtris data on the</li> </ul>	<b>BWB</b>

	<p>SRN around the site between 2023 and 2019. The assessments compared PCU flows across April, May and June (AECOM review) and total vehicles across March/October (BWB review), which showed that overall traffic flows have reduced. BWB welcome any feedback on the data but intend to produce a note summarising the data as a way of assessing impacts of Covid rather than testing it in PRTM as a separate scenario.</p> <p>b. PW said that this may also relate to the discussions held earlier about 2019/2023 PRTM models in that traffic flows have reduced.</p> <p>c. TBo asked if there is information for the A453 in the northbound direction. MC said that there is only a counter point recording southbound traffic, which is why northbound traffic has not been provided.</p> <p>d. VD asked if the Webtris data for 2023 has been used to validate the new PRTM base model. JM said that a number of data sources have been used which includes both LCC C2 and Webtris counts.</p> <p>e. VD said that given the 2023 flows are shown to be lower compared to 2019 asked if the current modelling be worst-case in terms of background traffic volumes and whether a comparison has been undertaken between the two PRTM base models.</p> <p>f. JM said that the networks are different between 2019 and 2023 models, the 2023 model is an open road base with more nodes but appreciates the point that 2019 could be more robust but this has not been confirmed. VD asked if this is an easy comparison to make to understand the differences. JM said it is probably best to compare the LMVR and journey times but is something that AECOM can look at.</p>	<b>AECOM</b>
<b>8</b>	<p><b>Revised scope of highway design pre DCO report</b></p> <p>a. SHi said that the report has already been updated with comments from JB and asked whether each individual authority can send comments in one go for expediency. SHi asked FA if there is anything significant to discuss from her comments.</p> <p>b. FA acknowledged the request for one set of comments to be provided but that the comments should be straight forward to review/consider.</p> <p>c. SHi said that he will issue a revised report in early January taking on board FA comments.</p>	<b>BWB</b>
<b>9</b>	<p><b>VISSIM base model update</b></p> <p>a. VD confirmed the revised base VISSIM model is being fine-tuned and will aim to be issued early next week once comfortable with how it is running.</p>	<b>BWB</b>

	<p>b. GN thanked VD and asked for the revised base VISSIM model validation report to accompany the model and a technical note or list of changes made with a reason for the update and any implications for Jacobs to easily review and sign off.</p> <p>c. VD said the changes are listed as a section in the report. GN asked for his colleague Lee to be copied into the email who will be reviewing the details.</p>	<b>BWB</b>
<b>10</b>	<p><b>Stage 1A modelling sign off sheet</b></p> <p>a. MC thanked CT for sending the signed version across and AW for the comments received yesterday.</p> <p>b. MC shared the comments from AW, in summary five of the six documents are broadly agreed in principle with LCountyC (with some being deferred to NH). The outstanding document to be agreed is the furnishing methodology note and so it was suggested that LCountyC sign the Stage 1A modelling sheet but provide a comment saying this excludes the furnishing methodology note, given that NH and NCountyC are comfortable with it. AW confirmed he can do this.</p> <p>c. MC clarified that NH have also confirmed in the comments section that NH have agreed with three other documents (Local Model Validation report, Trip Generation core assessment and the EMG1 rail freight terminal) although these will be formally signed off through the Stage 1B sign off pack.</p> <p>d. GN mentioned that the VSSIM LMVR will be superseded with the updates VD is carrying out. MC acknowledged this and confirmed that the Stage 1A modelling sign off sheet references report version P3, which will remain unchanged, and the updates will be set out within version P4 which can be included in the Stage 1B modelling pack. GN agreed with this approach but that we need to be cautious to ensure that this is clear.</p> <p>e. MC asked NCountyC if they are comfortable with the six documents. TBo said that they haven't reviewed the VISSIM work but would defer to NH on this, so NCountyC have no issues and once confirmation has been received from LCountyC then this can be signed.</p> <p>f. HH however questioned how the details can be signed off now because there is still a question over the PRTM model version being used. MC said that the Stage 1A documents all include revision references, which relate to the 2019 PRTM model, so if there are changes to the modelling approach then documents will get superseded which can be covered in new sign off sheets.</p> <p>g. HH reflected on the approach taken to date and whereby a mitigation strategy has been developed in advance of strategic modelling being undertaken with the intention that a strategic modelling exercise would be used to demonstrate that the strategic mitigation proposals are</p>	

	<p>appropriate. On this basis the sign off sheet for Stage 1A item is therefore not on the critical path on the basis the work has been progressed at risk. Sign off is therefore required ahead of Examination so would like to withhold and wait until the modelling strategy is confirmed before signing the Stage 1A modelling sheet. There appeared no merit in doing so now. SHa reiterated that the approach is to continue using the 2019 PRTM model because of programme requirements.</p> <p>h. SHi asked if HH can confirm the approach being undertaken is acceptable subject to there being no changes to the PRTM modelling. HH said that he would like to liaise with colleagues and wait for a confirmed approach with PRTM before signing the Stage 1A modelling sheet.</p> <p>i. DS said that NCountyC would await the outcome of these discussions before signing off the Stage 1A modelling sheet.</p>	
<b>11</b>	<p><b>Programme</b></p> <p>a. PW shared an updated programme which has been circulated to the TWG. The public consultation is now set for February 2025 based on the 'green package' of mitigation. However, the current timescales were set on the basis of the PRTM outputs being received early this week and the proforma for the wider strategic modelling being agreed today. Having confirmation of which model version is to be used is therefore critical for timescales.</p>	
<b>12</b>	<p><b>AOB</b></p> <p>a. SHi asked CT if she could send an instruction to colleagues at NH to formally engage with BWB on the geo-technical aspects of the mitigation. CT confirmed she can send an instruction.</p> <p>b. SHi also asked about abnormal load contacts. CT said NH have a webpage with details or message the general inbox.</p>	<p><b>CT</b></p> <p><b>SH</b></p>

**EAST MIDLANDS GATEWAY PHASE 2 – TRANSPORT WORKING GROUP MEETING;  
THURSDAY 9 JANUARY 2025 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Catherine Townend (CT) – National Highways (NH)  
 Harry Horsley (HH) & Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) & Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Anthea Anderson (AA) – Leicester City Council (LCityC)  
 Tim Bellenger (TBe) – East Midlands Combined County Authority (EMCCA)  
 George Nock (GN), Fiona Ahmed (FA) & Jeremy Bloom (JB) – c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Steve Harley (SHa) – Oxalis Planning  
 Steph Meyers (SM) – ITP  
 Paul Wilson (PW), Matt Corner (MC), Simon Hilditch (SHi) & Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Steve Freek (SF) – National Highways (NH)  
 Alain Chandler-Hurst (ACH) – c/o Jacobs; NH transport consultants  
 David Green (DG) & Stefan Stojavljevic (SS) – Delta Planning

**MINUTES:**

Agenda item		Action
1	<p><b>Review of December's meeting minutes</b></p> <p>a. PW shared December's meeting minutes on screen and summarised the following actions, the majority of which are included in the agenda for this meeting:</p> <ul style="list-style-type: none"> <li>i. Further discussions have been held on which version of the PRTM model is to be used.</li> <li>ii. Information has been shared on the planning data assumptions for the wider strategic modelling. A proforma has been shared which NH are comfortable with subject to agreeing which version of the model is to be used and a minor change to the Plot 16 traffic numbers.</li> <li>iii. Stage 1 modelling outputs to be discussed. The December minutes should have included an action for LCountyC at point 10H, which will therefore be updated and re-shared.</li> <li>iv. Further information has been shared on the mezzanine floorspace and associated trip generation.</li> <li>v. A document has been shared setting out the Covid sensitivity details.</li> <li>vi. SHi was on the call to discuss design related matters and provide an update on mitigation.</li> <li>vii. Stage 1A modelling sign off sheet is still outstanding from LCountyC and NCountyC.</li> <li>viii. CT confirmed that instructions have been sent for NH to</li> </ul>	<p><b>PW</b></p>

	<p>engage on the geo-technical aspects of the mitigation.</p> <p>ix. SHi has contacted the abnormal loads team via the general inbox but has not received a response. CT to follow up and provide a direct contact.</p> <p>b. PW asked if anyone has any further comments on the minutes. No further comments hence were agreed, except from HH, who said that LCountyC still need to review them (an updated version, including for point iii above, was issued on 9<sup>th</sup> January 2025)</p>	<p><b>CT</b></p> <p><b>LCountyC</b></p>
<b>2</b>	<p><b>Client update</b></p> <p>a. IR said the statutory consultation period for the DCO needs to be a minimum of 28 days and Segro have scheduled it to run from 3 February 2025 to 14 March 2025, hence longer than statutory 28 days. There are two public exhibitions planned; one at Diseworth Village (10 February) and a second at the Hilton Hotel (25 February). Segro will send out individual invites via Royal Mail to all households covering a significant area.</p> <p>b. IR said that in terms of the M1 to A50 free flow link, the consultation will refer to the option of bridging over the A453. However, drainage issues need considering for the option of going under and associated pumping stations.</p> <p>c. JB said that he has contacted the drainage team and will follow up on this for further information.</p> <p>d. SHi said that the risks associated with going over and under the A453 will be set out in the consultation. There appear to be no design standards relating to pumping stations and so further clarity is required. JB said that this will form part of his discussions with the drainage team.</p> <p>e. IR said that timescales are dictated by the transport work but aiming for a Spring 2025 submission.</p> <p>f. HH asked if the authorities will receive formal notification of the consultation dates and if there will be sight of materials beforehand.</p> <p>g. IR said that Segro can share the boards beforehand and will email the authorities with invitations next week.</p> <p>h. HH asked if there will be sight of the highway mitigation scheme before the consultation. SHi said that this forms an agenda item in the meeting.</p> <p>i. MC shared a presentation setting out key details for the consultation, which BWB will share with the TWG (alongside these minutes).</p> <p>j. SHi suggested whether the authorities could arrive earlier at the Hilton Hotel event to meet face to face at approximately 1pm before the consultation starts at 2pm.</p>	<p><b>JB</b></p> <p><b>IR</b></p> <p><b>BWB</b></p>



3	<p><b>2019 vs 2023 PRTM model</b></p> <ul style="list-style-type: none"> <li>a. PW asked if LCountyC NDI have considered timescales for moving to the 2023 model and if AECOM has compared the LMVR and journey times for links around the site.</li> <li>b. PB said that PRTM 2023 is available and has a Freeport area specific LMVR ready for circulation. It has a lot of journey time routes, screenline data and validates well around the Freeport area. However, timescales will be the key point of discussion but from LCountyC NDI point of view it is the best model to use, so a discussion needs to be had over which evidence base will allow for a smoother path through Examination and where it is picked up, Stage 2, wider strategic assessment etc.</li> <li>c. PW said that PRTM 2023 could potentially be picked up for the wider strategic modelling. However, presumably NH would still need to review the model and the planning data assumptions need bottoming out beforehand, hence there are still processes that would still need to be undertaken before the modelling can be run.</li> <li>d. PB said that the timescales in agreeing the final modelling inputs may coincide with NH review of the model.</li> <li>e. JM said that an EMG2 base year model validation report would be required, similar to what was produced for the 2019 model. This would take approximately 2 weeks, before the model is ready to be shared with NH for review..</li> <li>f. PW summarised his view on timescales and that before the modelling can be started there would need to be a base year model review (circa 2 weeks), a NH review of the model (GN confirmed a minimum of 4 weeks) and then planning data assumptions would feed into the above timescales. Hence overall if we were to switch to the 2023 model then it would be March 2025 at the earliest before modelling can be started, with circa 2 months thereafter before outputs start being received. These timescales align with what PW set out in a Statement IR sent to Rebecca Henson, which Segro are waiting for feedback on.</li> <li>g. HH asked what modelling scenarios will be included in the Transport Assessment and which scenarios will be delayed until May 2025 if we were to switch to the 2023 version.</li> <li>h. PW said that Stage 1 and 2 will be included in the Transport Assessment. The wider strategic work will be covered in a separate Transport Assessment produced by Lawrence Walker. It is the wider strategic work that would be impacted by timescales.</li> <li>i. HH said that there is a risk if the Stage 1a/b modelling and mitigation do not align with the wider strategic solution. PW said there is always a risk but the current mitigation within the 'green package' forms part of</li> </ul>	
---	--	--



	<p>the wider strategic solution.</p> <p>j. HH asked if the programme timescales align with the wider strategic work and what are the timescales for coming up with the mitigation and testing it through PRTM. The current understanding is that the Stage 1a and 1b scenarios will not provide an understanding of mitigation requirements for EMG2.</p> <p>k. MC summarised the scenarios being tested in PRTM;</p> <p>i. Stage 1 includes the core 2028/38 forecast year scenarios;</p> <p>ii. Stage 2 includes the Covid assessment, any vision and validate assessment (albeit this should not be required) and EMG2 mitigation i.e. green package; and</p> <p>iii. Wider strategic assessment considers all Freeport sites and associated mitigation for which the green package forms part of.</p> <p>iv. Hence, the Stage 2 work includes testing the mitigation proposed by EMG2.</p> <p>l. IR said that the wider strategic work aims to demonstrate that should all the sites come forward then this is how the mitigation would come together and the work being proposed by EMG2 would form part of that larger scheme.</p> <p>m. PW said that the plan is for the green package to mitigate the impacts of EMG2, so regardless of what schemes ultimately come forward there is a scheme to accommodate EMG2.</p> <p>n. PB asked if the wider strategic assessment is a different workstream to the EMG2 DCO submission?</p> <p>o. PW confirmed it is and said that the wider strategic assessment is subject to a separate PRTM proforma. The position is that EMG2 remains with the 2019 model given that outputs are expected imminently. The question is then what version of the model is used for the wider strategic assessment, given modelling has not officially started.</p> <p>p. PB said that all new projects need to use the 2023 model version and given work has not started on the wider strategic assessment, then the 2023 model will need to be used.</p> <p>q. IR said that Steve Johnstone has been asking about which version of the model to use for some time now and so the delay in agreeing proforma details to align with the availability of PRTM 2023 seems unethical.</p> <p>r. HH asked whether the wider strategic work would form part of the DCO submission. PW said that it will be an ancillary piece of work that needs agreeing collectively but it is separate to the EMG2 DCO.</p> <p>s. SHi/IR said that the aim of that work is to demonstrate what mitigation</p>	
--	---	--

	<p>would be required to accommodate all planned development and how it would fit together. This should give the authorities comfort that developers are working together to come up with a significant solution at M1 Junction 24 to accommodate all planned growth in the area.</p> <p>t. IR said that the wider strategic work was undertaken by Segro at good faith to show the authorities how all the schemes could come forward together and we could have simply submitted a Transport Assessment purely for EMG2.</p> <p>u. HH said that if the wider strategic solution does not form part of the DCO submission then a sensitivity test could be undertaken that tests the EMG2 mitigation in PRTM 2023 version to check that everything aligns.</p> <p>v. PW said that the hope was for the PRTM proforma for the wider strategic work to be agreed last month and there have been changes in the understanding of the timescales for when PRTM 2023 will be available. The wider strategic assessment is tied to EMG2 for which strategic modelling has been commissioned already.</p> <p>w. HH said that the authorities have not seen the mitigation schemes and there will be a process to agree the mitigation, which does not form part for the current programme.</p> <p>x. SHi said that the mitigation details will be shared now so that the details can be discussed/finalised alongside the PRTM modelling, with the TWG but also NH SES.</p> <p>y. PW said that Segro/BWB are expecting to receive a response from Rebecca Henson shortly and it will then be for BWB/Segro to make a decision as to how the modelling is progressed (email since sent on 13<sup>th</sup> January 2025).</p> <p>z. IR agreed, but said that the EMG2 modelling already undertaken would need to remain with the 2019 version asking whether we can therefore agree the PRTM proforma for the wider strategic work now?</p> <p>aa. PW said that the proforma can be agreed as it is separate to the version of PRTM being used.</p> <p>bb. HH asked if the proforma can include a scenario that tests the impacts of the EMG2 green package as a sensitivity test in PRTM 2023. PW acknowledged this point and agreed that it comes down to which version of the model is used and said that BWB will liaise with Segro on timescales and which model to be used.</p>	<p><b>BWB</b></p> <p><b>BWB/Segro</b></p> <p><b>BWB/Segro</b></p>
<b>4</b>	<b>Highway design work</b>	
	<p>a. SHi shared drawings of the highway mitigation which will be shared with the public consultation materials to which comments would be appreciated and provided an overview of what the works include.</p>	

	<p>The scope of highway design pre DCO document then sets out what BWB are trying to achieve.</p> <p><u>Sheet 1 – Site Frontage works</u></p> <ul style="list-style-type: none"> <li>b. SHi said that the access strategy is to have a fourth arm from the A453/Hunter Road roundabout and associated widening, with a bus interchange provided within the site. However, BWB will consult on the new roundabout as a secondary option.</li> <li>c. SHi explained the works on Hyam's Lane, which would change from an all-purpose highway to a dedicated walking/cycling link with improved signage. The majority of the link will be unadopted and maintained by Segro. The route forms part of a future National Cycle Route with Sustrans. All existing field accesses would be closed.</li> <li>d. SHi said that a plan showing the Public Rights of Way strategy will be provided. There will be a new signal-controlled crossing at the EMA junction.</li> <li>e. SHi said that a new footway/cycleway (adopted) will be provided along the A453 connecting EMG2 with EMG1. A Toucan Crossing will be proposed on the A453 at the site frontage.</li> <li>f. HH said that the new access has not been modelled in PRTM as it is the secondary option. SHi said that it is a minor loading point change that should not affect the strategic modeling work significantly. HH said that it would affect the existing A453/Hunter Road roundabout.</li> <li>g. SHi explained that there are also minor works at the A453/The Green junction, which involves providing a short flare to allow two vehicles to sit side by side at the give way line.</li> <li>h. HH asked whether emergency access has been considered and if it is shown on the plans.</li> <li>i. SHi said that the plan is for emergency access to be via Hyam's Lane as it will be a surfaced route of suitable width.</li> <li>j. HH said that part of the Hyam's Lane will be stopped up and so the TRO will need to be considered around the adopted highway that will also need detailing on the plans.</li> <li>k. HH said that access via Hyam's Lane to Donington Services will need considering. SHi said that BWB has consulted with Moto but due to security reasons from NH there cannot be rear end access to the services. However, an alternative route will be provided to the main entrance at Finger Farm roundabout. From walking the current route along Hyam's Lane, it is inaccessible anyway, so whilst the route will be longer it will be a better quality route.</li> </ul>	<p><b>SHi</b></p>
--	---	-------------------

	<p><u>Sheet 2 – Finger Farm to EMG1</u></p> <p>l. The A453 footway/cycleway would use part of the former A453 road where possible and include sections of new construction elsewhere. Some of the route forms part of the former L45 footpath.</p> <p>m. SHi said there are existing gradient issues that can be addressed by aligning the footway/cycleway around the existing layby and within the EMA land. This requires third party land to avoid an existing lay-by, which is to be retained.</p> <p>n. The northern section close to EMG1 uses part of the old A453 road within NH Trunk Road land. The final connection to EMG1 will use an area of earthworks installed as part of EMG1 for future walking/cycling connections. These proposals will therefore provide wider connections to Kegworth as well as other settlements and extend the National Cycle Route, so will bring added benefits.</p> <p>o. SHi said that the EMG1 roundabout will be amended to provide two lanes into EMG1 from the A453 southbound. A new pedestrian crossing is proposed on the EMG1 exit connecting the new drop off layby with the bus interchange.</p> <p>p. SHi asked if anyone has any initial comments on this part of the scheme. No comments received.</p> <p><u>Sheet 3 – M1 Junction 24</u></p> <p>q. SHi said that the largest element of mitigation comprises a new free flow link from the M1 northbound to A50, which is currently shown bridging over the A453 (but there is also an option to go underneath). The link would be a single lane interchange. The proposed merge arrangements with the A50 need considering with the existing 2/1 merge from the roundabout. It is likely that the new free flow link will be a lane gain on the A50 before dropping back to two lanes further north away from the junction. This will need discussions with NH SES to agree the details as it will likely form a departure.</p> <p>r. SHi said that there are space constraints with the diverges on the M1 and weaving lengths from the A42. This has been looked at in VISSIM and will be a critical part of the design for NH to review.</p> <p>s. SHi said that hard shoulders are provided within the proposed layout which meet current standards. They will therefore be re-introduced on a section where they were lost as part of the Smart Motorway scheme.</p> <p>t. SHi said that the weaving section on the M1 southbound/A50 section will be widened to three lanes. When BWB carried out works at M1 Junction 24 as part of EMG1, there was a departure on the weaving length that will continue to need consideration.</p> <p>u. SHi said that there are also minor changes to road markings and</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
--	--	-------------------------------------

	<p>signage and reallocating lanes on the A453 southbound to allow more traffic to travel to the airport. Road markings will be changed to allow two lanes from the A453 northbound to the M1 northbound.</p> <p>v. SHi asked that the authorities and NH review the details and advise BWB of any comments. JB said that issues have been identified with the diverges that can be discussed in further detail.</p>	<b>All</b>
<b>5</b>	<p><b>Planning data assumptions</b></p> <p>a. PW said that there were a few planning data assumptions that needed bottoming out before the wider strategic modelling can be commenced.</p> <p>b. AA confirmed that she is in the process of getting the data from LCityC planning colleagues and will aim to have this by the end of the month.</p> <p>c. JM said that Richard Groves of SDDC (Senior Planer) has responded with information on housing data. AECOM needs to review the data and ensure it is captured.</p> <p>d. PW said that NCityC information has been received and shared.</p> <p>e. PW said that DCityC information is being provided by Duncan Irons of Systra on DCityC's behalf, which BWB will share on receipt.</p> <p>f. PB said that if Duncan is providing inputs from the EMG model, then there are only two forecast years and so phasing may need to be considered as part of the PRTM modelling.</p>	<p><b>AA</b></p> <p><b>AECOM</b></p> <p><b>BWB</b></p> <p><b>AECOM</b></p>
<b>6</b>	<p><b>Stage 1 modelling outputs</b></p> <p>a. JM provided an update and AECOM are happy with the models and are focusing on the 2022/23/24, 2028/38 without development scenarios. AECOM will aim to share the information next week.</p> <p>b. PW asked that once information is ready if it could be sent over even if it is drip fed to allow BWB to make a start with things.</p> <p>c. GN asked for timescales in receiving PRTM outputs for each scenario and the forecasting report to plan resourcing.</p>	<p><b>AECOM</b></p> <p><b>JM/PW</b></p>
<b>7</b>	<p><b>Sustainable transport strategy</b></p> <p>a. SM said that before Christmas ITP issued a response to comments document, which was sent to LCountyC, LCityC and NH comments. ITP has since received comments from NCountyC. ITP will therefore update the document to include an initial response to NCountyC comments before updating the STS and FTP.</p> <p>b. SM asked if there would be any further comments from other</p>	<b>FA</b>

	<p>organisations? FA said that she has reviewed ITP initial response and is largely happy but may have some further questions that will be shared.</p> <p>c. SM asked whether comments are expected from DCityC and DCountyC. PW confirmed that these authorities are happy to remain on the periphery.</p> <p>d. AW confirmed that there are no further comments from LCountyC.</p>	
<b>8</b>	<p><b>Vision and validate/mezzanine related matters</b></p> <p>a. PW responded to comments from CT on the data that fed into the vision and validate assessment. The latest email issued on 6<sup>th</sup> January 2025 includes more detail on the traffic forecasts for various scenarios. The latest email focuses on the 2022 survey data and the B8 element of the proposals. The headline summary is that the client would like flexibility for a further 100,000sqm of B8 mezzanine floorspace. The worst-case impact on traffic is it could generate a further 220 trips (worst-case evening peak) based on currently agreed trip rates, but by attributing the additional mezzanine floorspace to the EMG1 surveyed trip rates or applying a reduction in trip rates to the mezzanine floorspace, then the overall traffic forecasts would fall well within what we are currently modelling and allow Segro to go as far as building out 592,000sqm of B8 floorspace at EMG2 in total.</p> <p>b. PW referred to the Northampton Gateway scheme where an agreement was made to deduct 50% of the trip rates to mezzanines. The Amazon at Bardon application agreed for a 75% reduction to light vehicle trips to the mezzanine floorspace.</p> <p>c. GN asked if BWB could confirm the exact quantum of development and land use being applied for through the DCO (a subsequent email was sent on 9<sup>th</sup> January 2025).</p>	<b>BWB</b>
<b>9</b>	<p><b>Covid sensitivity testing</b></p> <p>a. MC summarised the current position with the Covid sensitivity assessment. An email was sent on 10 December 2024 with initial data analysis of 2019 vs 2023 flows from six different counter locations. This showed that traffic has reduced overall.</p> <p>b. A response was received from GN confirming the data is acceptable but for the details to be submitted formally within a Technical Note.</p> <p>c. BWB has subsequently issued a Technical Note on 3<sup>rd</sup> January 2025 and will await any comments/agreements from the TWG.</p>	<b>All</b>
<b>10</b>	<p><b>VISSIM base model</b></p> <p>a. VD confirmed that the base model is close to being updated but suggested that a meeting with Lee Templeman (LT) of Jacobs would be useful to talk through the changes before following up with the model.</p>	<b>GN</b>

	GN said that he would liaise with LT and confirm availability.	
<b>11</b>	<p><b>Construction traffic</b></p> <p>a. MC said that as part of the Stage 1 modelling we've agreed to carry out an assessment of construction traffic. BWB has looked at construction traffic numbers broken down by different construction components and vehicle types. A spreadsheet has been populated setting out the calculations which BWB will share setting out the peak hour construction traffic forecasts. Our initial assessment shows that peak hour movements are likely to be low and so consideration is needed as to how this is tested and whether it is modelled in PRTM or manually assessed on top of 2028/38 without development flows, if indeed that is even required.</p>	<b>BWB</b>
<b>12</b>	<p><b>Programme</b></p> <p>a. PW said that we are currently a month behind the current programme because of current delays in reaching agreement on certain items and in receiving outputs on certain elements but BWB will keep people updated on progress as we move forward.</p>	
<b>13</b>	<p><b>AOB</b></p> <p>a. HH said that normally it is recommended that an LMVR is agreed prior to modeling being undertaken but suggested whether PRTM 2023 is ran at risk before validation is signed off to help move things forward and noting that LCountyC NDI has confirmed the model validates well. PW thanked HH and said this can be considered with the wider project team.</p>	<b>BWB/Segro</b>

## **APPENDIX 20: Modelling Meeting Minutes**

---



**EAST MIDLANDS GATEWAY PHASE 2 – MONTHLY MODELLING MEETING;  
THURSDAY 5 SEPTEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
George Nock (GN) & Alain Chandler-Hurst (ACH) – c/o Jacobs; NH transport consultants  
Patrick Brooks (PB) – LCountyC Network Data Intelligence  
Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Catherine Townend (CT) – National Highways (NH)  
Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
Vibeeshan Devaharan (VD) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

<b>Agenda item</b>		<b>Action</b>
<b>1</b>	<p><b>Base model sign off recap</b></p> <p>a. MC provided a recap on the previous agreements made with the base model work:</p> <ul style="list-style-type: none"> <li>i. No concerns with the current PRTM LMVR Addendum but questions raised as to whether changes to EMG1 flows affects anything. BWB to liaise with AECOM to confirm this.</li> <li>ii. VISSIM base model all fine as per previous agreements; these can be woven into a specific SoCG.</li> <li>iii. NH and NCC are comfortable with all standalone J10/Linsig models (noting the next point) but LCountyC still need to review and will do so once the revised forecast modelling is complete and an Aol has been agreed.</li> <li>iv. BWB to ensure that all future standalone modelling uses agreed models, as NH identified old model used for M1 Junction 25 previously.</li> <li>v. BWB to circulate updated sign off sheets with a notes box either next to each approver or at the bottom of table.</li> </ul>	<p><b>BWB</b></p> <p><b>BWB</b></p> <p><b>LCountyC</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>
<b>2</b>	<p><b>Recap on the strategic modelling scenarios and stages</b></p> <p>a. MC provided a recap on the strategic modelling scenarios/stages:</p> <ul style="list-style-type: none"> <li>i. No concerns with the current assessment years being tested (2022, 2028 and 2038).</li> <li>ii. Agree that consideration is needed of Covid factors but discussion held as to whether this should be undertaken in the core assessment rather than a separate sensitivity assessment. BWB to</li> </ul>	<p><b>BWB</b></p>

	<p>discuss with AECOM.</p> <p>iii. The principle of a vision and validate assessment agreed, but LCC suggested this could form part of the mitigation scenario given it sits alongside the physical mitigation strategy. BWB to liaise with AECOM and include on September TWG meeting.</p> <p>iv. NH raised concern that the 2023 survey data provided by ITP was recorded in October during school holidays hence may not be valid. BWB to liaise with ITP.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>3</b>	<p><b>Forecast modelling strategy/assumptions</b></p> <p>a. PW confirmed that BWB had provided A52 signal timing data because of lack of response from Tetra Tech/NH. No issues raised with the information provided to AECOM acknowledging that AECOM will carry out checks when running and optimise where required. Agreement made that other three minor improvements raised by NH not needed for PRTM.</p> <p>b. The furnishing approach remains agreed but needs revisiting post revised PRTM modelling be carried out. GN asked that BWB adopt a critical approach to identify any anomalies in spreadsheets and keep NH/LCC in the loop as things progress.</p> <p>c. MC said that whilst the agreed furnishing approach will be undertaken for all junctions, for the VISSIM network in particular development trips will also be manually assigned to network as a separate scenario to avoid background traffic reassigning, as previously the modelled flows showed very little different between the with and without development scenarios because of high congestion levels. BWB to set out distribution pattern with TWG post receipt of said information from AECOM as part of the current modelling work beforehand for agreement.</p>	<p><b>BWB</b></p>
<b>4</b>	<p><b>AECOM related information</b></p> <p>a. Plot 16 needs including in the modelling for completeness, otherwise there is a risk that this could be raised as an issue from a DCO perspective on a technicality. BWB to provide AECOM with revised traffic flows for 30,000sqm GFA at EMGP1 for Plot 16 and 400,000sqm at EMGP2 (floorspace was confirmed following a meeting with Segro on Friday last week).</p> <p>b. Further information required on the EMG1 rail freight terminal and potential number of HGVs travelling between EMG2/EMG1 and subsequent impacts on modelling. BWB to review and provide further information on numbers/strategy (email sent to Harry 06/09/24).</p> <p>c. LCC noted that EMG1 proposals used 4-5pm shoulder peak trip rates as a worst-case sensitivity test, whereas EMG2 is proposing to use traditional 5-6pm trip rates so that it aligns with the PRTM model time</p>	<p><b>BWB</b></p> <p><b>BWB</b></p> <p><b>BWB</b></p>

	period confirmed by AECOM. BWB of the view that 5-6pm trip rates are suitable because EMG1 surveys shows no shoulder peak and because original trip rates are higher than current TRICS rates. BWB to confirm proposed trip rates within a revised PRTM proforma and subsequent trip generation note for completeness	
<b>5</b>	<p><b>Wider strategic modelling</b></p> <p>a. PW provided an update with what work is currently being undertaken. The plan at the moment is to produce a PRTM proforma but also discussions are being held about using EMGM model via Systra.</p> <p>b. LCC asked whether Q1 2025 DCO submission is fixed or if there is flexibility around consideration of a delivery strategy for the cumulative works. If timescales are fixed then we lose the ability to introduce works via DCO approval and instead they will need to be secured via S106. BWB to liaise with Segro on timescales/approach.</p>	<b>BWB</b>
<b>6</b>	<p><b>AOB</b></p> <p>a. BWB to schedule monthly meetings (1.5 hours) moving forward and consider inviting AECOM to these.</p>	<b>BWB</b>



	<p>BWB to formally set this out in a note.</p> <p>vi. BWB will be reviewing the programme again once the PRTM modelling is back up and running.</p> <p>vii. BWB to produce a trip generation note formally setting the details out once the modelling is back up and running.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>2</b>	<p><b>EMG1 Rail Freight Terminal</b></p> <p>a. SH provided an overview of the EMG1 terminal operations confirming why the proposed changes would not affect traffic generation. BWB to set out in a note.</p>	<p><b>BWB</b></p>
<b>3</b>	<p><b>Shoulder peak trip rates</b></p> <p>a. PW confirmed that PRTM proforma 13 now adopts the 4-5pm peak trip rates, which has been agreed with NH, LCountyC and NCountyC.</p>	
<b>4</b>	<p><b>Modelling scenarios</b></p> <p>a. PW summarised the strategy for the PRTM modelling:</p> <ul style="list-style-type: none"> <li>i. The strategic modelling incorporating all Freeport and Isley Woodhouse sites is to use the EMG WISSER model (managed by Systra) subject to validation being confirmed around M1J24.</li> <li>ii. Each individual development will have their choice of modelling package, so EMG2 is maintaining using PRTM.</li> <li>iii. The Transport Assessments for each development will refer to a Memorandum of Understanding, alongside NH/LCountyC, to build their part of the wider mitigation package. Each individual part of the mitigation package should be suitable in mitigating the impacts of each individual development and to be evidenced by modelling.</li> </ul> <p>b. PW summarised the modelling scenarios that are to be tested, taking into account the above:</p> <ul style="list-style-type: none"> <li>i. 2022 forecast base year</li> <li>ii. 2028 2038 forecast years including all Freeport and Isley Woodhouse (including/excluding EMG2) to be retained as previously agreed.</li> <li>iii. 2028/2038 forecast years excluding the draft local Plan sites ie. Isley Woodhouse, Land west of Castle Donington and Coaker employment development (including/excluding EMG2) to be tested as a new scenario. The purpose of this is to ensure the package of mitigation attached to EMG2 is suitable. If Isley</li> </ul>	<p><b>BWB</b></p>

	<p>Woodhouse is included then the modelling would show capacity issues in relation to the site access and Finger Farm junction without their associated mitigation scheme, even if the EMG2 part of the wider mitigation scheme proposed provides nil detriment overall within the study area, hence the need for an interim scenario. BWB to set this out in a separate PRTM proforma and to agree the uncertainty log details with LCountyC, NH, NCountyC. NH/LCountyC/NCountyC confirmed that this approach sounds reasonable but would need to see further information including proforma's etc.</p> <p>c. MC ran through PRTM proforma v13. No concerns but it was collectively agreed that any new scenarios would need dealing with separately for ease.</p> <p>d. AECOM confirmed they now have everything to re-start the modelling.</p>	
<b>5</b>	<p><b>Covid sensitivity test</b></p> <p>a. PW confirmed that following discussions with AECOM about the strategy for the covid sensitivity testing, it has been agreed to carry this out in Stage 2.</p> <p>b. AECOM/BWB to agree the covid factors alongside NH/LCountyC/NCountyC prior to Stage 2 modelling starting, building on the traffic data provided by NH and AECOM.</p>	<b>BWB/AECOM</b>
<b>6</b>	<p><b>Wider mitigation strategy</b></p> <p>a. PW provided a headline overview of the mitigation strategy. Lots of work going on 'behind the scenes' which includes five developments around East Midlands Airport (EMG2, Isley Woodhouse, Uniper, Land west of Castle Donington, Coaker Land).</p> <p>b. The wider strategic assessment is being modelled using the EMG WISSER model and meetings have been held including representatives from NH, LCountyC and NCountyC (Kevin Sharman).</p> <p>c. BWB will share further information once available but will keep the TWG updated on any progress with the wider assessment that BWB will liaise with AECOM to understand their timescales further before considering wider timescale implications</p>	<b>BWB</b>
<b>7</b>	<p><b>Vision &amp; Validate</b></p> <p>a. PW confirmed the core modelling applies 100% of the trip rates to the mezzanine floorspace.</p> <p>b. PW said there are recent examples where deductions have been applied to mezzanines (Amazon at Bardon, Northampton Gateway etc.) so as part of the Vision and Validate assessment, further</p>	<b>BWB</b>

	thought is required backed up by evidence to re-consider trip rates for the mezzanines. BWB to consider and share information once available but require a response to the email sent to George on 4/9/24.	
<b>8</b>	<p><b>AECOM related matters</b></p> <ul style="list-style-type: none"> <li>a. AECOM require the final proforma before starting the modelling for the scenarios that have been agreed. This was sent by BWB on 04/10/24.</li> <li>b. AECOM asked about the air and noise quality requirements. BWB and AECOM to agree these separately which should not affect anything from a transport perspective.</li> </ul>	<b>BWB/AECOM</b>

**EAST MIDLANDS GATEWAY PHASE 2 – MONTHLY MODELLING MEETING;  
WEDNESDAY 6 NOVEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Adrian Whiteman (AW) & Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 Alain Chandler-Hurst (ACH) & Fiona Ahmed (FA) – c/o Jacobs; NH transport consultants  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) – LCountyC Network Data Intelligence  
 Paul Wilson (PW) & Matt Corner (MC) – BWB Consulting Limited; Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Catherine Townend (CT) – National Highways (NH)  
 Richard Best (RB) – Leicestershire County Council (LCountyC)  
 Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 George Nock (GN), Jeremy Bloom (JB) & Lee Templeman (LT) – c/o Jacobs; NH transport consultants  
 Laura Good (LG) – LCountyC Network Data Intelligence  
 Ian Rigby (IR) - Segro  
 Vibeeshan Devaharan (VD) & Simon Hilditch (SH) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of October's meeting notes</b></p> <p>a. MC went through October's meeting notes and actions</p> <p>i. BWB issued EMG1 RFT, trip generation and Stage 1A modelling sign off sheet. NH/LCountyC/NCountyC to review and comment/approve.</p> <p>ii. AECOM are now back up and running with the Stage 1 modelling.</p> <p>iii. BWB produced a separate PRTM proforma covering additional scenarios that exclude the Local Plan sites, needed for both transport and air/noise quality.</p>	<p><b>NH/LCountyC/ NCountyC</b></p>
<p><b>2 Stage 1A modelling update</b></p> <p>a. Rail Freight Terminal note issued 15/10, NH agreed 23/10/24</p> <p>i. BWB confirmed that the note builds on the discussions held at the last TWG meeting, so there should be no surprises. NH have agreed with the details, LCountyC and NCountyC to review and confirm agreement.</p>	<p><b>LCountyC/ NCountyC</b></p>



	<p>b. Trip Generation Core Assessment note issued 18/10/24</p> <p>i. The trip generation note covers the details agreed verbally to date including trip rates, shoulder peak periods, mezzanines. NH, LCountyC, NCountyC to review and confirm agreement.</p> <p>c. Stage 1A modelling sign off sheet issued 10/10/24</p> <p>i. BWB issued a sign off sheet covering the Stage 1A modelling work, which includes the base PRTM/VISSIM model validation, furnessing methodology and proforma v14/uncertainty log v7 details.</p> <p>ii. HH confirmed that all reports have been agreed by LCountyC to date except for the furnessing methodology and questioned whether this can be signed off prior to receiving data.</p> <p>iii. MC confirmed that the report sets out the principles and methodology/approach for the furnessing process, hence can be agreed now, noting NH signed this off on 11/04/24. LCountyC and NCountyC to review and confirm agreement.</p> <p>iv. FA suggested that CT would be best placed to sign off information from a NH perspective but will confirm and arrange for Stage 1A sheet to be signed.</p> <p>v. All Stage 1A modelling information is contained within the 'Approved Information' folder, once the sign off sheet has been completed and returned by NH, LCountyC and NCountyC, this will then sit on the SharePoint page.</p> <p>d. Update from AECOM on Stage 1 modelling</p> <p>i. AECOM up and running with 2022/23/24 base model scenarios and will aim to start the 2028/38 forecast scenarios w/c 11/11/24.</p> <p>ii. JM confirmed he would schedule a meeting with BWB at the appropriate time (ideally the w/c 18/11/24) to discuss output priorities and to go through initial findings of the modelling.</p>	<p><b>NH/LCountyC/ NCountyC</b></p> <p><b>LCountyC/ NCountyC</b></p> <p><b>NH</b></p> <p><b>JM</b></p>
<b>3</b>	<b>PRTM proforma v14a and uncertainty log v7a, issued 28/10</b>	
	<p>a. PW confirmed that PRTM proforma 14a includes additional scenarios that retain the 2028/38 assessment years but exclude six Local Plan sites. The purpose of this is to test part of the mitigation attached to EMG2 (known as the 'green package') and is also required for air/noise quality purposes regardless. The reason being that if we include all Local Plan sites then the modelling would continue to show capacity problems, but this should be covered by the wider mitigation strategy that hopefully shows betterment overall on the network with all the Freeport and Local Plan sites in place. Hence,</p>	

	<p>majority of details in the proforma remain unchanged.</p> <p>b. Overall, the view was that these scenarios make sense and are in effect 'middle scenarios' to tell the full story, noting that the end game scenario, the approach of which continues to be discussed at a higher level is key to all of this. HH confirmed he would expect this to be undertaken in PRTM although concerned that the green package forms part of a wider scheme that the TWG are not currently aware of, and it needs to be demonstrated that the wider mitigation is satisfactory.</p> <p>c. ACH raised concern about relying on these scenarios to demonstrate that access works within capacity. PW confirmed that the capacity problems are forecast to be more at Finger Farm in the future, but with the mitigation being delivered by Isley Woodhouse that is focussed on Finger Farm and the A453 across the site frontage this should resolve any issues. However, it is understood that it needs to be demonstrated that access works within capacity without relying on external mitigation, hence for BWB to consider at the appropriate time.</p> <p>d. HH asked whether Isley Woodhouse should be retained in the additional modelling scenarios given the full build out would not be included by 2038. MC confirmed that there would be a large volume of Local Plan development included in the uncertainty log up to 2038, adding weight to the additional scenarios being required from a transport as well as noise and air quality perspective.</p> <p>e. PW confirmed with JM that a reduced list of outputs would be needed for these scenarios from a reporting perspective, which should assist with regards to timescales.</p>	
<b>4</b>	<p><b>Vision &amp; Validate related update</b></p> <p>a. PW confirmed the strategy for the Vision and Validate assessment may now change as BWB are on more of a fixed path in terms of mitigation, which is being coordinated alongside the wider consortium. The purpose of the V&amp;V assessment may now be to understand how much mezzanine floorspace can be built without compromising the agreed traffic generation threshold.</p> <p>b. The trip rates would continue to adopt those recorded at EMG1 given the similarities in the sites and the Travel Plan strategy but further evidence on any reductions in trip rates for mezzanines is still needed.</p> <p>c. HH queried whether in planning terms additional mezzanine floorspace can be built that has ultimately been applied for and consented. The EIA confirms that the modelling needs to include the full quantum of development currently understood to be 430,000sqm B2/B8 use.</p> <p>d. HH confirmed that once the wider mitigation has been identified,</p>	

	<p>there will need to be a trigger point for delivering the works which will need to be agreed and not rely on public sector funding.</p> <p>e. PW said that post the meeting (and to be elaborated upon at the TWG) the plan would be to increase the amount of mezzanine GFA included for within the parameters plan and hence DCO, assuming that the TWG are indeed comfortable that, based on the evidence provided for EMG1, which includes for mezzanines, and sites elsewhere, trip rates for mezzanine GFA are less than that generated by ground floor GFA. In doing, this would not prejudice the traffic flows currently being assessed in PRTM, seeing as 100% of trips have been attributed to the total 430,000sqm GFA, including mezzanines.</p>	
<b>5</b>	<p><b>AOB</b></p> <p>a. MC referred back to previous discussions on Covid sensitivity given the PRTM has a base model year that pre-dates covid. Jacobs information showed that traffic has increased on parts of the SRN (but reduced on the local road network), more notably in the PM peak with worst-case increase of approximately 8%. Hence, the strategy could be to growth the background traffic by 8% to test within the mitigation given this is focused on the SRN. The data shows that the local junctions would have a reduction in traffic hence core modelling should be fine.</p> <p>b. JM raised concern that increasing all traffic by the highest factor could be highly robust and not representative. HH said that by the time we reach examination, PRTM will have a version with a 2023 base year. One option could be to compare 2019-2023 PRTM flows vs 2019-2023 surveyed flows to work out whether there is a similar level of growth. BWB to review the latest Webtris data to understand whether flows have since changed.</p> <p>c. AECOM confirmed that they would also review the situation to help inform decision making, because the reality is that the 8% figure referenced above would be too high, because it would also take into consideration wider growth and hence nothing to do with Covid.</p>	<p><b>BWB</b></p> <p><b>AECOM</b></p>
<b>6</b>	<p><b>Timescales</b></p> <p>a. PW said that BWB will liaise with AECOM to understand their timescales further before considering wider timescale implications</p>	<b>BWB</b>
<b>7</b>	<p><b>Next steps</b></p> <p>a. PW summarised the key next steps:</p> <p>i. Focus on reaching an agreement on the Stage 1A modelling work and obtaining sign off from NH, LCountyC and NCountyC.</p> <p>ii. Receiving confirmation on the EMG1 RFT and trip generation documents.</p>	<p><b>NH/LCountyC/ NCountyC</b></p> <p><b>NH/LCountyC/ NCountyC</b></p>

<p>iii. Continue the modelling work, including that set out in PRTM proforma v14a (noting that the end game scenario also needs to be modelling; albeit how exactly is TBC).</p>	<p><b>BWB/AECOM</b></p>
<p>iv. Continue to explore mezzanine trip rates and hence the current suggested 'vision and validate' approach.</p>	<p><b>BWB</b></p>
<p>v. Determine a suitable approach to deal with Covid sensitivity as part of the Stage 2 modelling.</p>	<p><b>BWB/AECOM</b></p>

**EAST MIDLANDS GATEWAY PHASE 2 – MONTHLY MODELLING MEETING;  
THURSDAY 5 DECEMBER 2024 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
 Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
 George Nock (GN) – c/o Jacobs; NH transport consultants  
 Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
 Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
 Paul Wilson (PW), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited;  
 Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Harry Horsley (HH) – Leicestershire County Council (LCountyC)  
 Catherine Townend (CT) – National Highways (NH)  
 Tom Boylan (TBo) – Nottinghamshire County Council (NCountyC)  
 Alain Chandler-Hurst (ACH) & Fiona Ahmed (FA), Jeremy Bloom (JB) & Lee Templeman (LT) –  
 c/o Jacobs; NH transport consultants  
 Ian Rigby (IR) – Segro  
 Simon Hilditch (SH) – BWB Consulting Limited; Segro transport consultants

**MINUTES:**

Agenda item	Action
<p><b>1 Review of November's meeting notes</b></p> <p>a. PW went through November's meeting notes and actions. In summary:</p> <ul style="list-style-type: none"> <li>i. Modelling meeting notes have been formalised into minutes, which were shared on 04/12/24.</li> <li>ii. BWB and AECOM had a meeting to discuss PRTM output priorities and timescales for the modelling.</li> <li>iii. Further work has been undertaken on the Covid sensitivity factors, which is an agenda item in the meeting.</li> </ul> <p>b. PW asked if everyone could review the formal minutes from September, October and November 2024 (and December 2024) and confirm that the details are agreed.</p>	<p><b>NH/LCountyC/ NCountyC</b></p>
<p><b>2 Wider strategic modelling</b></p> <p>a. PW confirmed that his email of 02/12/24 sets out the quantum of all developments and potential route for the tram and asked whether this covers everything needed for the PRTM proforma.</p> <p>b. GN asked whether the tram will be considered in the PRTM modelling as part of a 'with mitigation' scenario. JM said that PRTM is quite limited with what it can do with such information but can consider the details. However, it appears that it will not be possible to include for its potential expansion within the modelling work, which AECOM will confirm post further updates internally.</p>	<p><b>AECOM</b></p>

	<p>c. PW asked whether the planning data assumptions need updating versus what was received as part of the previous data collection. TBo has provided an update which should cover NCountyC and NCityC, which has been shared. DS will be catching up with TBo tomorrow to check whether all is indeed in order NCountyC wise.</p> <p>d. AD confirmed that the planning assumptions in the uncertainty log reflect updates received c. 12 months ago as part of a separate commission by NWLDC. Whilst planning data constantly changes, it may be that there have been no significant changes since that time as it was not that long ago.</p> <p>e. GN said it is standard practice for consultants to engage with LPAs to obtain latest planning data prior to modelling taking place.</p> <p>f. PW asked whether this was something that AECOM or LCCNDI can assist with as it will be difficult for BWB to get hold of such information.</p> <p>g. PB said that LPA's typically update their information annually each April but the Melton information is available, and Charnwood forthcoming, and so will contact the other LCityC/LCountyC authorities for updates. However, BWB will need to enquire with SDDC, Erewash and DCityC for updates since April 2023.</p> <p>h. PW confirmed BWB would engage with Erewash and DCityC but asked if any previous dialogue/information could be shared to assist this.</p> <p>i. PB suggested that Kit Tang previously sent an email which may contain contact details of relevant people at the authorities, which could be shared. This included SDDC, hence AECOM will look into this and re-engage.</p> <p>j. PW confirmed that the above is a key critical path item for all related projects hence requires full focus with a view to obtaining agreements at the December TWG meeting next week.</p> <p>k. During the meeting PB confirmed he had emailed the LCityC/LCountyC authorities, and PW had contacted Erewash and DCityC.</p>	<p><b>DS/TBo</b></p> <p><b>PB</b></p> <p><b>BWB</b></p> <p><b>AECOM</b></p> <p><b>ALL</b></p>
<b>3</b>	<p><b>Stage 1A modelling update</b></p> <p>a. MC confirmed that NH signed off the Stage 1A modelling work on 04/12/24. The sign off sheet has been sent to LCountyC and NCountyC for their signatures.</p> <p>b. AW said he would review and refer back next week, albeit PW stressed that the item above is more important in terms of priorities.</p>	<p><b>LCountyC</b></p>

4	<p><b>Current Stage 1 EMG2 modelling work update</b></p> <ul style="list-style-type: none"> <li>a. JM confirmed that AECOM are slightly behind schedule with the Stage 1 modelling because of issues with converting to EMFM but will be aiming to provide initial data outputs early w/c 09/12/24. Proforma 14 has taken priority over 14a, but 14a is being proceeded with in tandem.</li> <li>b. PW confirmed that BWB are currently updating the programme with the current version having initial outputs to be issued 06/12/24, hence this should not materially increase the overall timescales but asked AECOM to start sending through information as soon as possible once ready.</li> </ul>	<b>AECOM</b>
5	<p><b>Stage 2 modelling</b></p> <ul style="list-style-type: none"> <li>a. MC shared further information regarding the Covid sensitivity assessment comparing traffic flows on the M1, A42 and A453 between 2019 and 2023 (peak hour and daily flows). In summary, whilst there have been slight differences across each counter point, there has been an overall net reduction in traffic, hence this differs to previous thoughts, which may mean the covid sensitivity test is not needed.</li> <li>b. JM said that AECOM are currently analysing numbers for counters on the A453 Ashby Road near the site using LCountyC database and will share these once available. However, initial results are also showing a similar reduction in traffic.</li> <li>c. MC confirmed that BWB will share the information with the TWG upon receipt and review.</li> </ul>	<p><b>AECOM</b></p> <p><b>BWB</b></p>
6	<p><b>Vision and validate</b></p> <ul style="list-style-type: none"> <li>a. PW reiterated that a 'Vision and Validate' assessment does not need to be tested in PRTM given we are now on a fixed path in terms of mitigation.</li> <li>b. PW referred to CT email of 18/11/24 and that discussions have since been held with ITP who hold the EMG1 information. BWB will therefore respond soon with further thoughts.</li> </ul>	<b>BWB</b>
7	<p><b>Updated VISSIM base model</b></p> <ul style="list-style-type: none"> <li>a. VD said that since undertaking initial VISSIM modelling work for the wider strategic assessment, minor updates have been spotted to better calibrate the model. These are being fed into the base VISSIM model for consistency, although they are minor and do not fundamentally change the modelling.</li> <li>b. GN welcomed the update and said that NH will review the</li> </ul>	

	<p>information once available.</p> <p>c. VD said he would aim to issue the details next week. GN asked if LT could be copied into the email.</p> <p>d. MC said that whilst the VISSIM LMVR Revision P2 has been signed by NH (and remains valid), Revision P3 can be included in the Stage 1B modelling sign off sheet.</p>	<b>BWB</b>
<b>8</b>	<p><b>Timescales</b></p> <p>a. PW set out the timescales; public consultation now scheduled for 3<sup>rd</sup> February 2025 and the plan is to consult on the 'green package' of mitigation, understanding the risks associated with this. Submission of the DCO is planned for Q2 2025.</p> <p>b. PW confirmed that BWB have recently updated the programme but will need to make some final changes before a copy is shared with the TWG, subject to Client agreement.</p>	<b>BWB</b>
<b>9</b>	<p><b>AoB</b></p> <p>a. MC said that BWB are planning on purchasing PIC data across the key junctions and analysing this over the coming months. The details can be shared in a standalone Technical Note for the TWG to review and sign off ahead of the Transport Assessment being produced. No queries were raised with this approach.</p>	



**EAST MIDLANDS GATEWAY PHASE 2 – MONTHLY MODELLING MEETING;  
THURSDAY 2 JANUARY 2025 AT 1000 HOURS (ON TEAMS)**

**ATTENDEES:**

Harry Horsley (HH) & Adrian Whiteman (AW) – Leicestershire County Council (LCountyC)  
Fiona Ahmed (FA) – c/o Jacobs; NH transport consultants  
Paul Wilson (PW), Matt Corner (MC) & Vibeeshan Devaharan (VD) – BWB Consulting Limited;  
Segro transport consultants

**APOLOGIES/ALSO ISSUED TO:**

Catherine Townend (CT) – National Highways (NH)  
Tom Boylan (TBo) & Daniel Sullivan (DS) – Nottinghamshire County Council (NCountyC)  
George Nock (GN), Alain Chandler-Hurst (ACH), Jeremy Bloom (JB) & Lee Templeman (LT) –  
c/o Jacobs; NH transport consultants  
Jonathan Morrow (JM) & Aled Davies (AD) – AECOM  
Patrick Brooks (PB) & Laura Good (LG) – LCountyC Network Data Intelligence  
Ian Rigby (IR) – Segro  
Simon Hilditch (SH) – BWB Consulting Limited; Segro transport consultant

**MINUTES:**

Agenda item	Action
<p><b>1 Review of December's modelling meeting notes</b></p> <p>a. PW went through December's meeting notes and actions. In summary:</p> <ul style="list-style-type: none"> <li>i. PB confirmed all LCountyC planning data is in hand, with updates from certain authorities due this month. He, with the help of Anthea Anderson, will be liaising with LCityC to obtain the latest data.</li> <li>ii. An update has been received from Erewash, which PW forward to LCountyC's NDI team and AECOM on 11/12/24 (all remains in order). PW has spoken to Andy Gibbard of DCityC who advised BWB contact Duncan Irons of Systra regarding planning data updates. As DCityC is in the buffer zone within PRTM there were questions as to how much can be included in PRTM anyway.</li> <li>iii. Jon Morrow has liaised with SDDC regarding planning data updates and we understand no further input is needed (TBC at the TWG meeting).</li> <li>iv. PW is assisting with obtaining an update from NCityC and sent an email to Matt Gregory on 12/12/24, to which he will follow up.</li> <li>v. AECOM has confirmed that the tram can be modelled in PRTM so the approach at present is to model a with and without tram scenario.</li> <li>vi. Initial PRTM outputs are expected to be received from AECOM from 06/01/25.</li> <li>vii. BWB issued a revised programme on 10/12/24, albeit this is now slightly outdated given the delays in receiving PRTM modelling outputs and lack of agreement to the wider strategic assessment PRTM proforma</li> <li>viii. The Stage 1A sign off sheet was discussed and LCountyC are still to consider this internally before this can be signed.</li> <li>ix. BWB are still waiting for agreement to the previous modelling</li> </ul>	<p><b>PB</b></p> <p><b>PW</b></p> <p><b>PW</b></p> <p><b>AECOM</b></p> <p><b>AECOM</b></p> <p><b>All</b></p>

	<p>meeting minutes before these are uploaded to SharePoint.</p> <ul style="list-style-type: none"> <li>x. BWB issued information regarding the Covid sensitivity assessment. GN has since responded confirming the details are agreed subject to being formally written into a Technical Note.</li> <li>xi. The VISSIM base model is with VD to review before being shared with the TWG.</li> <li>xii. BWB has responded to CT email regarding the 'vision and validate' assessment.</li> </ul>	<p><b>BWB</b></p> <p><b>VD</b></p>
<b>2</b>	<p><b>Review of December's TWG meeting notes</b></p> <ul style="list-style-type: none"> <li>a. PW went through December's meeting notes and actions, specifically in relation to modelling: <ul style="list-style-type: none"> <li>i. AECOM to provide information on programme implications if we switch to the 2023 model, along with LMVR and journey time comparison details to inform wider decision making.</li> <li>ii. AECOM are due to issue Stage 1 modelling outputs during week commencing 06/01/25.</li> <li>iii. BWB responded to CT email regarding the 'vision and validate' assessment.</li> <li>iv. NH are happy with the PRTM proforma for the wider strategic assessment subject to confirmation on the model version being used and a minor discrepancy with Plot 16 traffic details; PW suggested the ancillary information provided to NH dated 2/12/24 could be appended to the revised PRTM Proforma for completeness, once comments are received from LCountyC in particular.</li> </ul> </li> </ul>	<p><b>AECOM</b></p> <p><b>AECOM</b></p> <p><b>BWB/LCountyC</b></p>
<b>3</b>	<p><b>2019 vs 2023 PRTM model</b></p> <ul style="list-style-type: none"> <li>a. PW said that he produced a note for Segro in December setting out expected timescale implications if we switch to the 2023 PRTM model and asked whether LCountyC has had sight of this. In summary, switching to the 2023 model is likely to delay timescales to at least mid-May from what BWB understand.</li> <li>b. HH has not seen the note but said the December TWG meeting was useful to understand wider implications, but the preference is for the most appropriate model to be used for the project. This will be informed by the information AECOM are providing, in tandem with LCountyC's NDI team, who oversee the model, and hence will await that.</li> <li>c. PW said that further conversations on the PRTM models can be had at next week's TWG meeting. In the meantime, BWB will be continuing with the 2019 model outputs expected to be received next week.</li> <li>d. PW said that GN has responded to BWB's email regarding Covid sensitivity assessment confirming that the details are agreed from a NH perspective and will be formally signed off once a Technical Note</li> </ul>	<p><b>BWB</b></p>

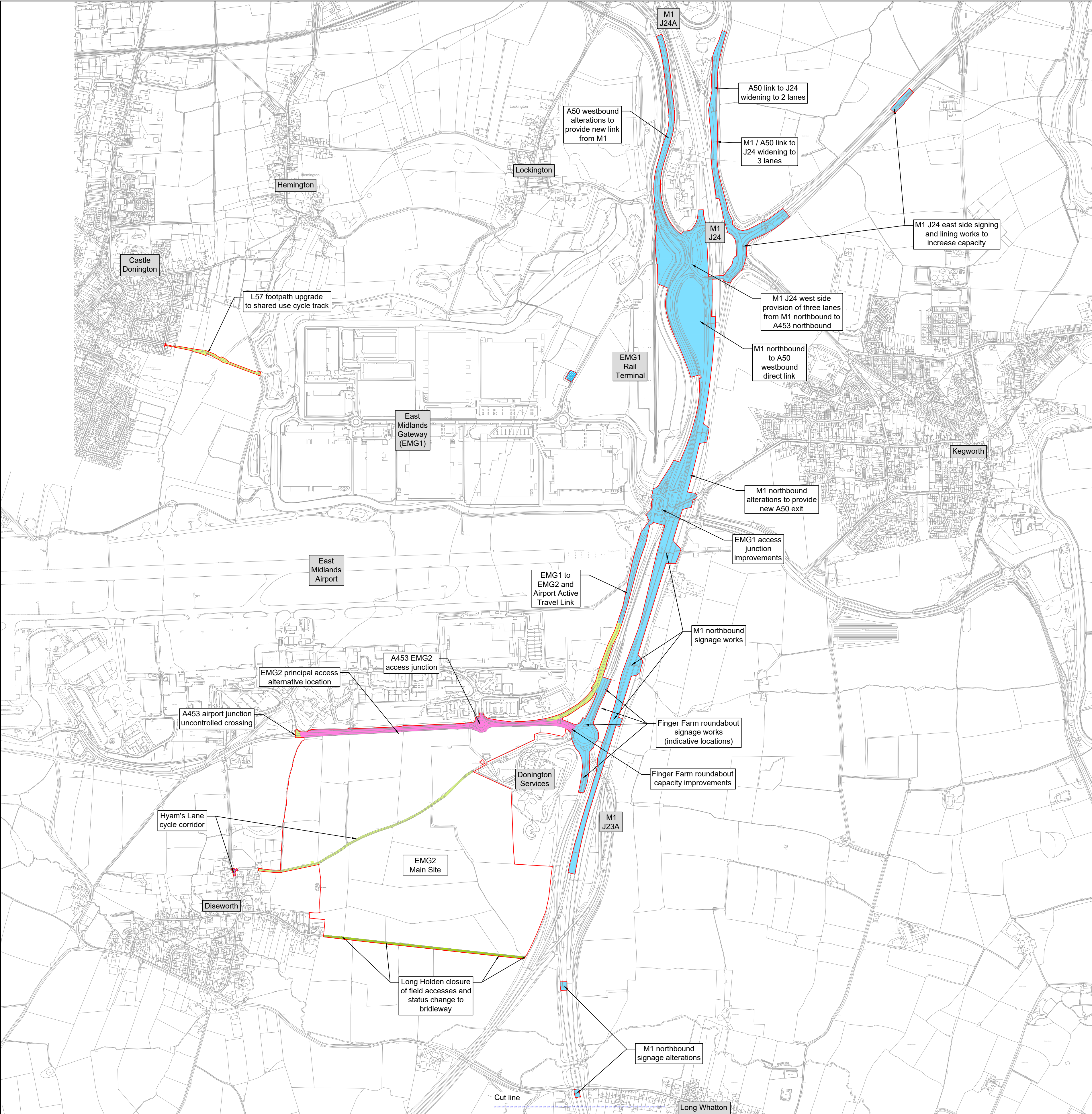
	<p>has been produced. BWB will share the GN email and a copy of the note once available.</p> <p>e. HH asked for clarification on what is being tested in the 'vision and validate' scenario. PW confirmed that it focuses on mezzanines and how much additional mezzanine floorspace is considered acceptable without compromising the agreed traffic generation.</p> <p>f. HH said that LCountyC would have concerns with uplifting GFA's as this is not standard practice. FA agreed and asked whether a scenario could be tested that considers the full development, including any additional mezzanine, at 100% of the trip rates.</p> <p>g. PW said that lots of discussions have been had in the past regarding trip rates. The EMG1 surveyed rates show that actual trip rates are much lower than what is being assessed. The Client would like flexibility for additional mezzanine floorspace, and information has been shared evidencing how this should not cause any issues with the volume of traffic being assessed.</p> <p>h. PW said that in response to FA question, BWB could produce a comparison of traffic generation with the full quantum of development, including additional mezzanine, using both the agreed, and surveyed EMG1, trip rates to provide a further understanding of the difference.</p> <p>i. FA sought clarification as to what was agreed with NH on previous projects as set out in PW email to CT on 17/12/24. PW said he would review and confirm but reminded that a 50% reduction in trip rates was also agreed with LCountyC for the Amazon at Bardon.</p>	<p><b>BWB</b></p> <p><b>BWB</b></p>
<b>4</b>	<p><b>Mechanism for delivering wider mitigation</b></p> <p>a. HH asked what had been considered amongst the consortium on the mechanism for delivering the wider mitigation, stating that the timescales will be challenging to agree this ahead of Examination.</p> <p>b. PW said that work has been on-going behind the scenes using the previous 2035 PRTM outputs. VISSIM modelling has been undertaken that manually adds development traffic from all sites to understand the impacts and a scheme of mitigation has been designed at and in the vicinity of M1 J24. Whilst this will need further assessment using the latest PRTM outputs it is based on robust assumptions so hopefully means we are further along than would normally be at this stage.</p> <p>c. HH said that the mitigation will need to go through NH processes for approval, which is often an iterative process, reiterating that to complete this by May 2025 will be challenging.</p> <p>d. PW said the latest programme currently includes this work which aligns with the May 2025 timescales. However, this was based on a number of assumptions, including when BWB would receive PRTM</p>	

	<p>outputs, which have already slipped by approximately one month.</p> <ul style="list-style-type: none"> <li>e. FA said that NH has issued a letter about the wider mitigation, which sets out that there are concerns over gaps in funding and the risk of certain schemes coming forward and others not (FA subsequently forwarded the letter, which has been passed onto the Client for the avoidance of doubt).</li> <li>f. HH said that LCountyC do not forward fund such mitigation schemes anymore and if third party money is needed then this needs considering, perhaps alongside modelling of different options.</li> <li>g. PW thanked HH and FA and said that this will be considered further in discussion with Segro.</li> </ul>	<b>BWB/Segro</b>
--	--	------------------

**APPENDIX 21: Overview of Works on the Strategic Road Network (drawing reference  
EMG2-BWB-GEN-XX-SK-CH-SK045\_S2-P03)**

---





**Notes**

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

Legend	
<span style="color: red;">---</span>	DRAFT order limits EMG2 DCO
<span style="color: blue;">---</span>	Works related to the strategic road network
<span style="color: magenta;">---</span>	Highway capacity and access works related to the local road network
<span style="color: green;">---</span>	Active travel works

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	30.05.25	Issued for information	SRH	SRH	
P02	30.05.25	Active travel works shown	SRH	SRH	
P03	11.06.25	M1 J24 works amended	SRH	SRH	



**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322

☐ Leeds | 0113 233 8000


☐ London | 020 7234 9122

☐ Manchester | 0161 233 4260

☒ Nottingham | 0115 924 1100

www.bwbconsulting.com

Client



Drawn: S. Hilditch

Reviewed: S. Hilditch

BWB Ref: 220500

Date: 30.05.25

Scale@A1: 1:10,000

Project Title

**EAST MIDLANDS GATEWAY 2 (EMG2)**

Drawing Status

**FOR INFORMATION**

Drawing Title

**OVERVIEW OF WORKS ON THE STRATEGIC AND LOCAL ROAD NETWORKS**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-GEN-XX-SK-CH-SK045**

Status

**S2**

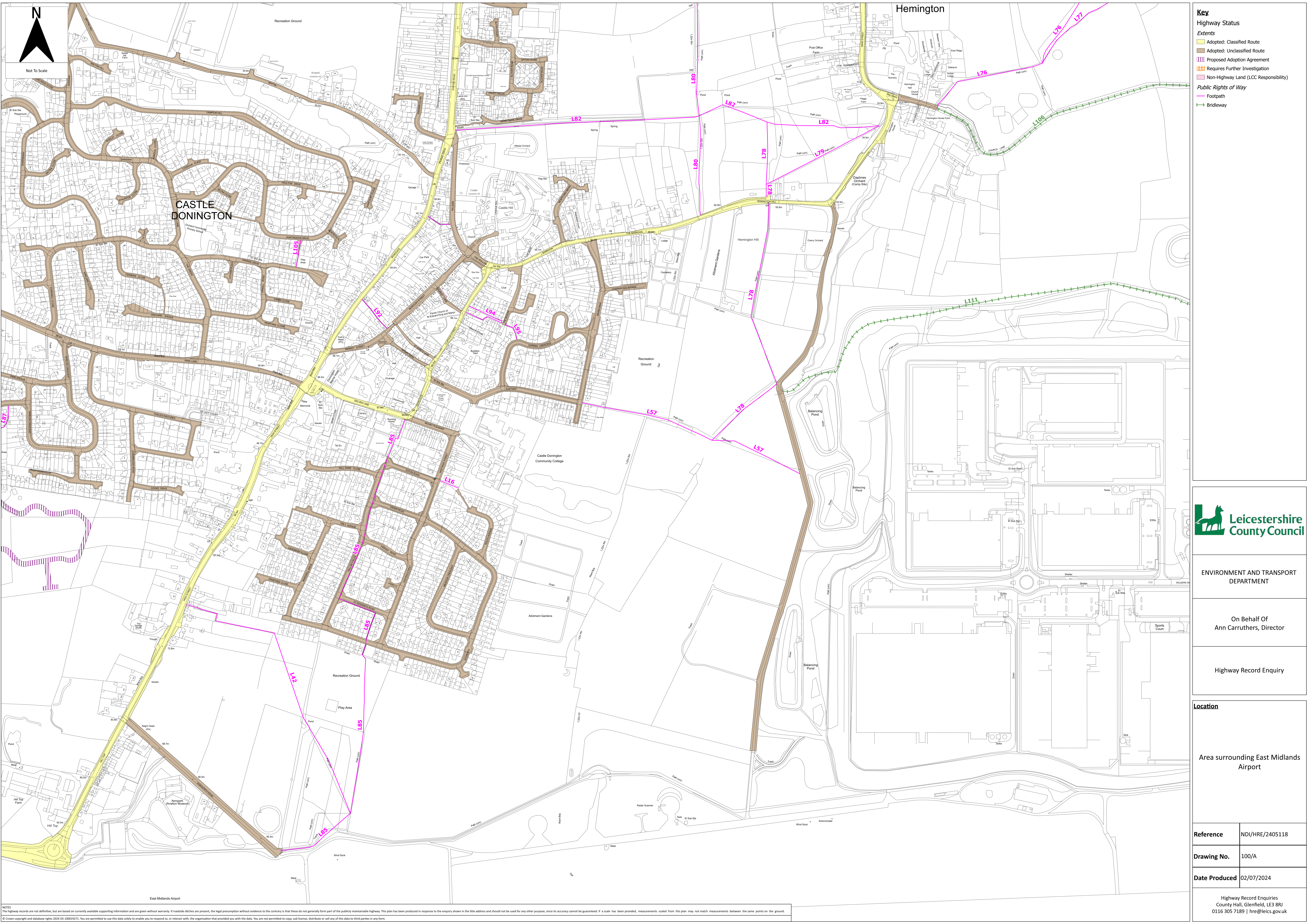
Rev

**P03**



## **APPENDIX 22: Highway boundary information**





Key

Highway Status

Extents

Adopted: Classified Route

Adopted: Unclassified Route

Proposed Adoption Agreement

Requires Further Investigation

Non-Highway Land (LCC Responsibility)

Public Rights of Way

Footpath

Bridleway



ENVIRONMENT AND TRANSPORT  
DEPARTMENT

On Behalf Of  
Ann Carruthers, Director

Highway Record Enquiry

Location

Area surrounding East Midlands  
Airport

Reference	NDI/HRE/2405118
Drawing No.	100/A
Date Produced	02/07/2024

Highway Record Enquiries  
County Hall, Glenfield, LE3 8RJ  
0116 305 7189 | hre@leics.gov.uk

NOTES  
The highway records are not definitive, but are based on currently available supporting information and are given without warranty. If roadside ditches are present, the legal presumption without evidence to the contrary is that these do not generally form part of the publicly maintainable highway. This plan has been produced in response to the enquiry shown in the title address and should not be used for any other purpose, since its accuracy cannot be guaranteed. If a scale has been provided, measurements scaled from this plan may not match measurements between the same points on the ground.  
© Crown copyright and database rights 2024 OS 100009271. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.





NOTES  
The Highway records are not definitive, but are based on currently available supporting information and are given without warranty. If roadside ditches are present, the legal presumption without evidence to the contrary is that these do not generally form part of the publicly maintainable highway. This plan has been produced in response to the enquiry shown in the title address and should not be used for any other purpose, since its accuracy cannot be guaranteed. If a scale has been provided, measurements scaled from this plan may not match measurements between the same points on the ground.  
© Crown copyright and database rights 2024 OS 100009271. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.

Key

Highway Status

Extents

Adopted: Classified Route

Adopted: Unclassified Route

Motorway (National Highways)

Trunk Road (National Highways)

Signed Adoption Agreement

Public Rights of Way

Footpath

Bridleway



ENVIRONMENT AND TRANSPORT  
DEPARTMENT

On Behalf Of  
Ann Carruthers, Director

Highway Record Enquiry

Location

Area surrounding East Midlands  
Airport

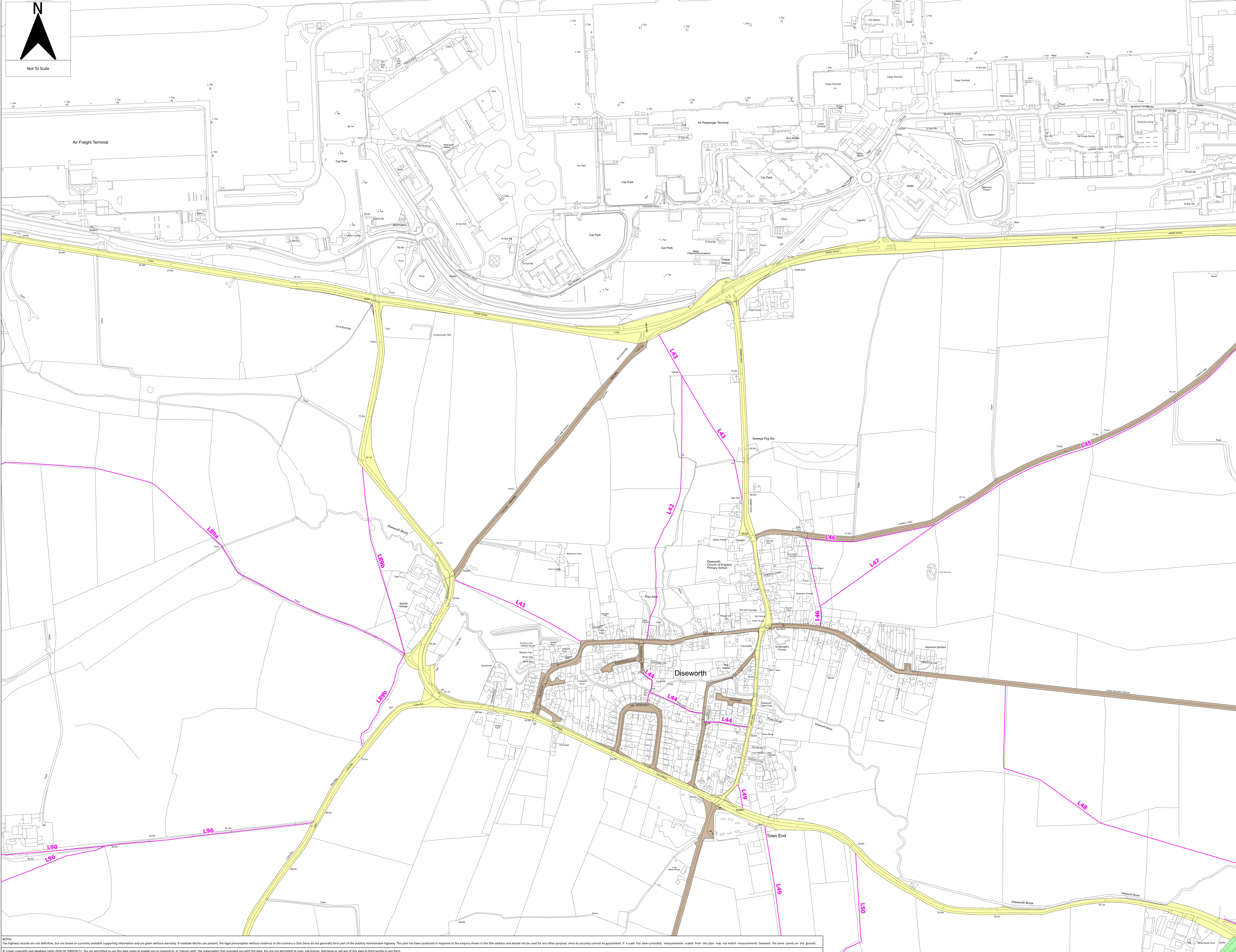
Reference NDI/HRE/2405118

Drawing No. 101/A

Date Produced 02/07/2024

Highway Record Enquiries  
County Hall, Glenfield, LE3 8RJ  
0116 305 7189 | hre@leics.gov.uk





## Key

### Highway Status

*Extents*

- Adopted: Classified Route
- Adopted: Unclassified Route
- Trunk Road (National Highways)
- Non-Highway Land (LCC Responsibility)

*Public Rights of Way*

- Footpath



ENVIRONMENT AND TRANSPORT  
DEPARTMENT

On Behalf Of  
Ann Carruthers, Director

Highway Record Enquiry

<u>Location</u>
-----------------

Area surrounding East Midlands  
Airport

<b>Reference</b>	NDI/HRE/2405118
<b>Drawing No.</b>	102/A
<b>Date Produced</b>	02/07/2024

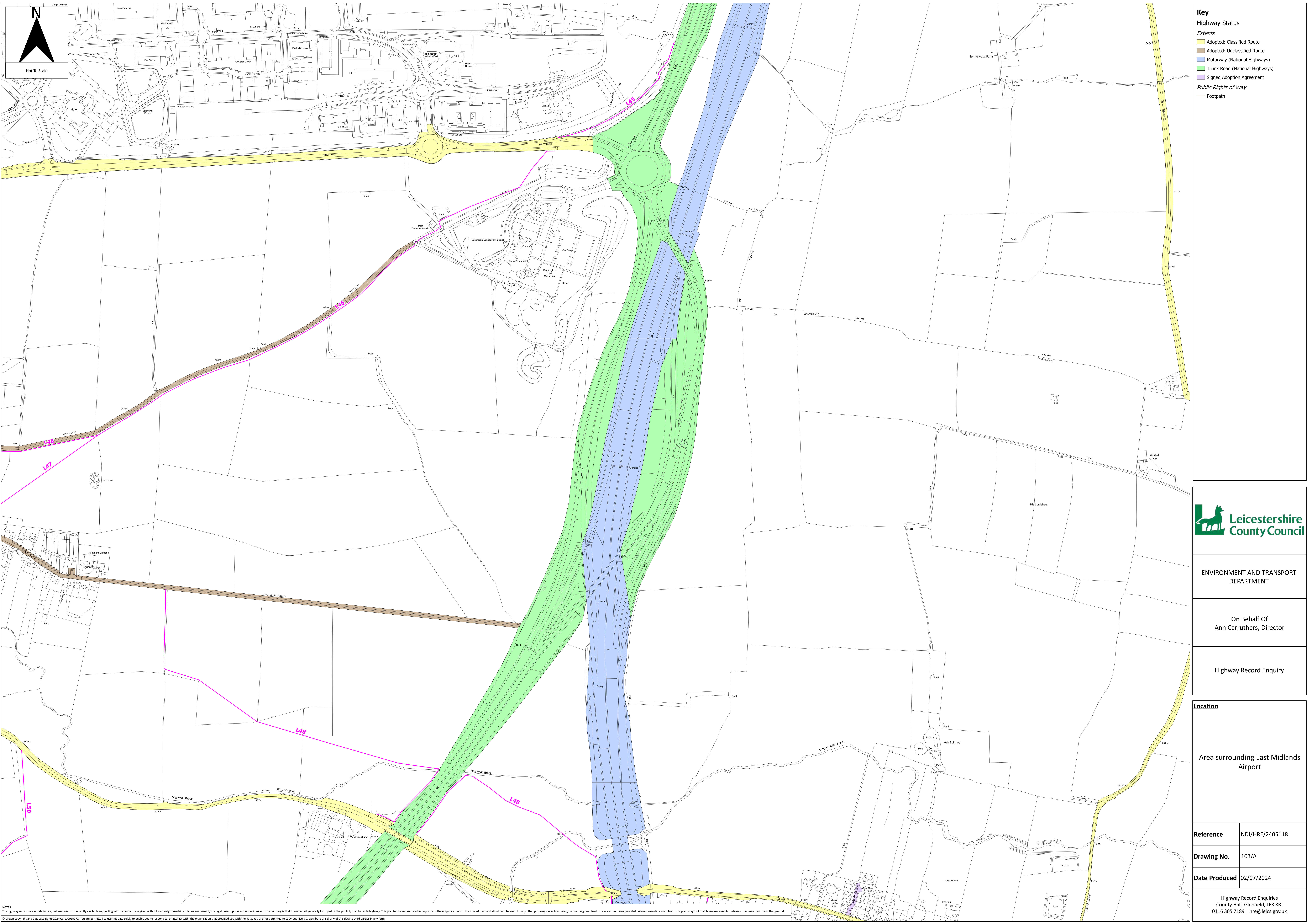
Highway Record Enquiries  
County Hall, Glenfield, LE3 8RJ  
0116 305 7189 | [hre@leics.gov.uk](mailto:hre@leics.gov.uk)

NOTES

The highway records are not definitive, but are based on currently available supporting information and are given without warranty. If roadside ditches are present, the legal presumption without evidence to the contrary is that these do not generally form part of the publicly maintainable highway. This plan has been produced in response to the enquiry shown in the title address and should not be used for any other purpose, since its accuracy cannot be guaranteed. If a scale has been provided, measurements scaled from this plan may not match measurements between the same points on the ground.

© Crown copyright and database rights 2024 OS 1500019271. You are permitted to use this data solely to enable you to respond to, or interact with, the communication that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.





Key

Highway Status

Extents

Adopted: Classified Route

Adopted: Unclassified Route

Motorway (National Highways)

Trunk Road (National Highways)

Signed Adoption Agreement

Public Rights of Way

Footpath



ENVIRONMENT AND TRANSPORT  
DEPARTMENT

On Behalf Of  
Ann Carruthers, Director

Highway Record Enquiry

Location

Area surrounding East Midlands  
Airport

ReferenceNDI/HRE/2405118

Drawing No.103/A

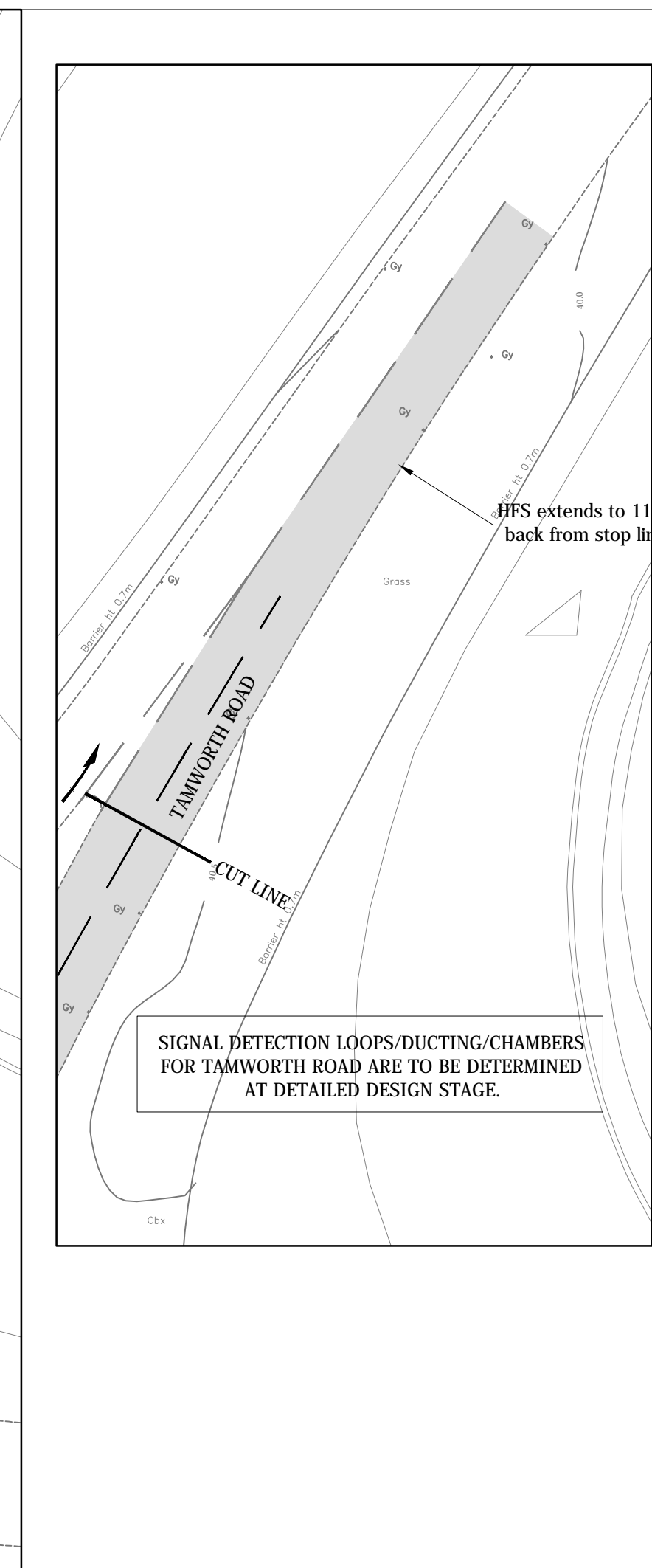
Date Produced02/07/2024





Highway Record Enquiries  
County Hall, Glenfield, LE3 8RJ  
0116 305 7189 | hre@leics.gov.uk

NOTES  
The highway records are not definitive, but are based on currently available supporting information and are given without warranty. If roadside ditches are present, the legal presumption without evidence to the contrary is that these do not generally form part of the publicly maintainable highway. This plan has been produced in response to the enquiry shown in the title address and should not be used for any other purpose, since its accuracy cannot be guaranteed. If a scale has been provided, measurements scaled from this plan may not match measurements between the same points on the ground.  
© Crown copyright and database rights 2024 OS 1000019273. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.



## **APPENDIX 23: A50 Junction 1 approved signalisation scheme**



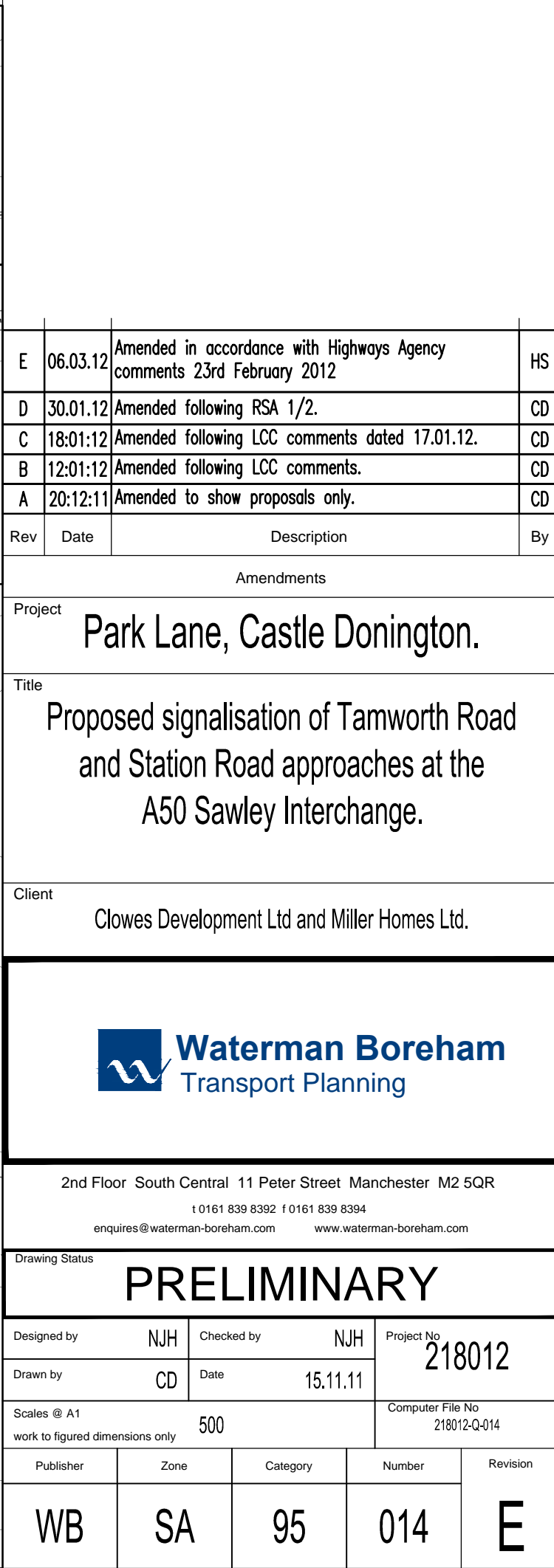
Key:	
OS Mapping	
White Young Green Proposals	
Waterman Boreham Proposals	
Waterman Boreham proposed High Friction Surfacing	

Notes:

a) All works shown BLACK on the drawing have been submitted to LA for technical approval by White Young Green. Refer to WYG detailed design drawing A060910-35-12/001 General Arrangement and related drawings for further information.

b) All works shown RED on the drawing indicate Waterman Boreham proposals.

B) As stated on the drawing all signal loops/ducting/chambers or Station Road/Tamworth Road and the circulatory carriageway will be determined and detailed design stage.



**APPENDIX 24: Walking, Cycling and Horse-Riding Assessment & Review - Review Report  
(document reference EMG2-BWB-GEN-XX-RP-CH-0018\_S4-P01)**

---



## **TRANSPORT AND INFRASTRUCTURE**

SEGRO

East Midlands Gateway 2 (EMG2)

Walking, Cycling, Horse-riding

Assessment and Review (WCHAR)

Preliminary design stage – review report

## DOCUMENT ISSUE RECORD

<b>Document Number:</b>	EMG2-BWB-GEN-XX-RP-CH-0018
<b>BWB Reference:</b>	220500

Revision	Date of Issue	Status	Author:	Checked:	Approved:
P01	20.06.2025	S4	Simon Hilditch MEng (Hons) CEng MICE MCIHT	Darren Ball BSc(Hons) IEng MICE	Simon Hilditch MEng (Hons) CEng MICE MCIHT

### Notice

This document has been prepared for the sole use of the Client in accordance with the terms of the appointment under which it was produced. BWB Consulting Limited accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of BWB.



**CONTENTS**

1. INTRODUCTION..... 1

    Instruction ..... 1

    Objectives ..... 1

2. BACKGROUND AND HIGHWAY TEAM DESCRIPTION..... 2

    Background..... 2

    Proposed highway scheme ..... 2

    Review team ..... 3

    Preceding assessment and review..... 3

    WCHAR study area..... 4

    Stakeholder engagement and site visits ..... 4

3. REVIEW OF WCHAR ASSESSMENT OPPORTUNITIES..... 5

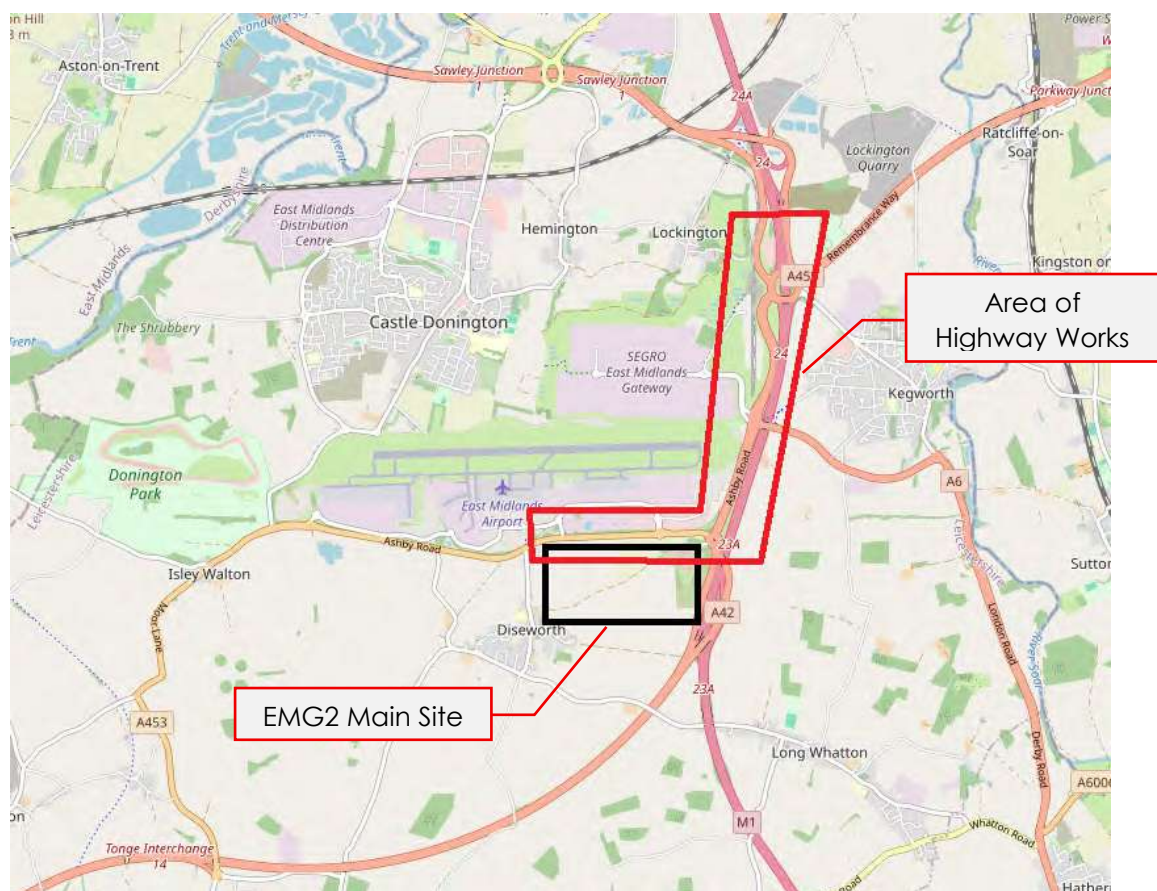
4. PRELIMINARY DESIGN STAGE REVIEW OPPORTUNITIES ..... 8

5. WALKING, CYCLING & HORSE RIDING REVIEW TEAM STATEMENT ..... 10

## 1. INTRODUCTION

### Instruction

- 1.1 BWB Consulting Ltd has been commissioned by Segro (the client) to undertake the highway design for the proposed East Midland Gateway 2 (EMG2) scheme.
- 1.2 The scheme is to provide primary access to the proposed EMG2 development and changes to the surrounding strategic and local road networks to serve and support the predicted increased traffic to the development.
- 1.3 A general site location plan is shown at **Figure 1** below.



**Figure 1:** scheme location (Map data from OpenStreetMap : <https://www.openstreetmap.org/copyright>)

### Objectives

- 1.4 This Report results from a Walking, Cycling & Horse-riding assessment and review (WCHAR) preliminary design stage Review undertaken for the Scheme and has been undertaken in accordance with DMRB GG 142 "Walking, Cycling & Horse-riding Assessment and Review".

## 2. BACKGROUND AND HIGHWAY TEAM DESCRIPTION

### Background

- 2.1 At the Assessment stage the scheme was judged to be a **large highway scheme**. This is confirmed with reference to GG142 tables 2.2.1 and 2.2.1N and therefore reviews are to be undertaken at both preliminary and detail design stages.
- 2.2 This Review, at the preliminary design stage, has been undertaken concurrently with the preliminary design and has been carried out in accordance with GG 142 "Walking, Cycling & Horse-riding Assessment and Review".
- 2.3 The existing highway layout affected by the works comprise:
- M1 Junction 24 signalised roundabout which connects to the A453, M1 and local roads to Kegworth and Lockington;
  - M1 southbound/A50 eastbound link to junction 24;
  - A50 westbound exit from junction 24;
  - A453 / A6 / EMG1 signalised site access junction;
  - A453 corridor from the Finger Farm roundabout to the Hunter Road roundabout inclusive;
  - A453 East Midlands Airport (EMA) signalised access junction;
  - Hyam's Lane (unclassified dead-end country lane with gravel surface); and
  - Long Holden (unclassified dead-end country lane with gravel surface).

### Proposed highway scheme

- 2.4 A package of highway works is proposed including: a new primary development access; substantial improvements around J24 of the M1; minor works on the local highways network; and pedestrian/cycle route enhancements.
- 2.5 A more detailed breakdown of these works is listed below and are shown diagrammatically on the components of the proposed development plan (Document DCO 2.7 & MCO 2.7):
- J24 Improvements comprising:
    - Works to the M1 northbound (DCO Works No. 8);
    - Construction of link road from the M1 northbound to the A50 westbound (DCO Works No. 9);
    - Works to the A50 westbound (DCO Works No. 10);
    - Works to the link road from the M1 southbound and A50 eastbound to M1 Junction 24 (DCO Works No. 11);
    - Works to the west side of the M1 Junction 24 roundabout and A453 northbound approach (DCO Works No. 12a); and
    - Works to the east side of the M1 Junction 24 roundabout and A453 southbound approach (DCO Works No. 12b).

- EMG1 Access Improvements comprising:
  - Signalised pedestrian crossing at the EMG1 exit road (MCO Works No. 8A); and
  - Capacity improvements (DCO Works No. 13).
- Finger Farm roundabout improvements (DCO Works No. 18)
- Active Travel works comprising:
  - Active Travel Link between EMG1 and EMA/EMG2 (DCO Works No. 14) ;
  - Hyam's Lane Works (DCO Works No. 7) ;
  - A453/East Midlands Airport (EMA) junction uncontrolled crossing (DCO Works No. 15);
  - Long Holden works (DCO Works No. 17); and
  - L57 footpath upgrade (DCO Works No. 19).

2.6 For the purposes of providing a comprehensive approach to walking, cycling and horse-riding assessment and review, the highway works are considered to include the main estate road and other publicly accessible infrastructure within both the existing EMG1 and the proposed EMG2 main site.

2.7 The preliminary design scheme drawings have been reviewed to:

- Ensure that previously identified opportunities at the assessment phase have been taken into account and implemented where achievable; and
- Identify opportunities for improvement for pedestrians, cyclists and equestrians as a result of the developing highway scheme design.

2.8 The following Scheme drawings have been reviewed:

Drawing	Title	Revision
EMG2-BWB-HGN-XX-DR-H-0101	EMG2 Highway Plan GA Sheet 1	P05
EMG2-BWB-HGN-XX-DR-H-0102	EMG2 Highway Plan GA Sheet 2	P05
EMG2-BWB-HGN-XX-DR-H-0103	EMG2 Highway Plan GA Sheet 3	P05

### Review team

2.9 The Review team consists of:

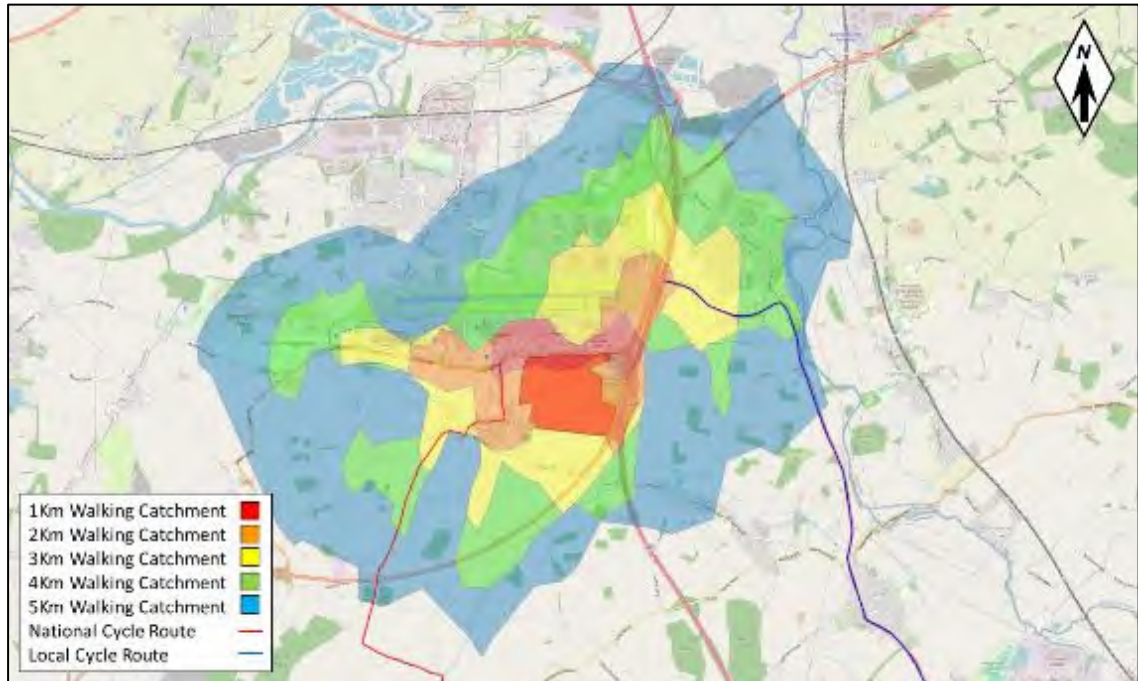
Role	Organisation	Contact name	Email	Phone
Lead Assessor	BWB Consulting	Simon Hilditch	<a href="mailto:simon.hilditch@bwbconsulting.com">simon.hilditch@bwbconsulting.com</a>	0115 924 1100
Design Team Leader and Assessor	BWB Consulting	Darren Ball	<a href="mailto:darren.ball@bwbconsulting.com">darren.ball@bwbconsulting.com</a>	0115 924 1100

### Preceding assessment and review

2.10 The WCHAR Assessment report was issued in March 2025 with minor updates in May 2025 in accordance with GG 142 "Walking, Cycling & Horse-riding Assessment and Review". The WCHAR Assessment is therefore up to date.

## WCHAR study area

- 2.11 The study area is shown at **Figure 2** below and is considered to be correct for the scheme.



**Figure 2** – WCHAR study area

## Stakeholder engagement and site visits

- 2.12 The design proposals have been discussed with both National Highways (NH) and Leicestershire County Council (LCC) as local highway authority. Both authorities will be further consulted with throughout the preliminary and detailed design stages.
- 2.13 As discussed in the WCHAR Assessment public consultation was undertaken during February and March 2025 which has helped inform the opportunities. Further consultation is to take place during June and July 2025.
- 2.14 Site visits have been undertaken as set out in the WCHAR Assessment.



### 3. REVIEW OF WCHAR ASSESSMENT OPPORTUNITIES

- 3.1 This section provides a summary of the opportunities identified as part of the Assessment report together with the actions taken and outcomes. They are provided verbatim from the assessment report. Note that the opportunity references are amended to enable additional opportunities to be added during the review stages, the original references in the Assessment report are shown in brackets.
- 3.2 To assist the key stakeholders in reviewing this document the location of the opportunity and which highway authority(ies) it affects has been included.

Opportunity		Location / Highway authority	Actions taken / outcomes
	<b>General opportunities</b>		
G1 (1)	Consider the provision of a shared footway /cycleway within the [EMG2 Main] site.	EMG2 main site: private	<b>Outcome:</b> the scheme provides a shared use footway/cycleway along the spine road of the EMG2 main site and this connects into the proposals for Hyam's Lane (opportunity S1).
G2 (2)	Consider providing a footway/cycleway along the western side of the A453 to provide a connection between EMG2 and EMG1 which would provide wider connectivity between the surrounding areas such as EMA and Kegworth	A453 corridor: NH (part) & LCC (part)	<b>Outcome:</b> the scheme will provide a new cycle track on the western side of the A453 from the EMG1 access junction, south to the A453 Finger Farm roundabout and then to the A453 Hunter Road roundabout. It will utilise former A453 road alignments where available but will need to go into land outside of the current or former road alignments in the vicinity of the northbound lay-by.
G3 (3)	Consider providing appropriate pedestrian and cyclist crossing facilities along the access roads within [the] EMG2 [Main site] to provide safe crossing opportunities	EMG2 main site: private infrastructure	<b>Future Action:</b> as the EMG2 main site road layout is illustrative at this stage this is to be further reviewed at the detailed design stage. However, we see no reason as to why this objective cannot be achieved.
G4 (4)	Consider providing appropriate pedestrian and cyclist crossing points on the A453 at the EMA junction and to east of the proposed site access, to enhance connectivity to EMG1 and EMA to provide a safe crossing facility for pedestrians and cyclists	A453 corridor: LCC	<b>Outcome:</b> the scheme provides an uncontrolled crossing at the EMA signalised junction which is to connect the new leisure route within EMG2. <b>Outcome:</b> the scheme provides a controlled (toucan) crossing between the A453 Hunter Road roundabout and the Finger farm roundabout, which connects to the route to EMG1 (opportunity G2)
G5 (5)	Consider upgrading Footpath Link 57 to connect Castle Donington to EMG1 and then onto EMG2 via EMG1 and the new A453 link	L57 footpath: LCC	<b>Outcome:</b> an upgrade of this footpath to a cycle track (for use by pedestrians and cyclists) is included in the scheme

Opportunity		Location / Highway authority	Actions taken / outcomes
	<b>Strategic opportunities</b>		
S1 (6)	Consideration should be given to ensuring that the proposals take into consideration the existing PROWs including Hyam's Lane and National and local cycle links and how the development proposals can tie into them to enhance connectivity to Long Holden	Various local roads and PROW: LCC	<p><b>Outcome:</b> the scheme retains Hyam's Lane which will be upgraded to become a cycle corridor connecting Diseworth to the A453 at the Hunter Road roundabout (and then to Kegworth via the new infrastructure identified at opportunity G2)</p> <p><b>Outcome:</b> the scheme will enhance the PROW network around the EMG2 main site by (a) providing a new PROW between the A453 EMA access junction, Hyam's Lane and Long Holden along the western boundary of the EMG2 main site; and (b) a new PROW along the eastern boundary of the EMG2 main site between Hyam's Lane and Long Holden</p>
S2 (7)	Consideration should be given to making Hyam's Lane part of NCN15 and then extending the link through the site, up the A453 to EMG1 and to Kegworth (see opportunity 2)	Hyam's Lane: LCC  A453 corridor: NH (part) & LCC (part)	<b>Future Action:</b> this is agreed in principle but signage is a detailed design matter so this will be reviewed further at the detailed design stage.
S3 (8)	Consideration should be given to whether any improvements could be made to the pedestrian / cycle routes south from Diseworth that would provide a shorter connection to Loughborough for employees (as well as benefits for residents).	Various local roads: LCC	<b>Outcome:</b> this has been reviewed as part of the overall sustainable transport assessment for the EMG2 scheme which concluded that there is no justification for this to form part of the EMG2 scheme
	<b>Pedestrian specific opportunities</b>		
P1 (9)	<p>Consider how wider connectivity of Hyam's Lane (which is being retained within the site) can be enhanced, this could include:</p> <ul style="list-style-type: none"> <li>- Additional south-easterly connection from Hyam's Lane to the Country Park (adjacent to the Moto Donington Services).</li> <li>- an additional northerly connection from Hyam's Lane to the proposed EMG2 Bus Interchange.</li> <li>- an additional southerly connection from Hyam's Lane to Long Holden, this connection provides access directly into the EMG2 estate</li> </ul>	Various local roads and PROW: LCC	<p><b>Outcome:</b> following consultation with Moto, a connection into the rear of their site is not possible due to security requirements for motorway service areas</p> <p><b>Outcome:</b> Hyam's Lane is to be connected by a new shared use footway/cycleway to the A453 Hunter Road roundabout via the bus interchange</p> <p><b>Outcome:</b> new PROW between Hyam's Lane and Long Holden are to be provided east and west of the EMG2 main site</p>

Opportunity		Location / Highway authority	Actions taken / outcomes
	<b>Cyclist specific opportunities</b>		
C1 (10)	Consider whether existing footways in the vicinity of the [EMG2 main] site can be upgraded to shared cycleway / footways to enhance connectivity.	Various local roads: LCC	<b>Outcome:</b> Hyam's Lane is to be upgraded to a cycle track for pedestrians and cyclists, extended to the A453 Hunter Road roundabout and north of there a new cycle track provided to the EMG1 junction alongside the A453. Elsewhere there are no other identified footways within the vicinity of the EMG2 main site that would merit upgrading for use by cyclists.
	<b>Equestrian specific opportunities</b>		
	None identified		



## 4. PRELIMINARY DESIGN STAGE REVIEW OPPORTUNITIES

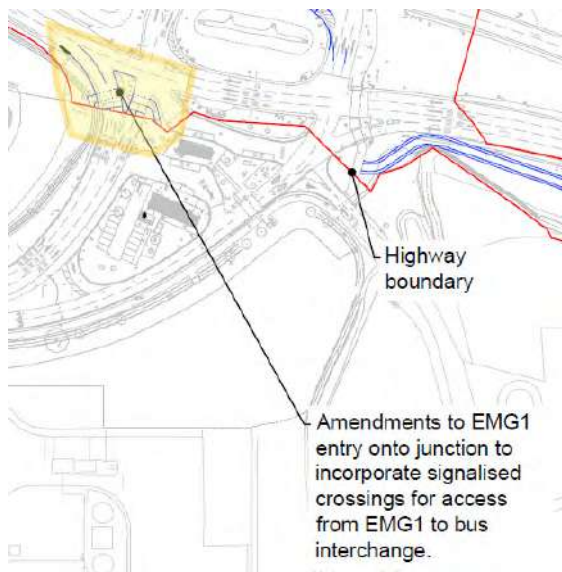
- 4.1 This section documents any user related opportunities identified during the preliminary design phase. They have been developed through discussions between the Lead Assessor and the wider design team and recorded here along with actions taken / outcomes. The numbering is a continuation of the numbers used at the assessment stage.

Opportunity		Location / Highway authority	Actions taken / outcomes
	<b>General opportunities</b>		
G6	Improve the environment of Long Holden and reduce the risk of anti-social behaviour and parking	Long Holden and PROW: LCC	<b>Action taken:</b> all-purpose road status is proposed to be removed and it is proposed to be designated as a public bridleway. Gated access is proposed for walkers, cyclists and horse-riders for public use along with private use for access to adjoining land.
	<b>Strategic opportunities</b>		
	No further opportunities identified		
	<b>Pedestrian specific opportunities</b>		
P2	As part of the EMG1 Works provide an opportunity for pedestrians to be safely dropped off at the EMG1 exit to then access the bus interchange	EMG1 estate roads: Private A453: NH	<b>Outcome:</b> this is included in the scheme design
	<b>Cyclist specific opportunities</b>		
	No further opportunities identified		
	<b>Equestrian specific opportunities</b>		
E1	There is an opportunity to provide a loop for equestrians on the eastern side of Diseworth using Long Holden, Hyam's Lane and the new PROW connecting the two. (This directly addresses public feedback received during the consultation).	Various local roads and PROW: LCC	<b>Action taken:</b> a bridleway connection is proposed on the western side of the EMG main site between Long Holden and Hyam's Lane.

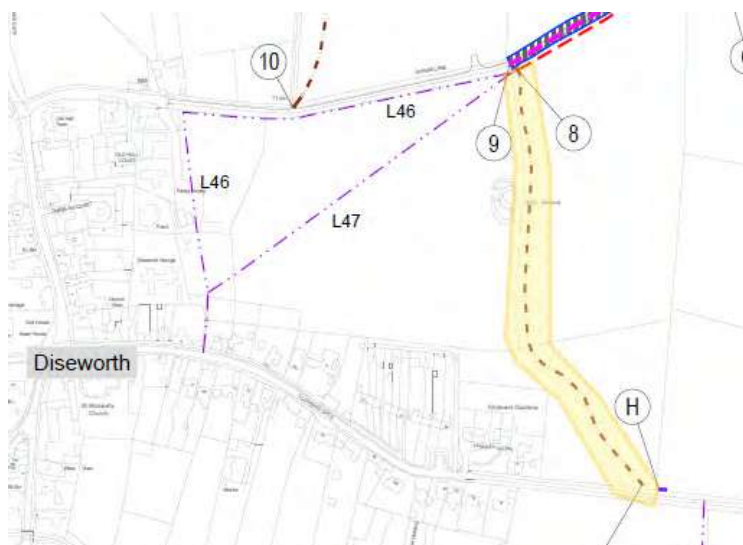
General Opportunity G6 (image courtesy of Google)



## Pedestrian Opportunity P2



## Equestrian Opportunity E1



## 5. WALKING, CYCLING & HORSE RIDING REVIEW TEAM STATEMENT

- 5.1 As Lead Assessor, I confirm that this walking, cycling and horse-riding review report has been compiled in accordance with DMRB GG 142 and thus records all design team deliberations and decisions relating to walking, cycling and horse-riding issues and opportunities. The walking, cycling and horse-riding review was undertaken by the following team:

<b>Name:</b>	Simon Hilditch
<b>Position:</b>	Lead Assessor
<b>Organisation:</b>	BWB Consulting Ltd
<b>Signed &amp; Dated:</b>	

<b>Name:</b>	Darren Ball
<b>Position:</b>	Design team leader and Assessor
<b>Organisation:</b>	BWB Consulting Ltd

- 5.2 As design team leader, I confirm that the assessment has been undertaken at the appropriate stage of the highway scheme development. I confirm that in my professional opinion the appointed Lead Assessor has the appropriate experience for the role making reference to the expected competencies contained in DMRB GG 142.

<b>Name:</b>	Darren Ball
<b>Position:</b>	Design Team Leader
<b>Organisation:</b>	BWB Consulting Ltd
<b>Signed &amp; Dated:</b>	



## **APPENDIX 25: BREAAAM Accessibility Index Calculator (existing site)**

---

## BREEAM 2018 Tra01/02 Accessibility Index calculator



Using the drop down boxes make the relevant selections and press the 'Select' button

Building type

No. nodes required

Select

### NODE 1

Public transport type	Bus										
Distance to node (m)	500										
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10	
Average frequency per hour	4	2	3	1	2						

### NODE 2

Public transport type	Bus										
Distance to node (m)											
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10	
Average frequency per hour											

Accessibility Index 4.41

**APPENDIX 26: Geometric Design Strategy Record for the local highway network  
(document reference EMG2-BWB-GEN-XX-RP-CH-0017\_S3-P01)**

---

## **INFRASTRUCTURE**

SEGRO  
East Midlands Gateway 2  
Leicestershire  
Geometric Design Strategy Record  
(Local Highways Network)



**INFRASTRUCTURE**

SEGRO

East Midlands Gateway 2

Leicestershire

Geometric Design Strategy Record

(Local Highways Network)

Nottingham

5<sup>th</sup> Floor, Waterfront House, Station Street




Nottingham, NG2 3DQ

T: 0115 924 1100

June 2025

## DOCUMENT ISSUE RECORD

Document Number:	EMG2-BWB-GEN-XX-RP-CH-0017
BWB Reference:	220500

Revision	Date of Issue	Status	Author:	Checked:	Approved:
1	13.06.2025	For comment	Darren Ball IEng MICE	Simon Hilditch MEng (Hons) CEng MICE MCIHT	Simon Hilditch MEng (Hons) CEng MICE MCIHT
					

### Notice

This document has been prepared for the sole use of the Client in accordance with the terms of the appointment under which it was produced. BWB Consulting Limited accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of BWB.

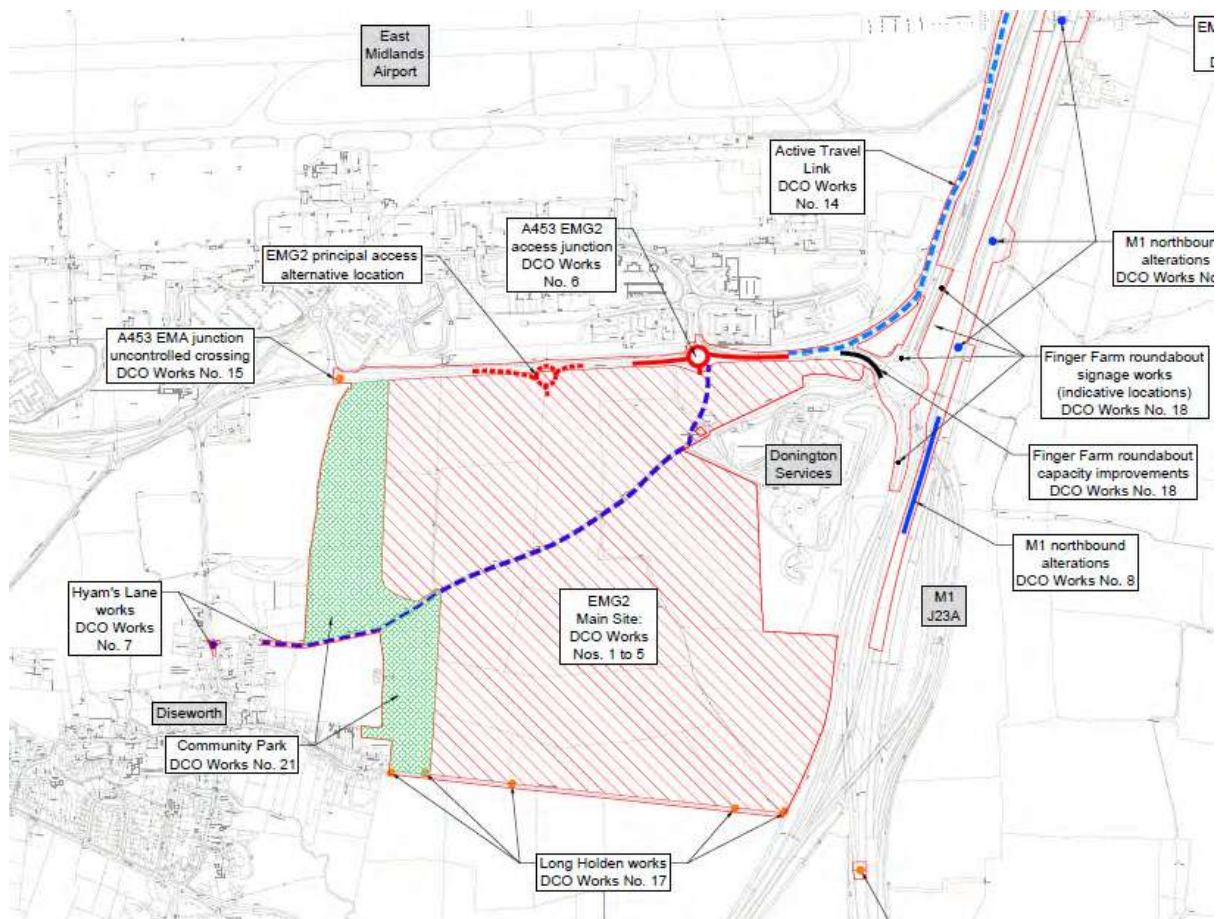
## CONTENTS

1.	INTRODUCTION.....	1
	Instruction .....	1
	Acronyms and Abbreviations .....	2
	Objectives .....	2
	List of Drawings.....	2
2.	SCHEME OVERVIEW AND DESIGN STANDARDS .....	4
	Scheme overview .....	4
	Overview of Standards .....	4
	Highway Authority, Road Class, Design Speed and Speed Limit .....	4
3.	A453 FINGER FARM ROUNDABOUT .....	6
	Layout .....	6
	Design Speed and Geometry .....	6
	Visibility .....	6
4.	A453 HUNTER ROAD / EMG2 PRIMARY ROUNDABOUT ACCESS JUNCTION .....	7
	Layout .....	7
	Traffic Flows .....	7
	Design Speed and Geometry .....	8
	Visibility .....	9
	Departures From Standard .....	9
5.	A453 SHARED USE CYCLEWAY/FOOTWAY .....	10
	Layout .....	10
	Traffic Flows .....	10
	Design Speed and Geometry .....	10
	Visibility .....	11
	Departures From Standard .....	11
6.	HYAM'S LANE CYCLE TRACK .....	12
	Layout .....	12
	Design Speed and Geometry .....	12

## 1. INTRODUCTION

### Instruction

- 1.1 The EMG2 development is located south of East Midlands Airport (EMA) and proposes substantial improvements to the strategic road network (SRN) at M1 junction 24 along with works to the A453 south of J24 on the Local road network (LRN).
- 1.2 BWB Consulting (BWB) has been instructed by SEGRO (the Client) to develop the highway design for the works on both the SRN and LRN. This report provides a Design Strategy Record (DSR) for the LRN.
- 1.3 **Figure 1.1** below shows the overall location of the works on the LRN in the context of EMG2.



**Figure 1.1** Location plan and LRN works

## Acronyms and Abbreviations

DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DSR	Design Strategy Record
EMA	East Midlands Airport
EMG1	East Midland Gateway 1
EMG2	East Midland Gateway 2
ICD	Inscribed Circle Diameter
LCC	Leicestershire County Council
LRN	Local Road Network
LTN	Local Transport Note
NH	National Highways
SRN	Strategic Road Network
SSD	Stopping Sight Distance

## Objectives

- 1.4 The objective of this DSR is to record the key decisions made during the layout design. This DSR does not include the upgrading of footpath L57 to a cycle track (DCO Works No. 19) as the design of that has already been reviewed by LCC.
- 1.5 The report will record the relaxations and departures from standards contained within the highway design.
- 1.6 The following reports and documents are to be provided separately to this DSR:
- Transport assessment and modelling;
  - Directional signage strategy;
  - Lighting strategy;
  - Maintenance and repair statement to GD 304;
  - WCHAR assessment and review to GG 142; and
  - Stage 1 road safety audit to GG 119.

## List of Drawings

- 1.7 The table below sets out the scheme design and option drawings that are to be read in conjunction with this report. They are provided separately and are not appended to this report.

Drawing no.	Title
EMG2-BWB-HGN-A453-DR-H-0101	A453 Geometry Plans Sheet 1 of 4
EMG2-BWB-HGN-A453-DR-H-0102	A453 Geometry Plans Sheet 2 of 4
EMG2-BWB-HGN-A453-DR-H-0103	A453 Geometry Plans Sheet 3 of 4
EMG2-BWB-HGN-A453-DR-H-0110	A453 Vehicle Swept Paths & Visibility Sheet 1 of 4
EMG2-BWB-HGN-A453-DR-H-0111	A453 Vehicle Swept Paths & Visibility Sheet 2 of 4
EMG2-BWB-HGN-A453-DR-H-0112	A453 Vehicle Swept Paths & Visibility Sheet 3 of 4

Drawing no.	Title
EMG2-BWB-HGT-A453-DR-H-0651	A453 Geometry Profiles
EMG2-BWB-HGN-HYAM-DR-H-0101	Hyam Geometry Plans Sheet 1 of 2
EMG2-BWB-HGN-HYAM-DR-H-0102	Hyam Geometry Plans Sheet 2 of 2
EMG2-BWB-HGN-HYAM-DR-H-0110	Hyam Vehicle Swept Paths & Visibility Sheet 1 of 2
EMG2-BWB-HGN-HYAM-DR-H-0111	Hyam Vehicle Swept Paths & Visibility Sheet 2 of 2
EMG2-BWB-HGT-HYAM-DR-H-0651	Hyam Geometry Profiles

## 2. SCHEME OVERVIEW AND DESIGN STANDARDS

### Scheme overview

- 2.1 The proposed works on the LRN are listed below, collectively referred to within this report as the LRN works.
- New arm (to serve the EMG2 Main Site) and improvements to the A453 Hunter Road roundabout comprising:
    - New southern arm to the roundabout to serve as primary access to the EMG2 development;
    - Carriageway widening to lengthen the existing 2 lane approach and exits on both A453 arms;
    - Provision of new Toucan signalised crossing of A453 between Finger Farm and Hunter Road roundabouts. Includes a new length of shared cycle/footway to the south from the crossing to Hunter Road roundabout and into the EMG2 development;
  - Improvement to Finger Farm roundabout A453 westbound exit:
    - Carriageway widening to lengthen the existing 2 lane exit to increase capacity reducing the risk of merging traffic queuing back towards the roundabout; and
  - Provision of new and improvements to the existing shared unsegregated cycle/footway adjacent to the A453 between EMG1 and the EMG2 (up to the boundary with the SRN, north of this point this becomes part of the works on the SRN)

### Overview of Standards

- 2.2 The scheme spans across two highway authority boundaries, NH and LCC. This report provides design commentary on the LCC's LRN works. The NH design commentary is covered by a separate report.
- 2.3 The LRN works will be designed in accordance with the following DMRB standards and DfT guidance:

Doc. Ref.	Document Title	Version / Revision
CD 109	Highway link design	Revision 1
CD 116	Geometric design of roundabouts	Version 2.1.0
CD 127	Cross-sections and headrooms	Version 1.0.1
CD 143	Designing for walking, cycling and horse-riding	Version 2.0.1
LTN1/20	Cycle Infrastructure Design	July 2020

### Highway Authority, Road Class, Design Speed and Speed Limit

- 2.4 The road class for the A453 west/east section between Finger Farm roundabout and the signalised junction access to the airport has been categorised as an urban all-purpose



road following the proposed developed. This is due to the road having development both sides and a cross section with carriageway, footways and road lighting in line with the typical sections for urban single carriageway shown in CD 127 'Cross-sections and headrooms',

Section of scheme	Road class	Design speed	Existing or proposed signed speed limit (mph)
A453 between Finger Farm roundabout and the signalised junction access to EMA.	All-purpose	85kph	Existing 50mph signed speed limit to be retained.
Shared use cycle/footway	N/A	30/40mph	Assessed based on longitudinal gradient in accordance with LTN1/20

### 3. A453 FINGER FARM ROUNDABOUT

#### Layout

- 3.1 The proposed works to the existing A453 Finger Farm roundabout is to extend the length of two-lane merge on the A453 westbound exit. The extension is to reduce the risk of merging traffic queuing back onto the roundabout.

#### Design Speed and Geometry

- 3.2 The proposed geometric changes to the roundabout are not influenced by design speed except for forward visibility exiting the roundabout. CD 116, para. 3.56 states that exit visibility from the ICD shall be in accordance with CD 109.
- 3.3 As detailed above, the A453 has been categorised as an urban all-purpose road and therefore the design speed based on the existing 50mph signed speed limit at 85kph (CD 109, para. 2.5 and Table 2.5).
- 3.4 The extension maintains the compliant horizontal and vertical geometry of the existing exit and provides minimum lane widths of 3.0m and a merge taper greater than 1 in 15 (CD 116, para. 3.28.3).

#### Visibility

- 3.5 The existing forward visibility (SSD) from the exit of the roundabout onto the A453 eastbound is currently sub-standard and constitutes a departure from standard. Drawing EMG2-BWB-HGN-A453-DR-H-0102 shows the achieved SSD of the proposals with minimal vegetation clearance which will remain an **existing departure from standard**. The drawing also shows the point at which desirable minimum SSD is achieved.

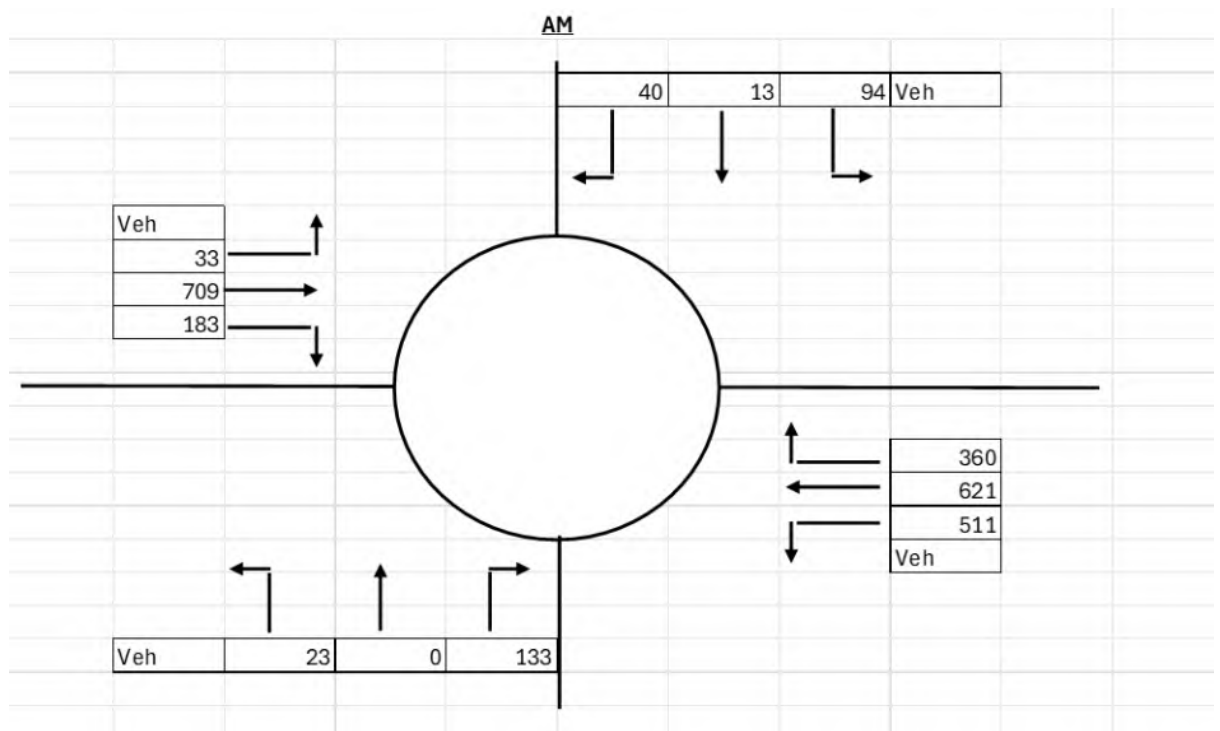
## 4. A453 HUNTER ROAD / EMG2 PRIMARY ROUNDABOUT ACCESS JUNCTION

### Layout

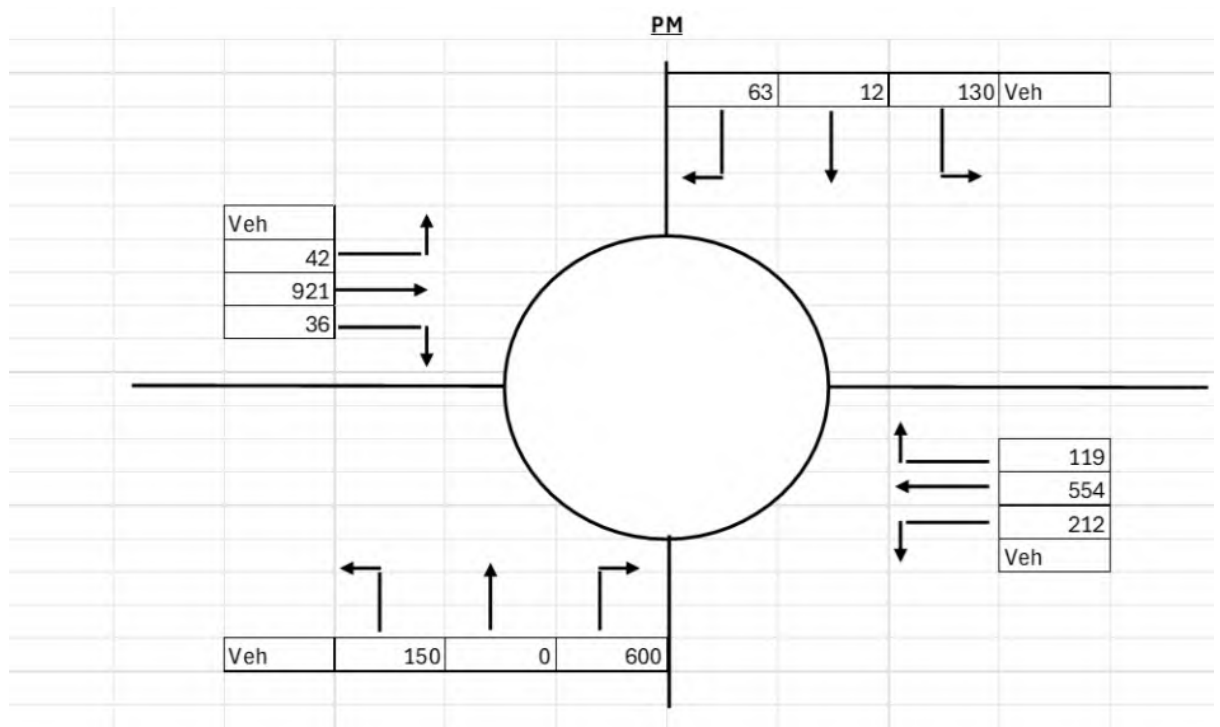
- 4.1 The works to the existing A453 Hunter Road roundabout proposes a new arm off the south of the roundabout to serve the development.
- 4.2 Additionally, the works include widening of the approach and exits to both A453 arms of the roundabout to increase capacity and road safety.

### Traffic Flows

- 4.3 **Figure 4.1 and 4.2** below set out the peak hour future assessment year traffic data for the development through the roundabout. Note the figures are orientated north.



**Figure 4.1** A453 Hunter Road roundabout forecast traffic flows AM peak hour



**Figure 4.2** A453 Hunter Road roundabout forecast traffic flows PM peak hour

### Design Speed and Geometry

- 4.4 The proposed works for the widening and increased length of the 2-lane approach and exits of the A453 arms, have been assessed in accordance with CD 116. Design speed does not influence the geometric design criteria for the proposals except for forward visibility. CD 116, para. 3.56 states that exit visibility from the ICD shall be in accordance with CD 109.
- 4.5 As detailed within paragraph 2.5 of this report, The A453 in this location has been categorised as an urban all-purpose road and therefore the design speed based on the existing 50mph signed speed limit at 85kph (CD 109, para. 2.5 and Table 2.5).
- 4.6 Drawing EMG2-BWB-HGN-A453-DR-H-0101 shows the detailed geometry proposals and assesses compliance with DMRB, notably CD 116 for the roundabout.
- 4.7 The proposed horizontal and vertical geometry changes to the A453 and proposed development arms have been designed to accommodate the swept path requirements for an HGV in the nearside lane and large car in the outside lane, and in accordance with the geometric requirements of CD 116.
- 4.8 On the EMG2 exit the width of lane 1 at the exit is widened to allow for the swept path manoeuvres of the design vehicle. However, as the lane width exceeds 4.5m, this is a **departure from standard**.

## Visibility

- 4.9 Visibility on the approach, circulatory and exit of the roundabout arms comply with the requirements of CD 116, para. 3.42 to 3.56.

## Departures From Standard

- 4.10 There is one **departure from standard** for the proposed changes to Hunter Road roundabout. The nearside approach lane width on the new southern arm is 4.99m to accommodate the design vehicle swept path. CD 116, para 3.14 states the maximum lane width shall be no greater than 4.5m.

## **5. A453 SHARED USE CYCLEWAY/FOOTWAY**

### **Layout**

- 5.1 The works propose a new shared use unsegregated cycle/footway (shared facility) along the A453 between the existing A453 / A6 Kegworth Bypass / EMG1 (Wilders Way) access junction and the A453 Hunter Road / EMG2 access roundabout. The route is unlit except for where it runs adjacent to existing lit roads.
- 5.2 The shared use facility will connect to the existing shared unsegregated cycle/footway facility to the north for EMG1, Kegworth village and A6 Kegworth Bypass. To the south, connect into the existing shared facility along the A453 to the existing Beverley Road roundabout and will connect into the new facility that is proposed to run along Hyam's Lane to Diseworth.
- 5.3 This report provides design information for the section of shared facility from the National highways boundary adjacent to the airport (approximately 500m north of the existing Finger Farm roundabout) to the A453 Hunter Road / EMG2 access roundabout.
- 5.4 Consideration has been given to maintaining the existing access to the pumping station off A453 between Hunter Road and Finger Farm roundabouts. The pumping station is located to the east of the airport, adjacent to the dual carriageway section of the A453.

### **Traffic Flows**

- 5.5 Based on the existing usage of the cycle networks in the vicinity of EMG1 and the proposed EMG2 site the envisaged usage is predicted to be well below 200 users per hour.

### **Design Speed and Geometry**

- 5.6 The design of the shared facility has been based on LCCs highways design guide and LTN1/20 with particular reference to Chapter 5 'Geometric Requirements'. Where appropriate, DMRB CD 195 has been used to further determine design requirements.
- 5.7 In accordance with LTN1/20, para 5.6.1 and Table 5-4, the design speed for the shared facility is 30kph, increased to 40kph on downhill gradients greater than 3%.
- 5.8 A desirable minimum width of 3.0m is proposed for the shared facility (LTN1/20, para 5.5.1 and Table 5-2).
- 5.9 A 1.0m verge farthest from the carriageway for the length of the shared facility is proposed adjacent to the dual carriageway section of the A453. The existing verge width is to be retained on the single carriageway section of A453.
- 5.10 A wider than desirable minimum offset of 3.5m is provided along the derestricted dual carriageway section of the A453. An absolute minimum 1.5m adjacent to the 50mph restricted single carriageway section between the Hunter Road and Finger Farm roundabouts in accordance with LTN1/20. Para. 6.2.11 and Table 6-1 is proposed except

for a pinch point 1.31m as indicated on drawing EMG2-BWB-HGN-A453-DR-H-0101. This constitutes a **departure from standard**.

- 5.11 Proposed horizontal curves on the shared facility generally exceed the minimum criteria of 25m and 40m radii for the appropriate design speed as stated within LTN1/20, para. 5.9.1 and Table 5-7 with the exception of the tie in to the existing facility at Hunter Road which has a 20m radius. This constitutes a **relaxation** as LTN 1/20 clause 5.9.3 is not a mandatory requirement.
- 5.12 The section of shared facility from the Finger Farm roundabout heading north for approximately 450m proposes a series of 5% longitudinal gradients for 30m with minimum 5m of flat section (maximum 2%) between each gradient. This is in compliance with LTN1/20, para's. 5.9.7 to 5.9.10 and Table 5-8.
- 5.13 Minimum K Value requirements for sag and crest curves are achieved in accordance with LTN1/20, para. 5.9.5.
- 5.14 The crossfall of the shared facility does not exceed 2.5% in accordance with LTN1/20, para 5.10.1.
- 5.15 It is proposed to maintain the existing vehicular access to the pumping station, a section of which will be shared with the new shared cycle facility. Over this section the existing surfaced access will be retained subject to confirming its current condition. The access track close to the pumping station is proposed to be realigned and include the provision of a new culvert crossing the existing watercourse. The realignment is primarily to provide smooth alignment at the interface with the shared facility and adequate visibility. A new lockable gate close to the pumping station is proposed at the extent of the new adoptable highway boundary. Bollards are proposed at the interfaces both ends of the access track to prevent motorised vehicles entering onto the cycle / pedestrian shared facility. Additional security bollards are proposed at the access of A453 to replace the existing security gate.

### Visibility

- 5.16 Stopping sight distance (SSD) along the route is achieved in accordance with LTN1/20, para. 5.7.1 and Table 5-5 (31m for 30kph and 47m for 40kph) with the inclusion of a short section of verge widening on one of the bends within the 40kph section.
- 5.17 A small degree of vegetation clearance may be required at the shared facility junction where the existing and new facilities intersect and at the intersections between the shared facility and the existing access track.

### Departures From Standard

- 5.18 There is one **departure from standard** along this section of shared facility as highlighted above.
- 5.19 It is recommended that LCC are consulted regarding the proposals for the 5% longitudinal gradient section of the facility.



## 6. HYAM'S LANE CYCLE TRACK

### Layout

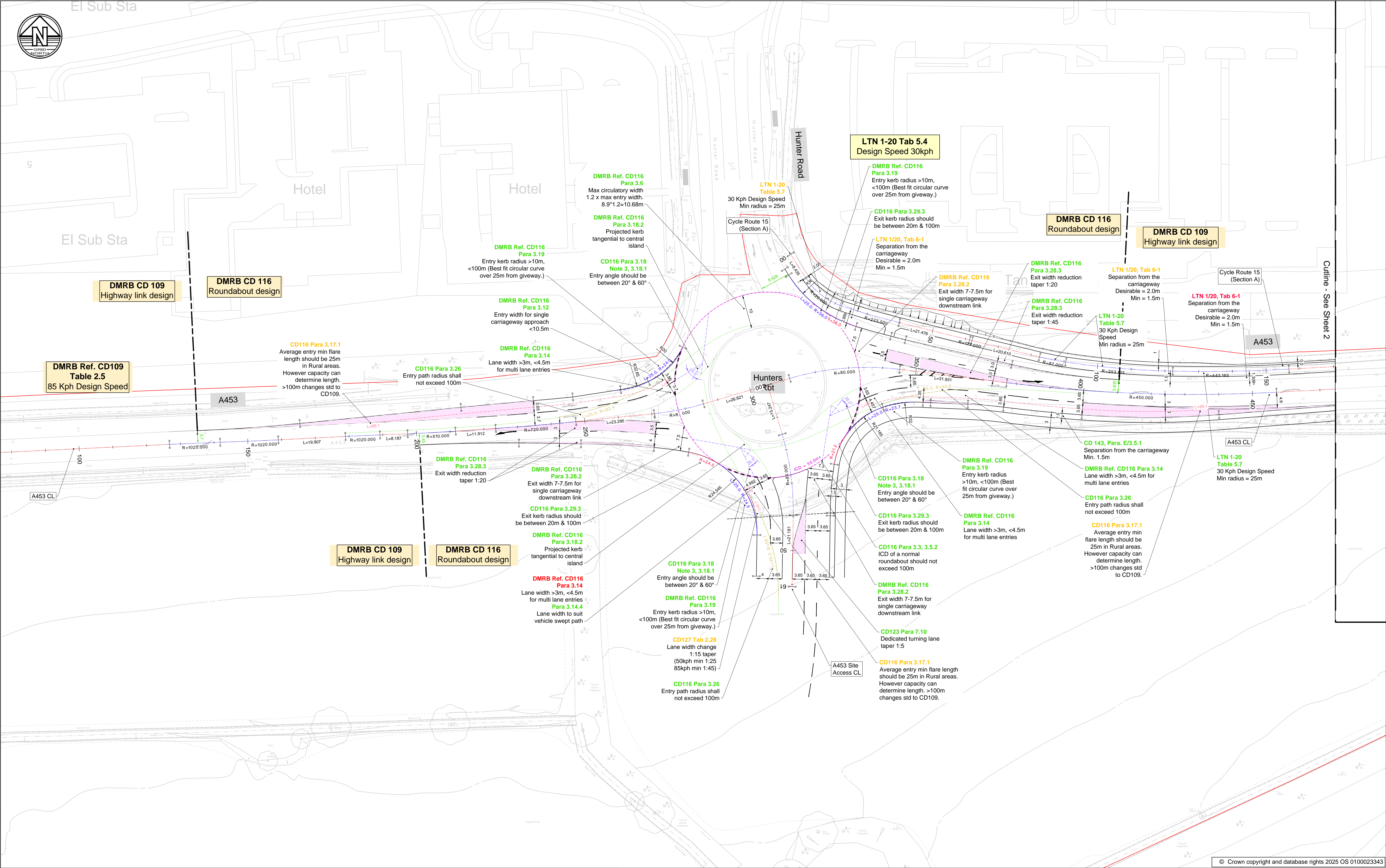
- 6.1 Hyam's Lane is a cul-de-sac road that serves as highway access for the Old Mill Farm as well as access to fields along the length of Hyam's Lane.
- 6.2 For the first approximately 120m of Hyam's Lane from the junction with Grimes Gate, there is a bituminous surface. From this point travelling east Hyam's Lane becomes a travel track up to the end of the lane near the boundary with the Moto Donington services.
- 6.3 The proposal is to utilise Hyam's Lane as a cycle track through the EMG2 Main Site including a new section between Hyam's Lane and Hunter Road roundabout to link the A453 and Diseworth.
- 6.4 It is proposed to provide a bituminous surface for the entire length of Hyam's Lane to be used as a cycle track, improving the existing gravel surface.

### Design Speed and Geometry

- 6.5 The design of the cycle track has been based on LCCs highways design guide and LTN1/20 with particular reference to Chapter 5 'Geometric Requirements'. Where appropriate DMRB CD 195 has been used to further determine design requirements.
- 6.6 In accordance with LTN1/20, para 5.6.1 and Table 5-4, the design speed for the facility is 30kph and 40kph on downhill gradients greater than 3%.
- 6.7 A desirable minimum width of 3.0m is proposed for the section of cycletrack currently unsurfaced and to retain the existing minimum 3.7m carriageway width having a bituminous surface.
- 6.8 Proposed horizontal curves for the cycle track generally exceed the minimum criteria of 25m and 40m radii for the appropriate design speed as stated within LTN1/20, para. 5.9.1 and Table 5-7. There are three locations where the minimum radius is not achieved due to the alignment of the adjacent EMG2 Main Site estate road. This constitutes a **relaxation** as LTN 1/20 clause 5.9.3 is not a mandatory requirement.
- 6.9 Minimum K Value requirements for sag and crest curves are achieved in accordance with LTN1/20, para. 5.9.5.
- 6.10 Longitudinal gradients generally conform to LTN1/20, para. 5.9.7 and Table 5-8. However, there are longitudinal gradients between chainages 750 and 1050 that exceed the length stated on Table 5-8 (**relaxations from standard**). It should be noted that this section is within the existing Hyam's Lane.

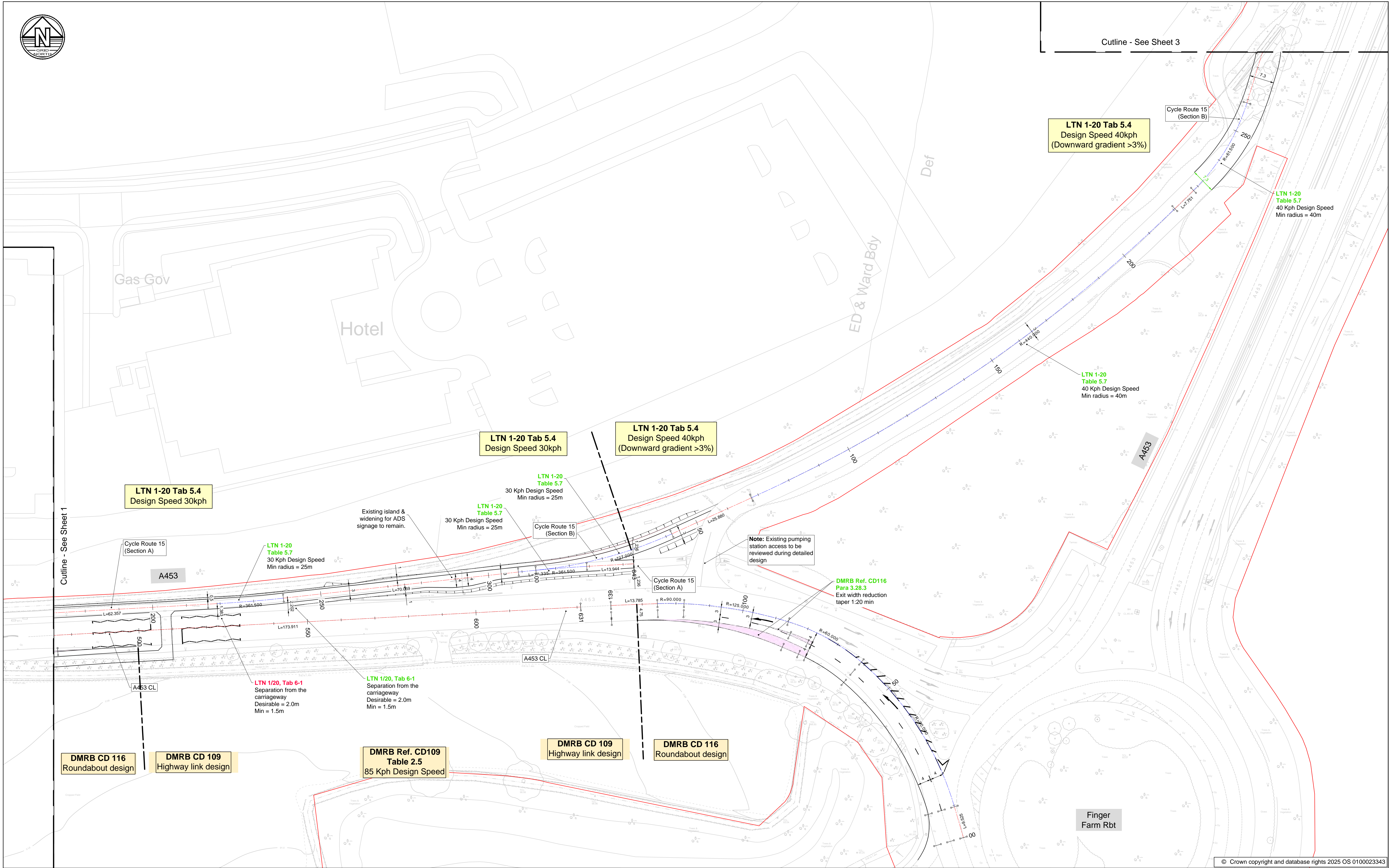







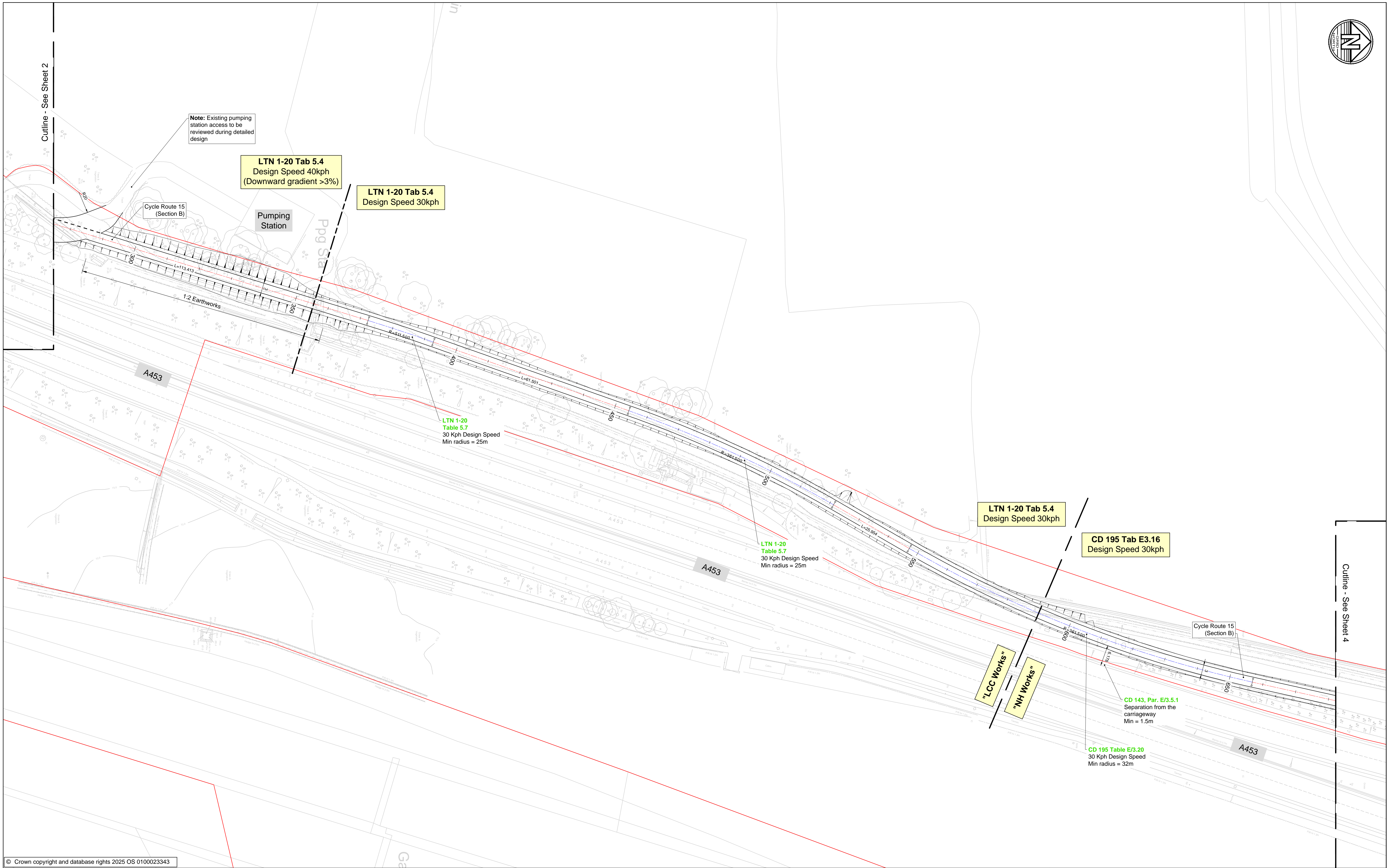
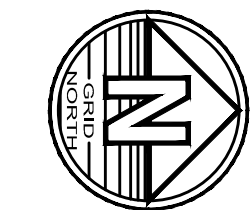
Notes		Legend		ISSUES & REVISIONS				<div><div><div><div></div><div></div><div></div></div><div><b>BWB</b><div>A CAF GROUP COMPANY</div></div></div><div><div><input type="checkbox"/> Birmingham   0121 233 3322</div><div><input type="checkbox"/> Leeds   0113 233 8000</div><div><input type="checkbox"/> London   020 7234 9122</div><div><input checked="" type="checkbox"/> Manchester   0161 233 4260</div><div><input type="checkbox"/> Nottingham   0115 924 1100</div></div><div>www.bwbconsulting.com</div></div>	Client		Project Title		Drawing Title						
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.		— Draft Order Limits		Rev	Date	Details of issue / revision	Drw		Rev	East Midlands Gateway 2		A453 Geometry Plans Sheet 1 of 4							
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.		- - - Alignment - Straights		P01	14.05.25	Issue for information	MS		SH	FOR INFORMATION		Project - Originator - Zone - Level - Type - Role - Number		Status	Rev				
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.		- - - - Alignment - Curves										EMG2-BWB-HGN-A453-DR-H-0101		S2	P01				
4. Any discrepancies noted on site are to be reported to the engineer immediately.		- - - - - Alignment - Transitions								Drawing Status		Project - Originator - Zone - Level - Type - Role - Number		Status	Rev				
5. Annotation shown coloured green achieves design standards		Carriageway area								Drawn: M.S.		Reviewed: S.H.		EMG2-BWB-HGN-A453-DR-H-0101		S2	P01		
6. Annotation shown coloured amber is a relaxation from design standards		Taper for cross section width change								BWB Ref: 220500		Date: 10.12.24		Scale@A1: 1:500		EMG2-BWB-HGN-A453-DR-H-0101		S2	P01
7. Annotation shown coloured red is a departure from design standards																		S2	P01
© Copyright BWB Consulting Ltd																		S2	P01





Notes			Legend			ISSUES & REVISIONS					<div><p>A CAF GROUP COMPANY</p><div><input type="checkbox"/> Birmingham   0121 233 3322</div><div><input type="checkbox"/> Leeds   0113 233 8000</div><div><input type="checkbox"/> London   020 7234 9122</div><div><input checked="" type="checkbox"/> Manchester   0161 233 4260</div><div><input type="checkbox"/> Nottingham   0115 924 1100</div><div>www.bwbconsulting.com</div></div>		Client		Project Title		Drawing Title							
<div>1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.</div> <div>2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.</div> <div>3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.</div> <div>4. Any discrepancies noted on site are to be reported to the engineer immediately.</div> <div>5. Annotation shown coloured green achieves design standards</div> <div>6. Annotation shown coloured amber is a relaxation from design standards</div> <div>7. Annotation shown coloured red is a departure from design standards</div>			<div><div>—</div> Draft Order Limits</div> <div><div>---</div> Alignment - Straights</div> <div><div>---</div> Alignment - Curves</div> <div><div>---</div> Alignment - Transitions</div> <div>Carriageway area</div> <div><div></div> Taper for cross section width change</div>			Rev		Date		Details of issue / revision			Drw		Rev									
						P01		14.05.25		Issue for information			MS		SH									
© Copyright BWB Consulting Ltd											Drawn: M.S		Reviewed: S.H		Drawing Status		Project - Originator - Zone - Level - Type - Role - Number		Status		Rev			
											BWB Ref: 220500		Date: 10.12.24		Scale@A1: 1:500		FOR INFORMATION		EMG2-BWB-HGN-A453-DR-H-0102		S2		P01	





© Crown copyright and database rights 2025 OS 0100023343

Notes	
1. Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.	7. Annotation shown coloured red is a departure from design standards
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.	
4. Any discrepancies noted on site are to be reported to the engineer immediately.	
5. Annotation shown coloured green achieves design standards	
6. Annotation shown coloured amber is a relaxation from design standards	

Legend	
—	Draft Order Limits
—	Alignment - Straights
—	Alignment - Curves
—	Alignment - Transitions
—	Carriageway area
—	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	04.03.25	Issue for information	MS	SH	
P02	15.05.25	Minor annotation changes	MS	SH	



**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client



Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	04.03.25
		Scale@A1:	1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

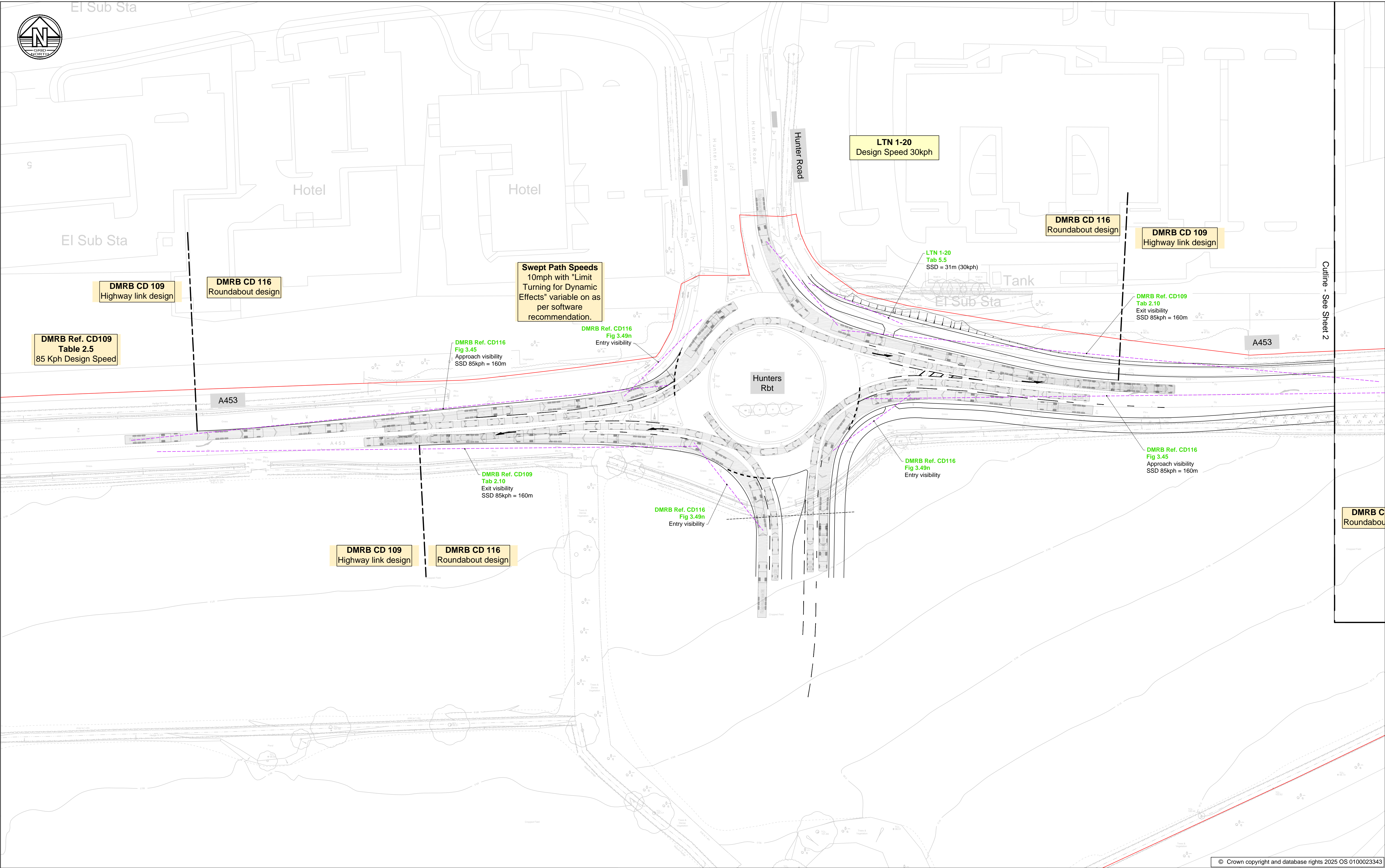
**FOR INFORMATION**

Drawing Title

**A453  
Geometry Plans  
Sheet 3 of 4**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-HGN-A453-DR-H-0103	S2	P02





DMRB C  
Roundabout

# Notes

---

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. Visibility sight lines shown are in plan view only. These are to be checked vertically against the design / existing surfaces at detailed design stage.

© Copyright BWB Consulting Ltd

**Large Car (2006)**

Overall Length	4.67
Overall Width	1.87
Overall Height	1.57
Min Body Ground Clearance	0.37
Min Body Ground Clearance	0.31
Lock to lock	4.00
Lock to lock	4.00
Kerb to Kerb Turning Radius	5.90

**FTA Design Articulated Vehicle (1998)**

Overall Length	16.40
Overall Width	2.50
Overall Body Height	3.80
Min Body Ground Clearance	1.00
Min Track Width	2.40
Lock to lock	6.00
Kerb to Kerb Turning Radius	6.00

[illegible]

Client



The logo for SEGRO, featuring the word "SEGRO" in a bold, black, sans-serif font. The letter "O" is replaced by a solid red circle.

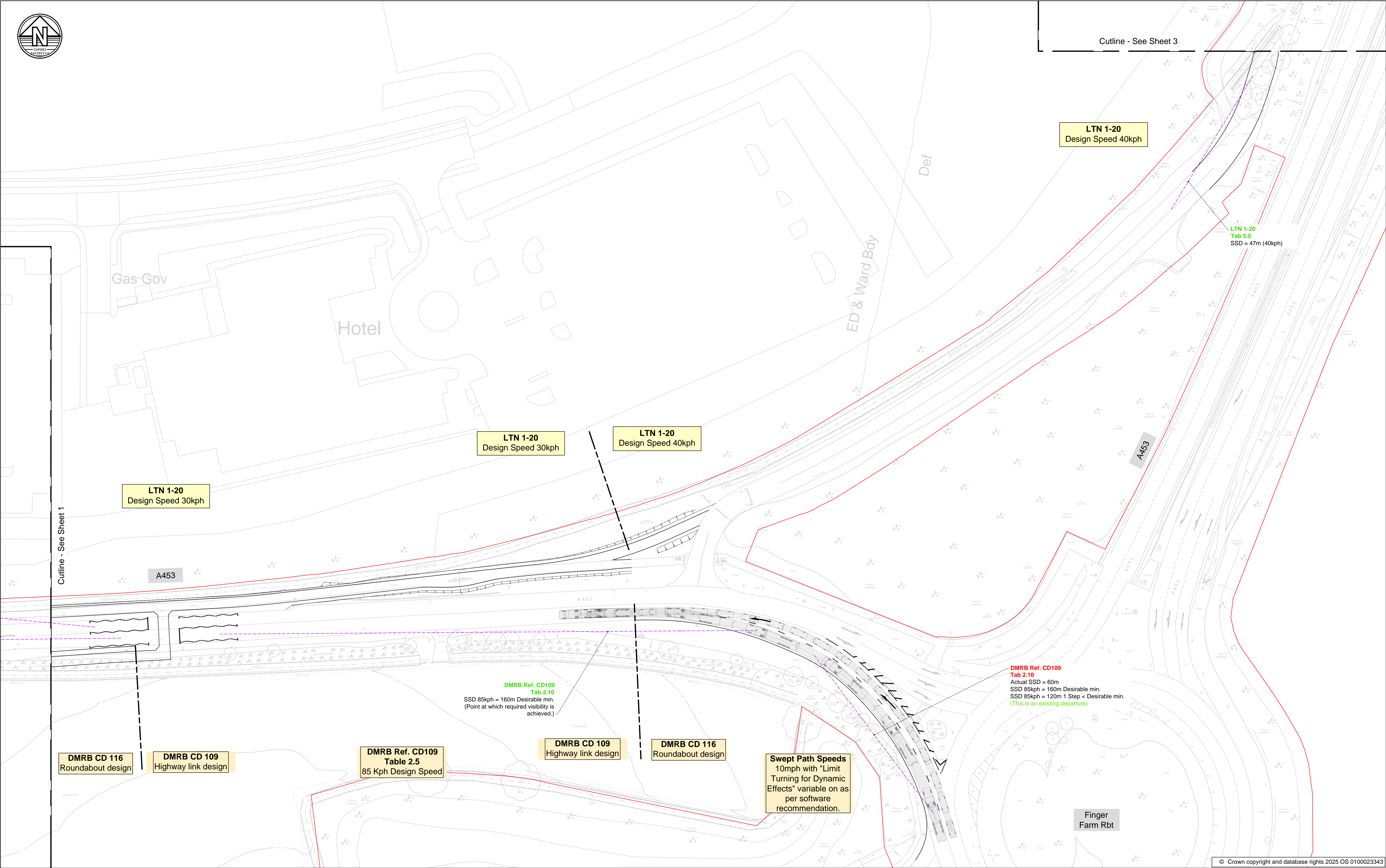
Drawn:	M.S	Reviewed:	S.H		
B/WB Ref:	220500	Date:	05.06.25	Scale@A1:	1:500

Drawing Status

**FOR INFORMATION**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-HGN-A453-DR-H-0110	S2	P01





Notes

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- Visibility sight lines shown are in plan view only. These are to be checked vertically against the design / existing surfaces at detailed design stage.

Legend

1:100m

1:200m

1:300m

1:400m

1:500m

1:600m

1:700m

1:800m

1:900m

1:1000m

1:1100m

1:1200m

1:1300m

1:1400m

1:1500m

1:1600m

1:1700m

1:1800m

1:1900m

1:2000m

1:2100m

1:2200m

1:2300m

1:2400m

1:2500m

1:2600m

1:2700m

1:2800m

1:2900m

1:3000m

1:3100m

1:3200m

1:3300m

1:3400m

1:3500m

1:3600m

1:3700m

1:3800m

1:3900m

1:4000m

1:4100m

1:4200m

1:4300m

1:4400m

1:4500m

1:4600m

1:4700m

1:4800m

1:4900m

1:5000m

1:5100m

1:5200m

1:5300m

1:5400m

1:5500m

1:5600m

1:5700m

1:5800m

1:5900m

1:6000m

1:6100m

1:6200m

1:6300m

1:6400m

1:6500m

1:6600m

1:6700m

1:6800m

1:6900m

1:7000m

1:7100m

1:7200m

1:7300m

1:7400m

1:7500m

1:7600m

1:7700m

1:7800m

1:7900m

1:8000m

1:8100m

1:8200m

1:8300m

1:8400m

1:8500m

1:8600m

1:8700m

1:8800m

1:8900m

1:9000m

1:9100m

1:9200m

1:9300m

1:9400m

1:9500m

1:9600m

1:9700m

1:9800m

1:9900m

1:10000m

1:10100m

1:10200m

1:10300m

1:10400m

1:10500m

1:10600m

1:10700m

1:10800m

1:10900m

1:11000m

1:11100m

1:11200m

1:11300m

1:11400m

1:11500m

1:11600m

1:11700m

1:11800m

1:11900m

1:12000m

1:12100m

1:12200m

1:12300m

1:12400m

1:12500m

1:12600m

1:12700m

1:12800m

1:12900m

1:13000m

1:13100m

1:13200m

1:13300m

1:13400m

1:13500m

1:13600m

1:13700m

1:13800m

1:13900m

1:14000m

1:14100m

1:14200m

1:14300m

1:14400m

1:14500m

1:14600m

1:14700m

1:14800m

1:14900m

1:15000m

1:15100m

1:15200m

1:15300m

1:15400m

1:15500m

1:15600m

1:15700m

1:15800m

1:15900m

1:16000m

1:16100m

1:16200m

1:16300m

1:16400m

1:16500m

1:16600m

1:16700m

1:16800m

1:16900m

1:17000m

1:17100m

1:17200m

1:17300m

1:17400m

1:17500m

1:17600m

1:17700m

1:17800m

1:17900m

1:18000m

1:18100m

1:18200m

1:18300m

1:18400m

1:18500m

1:18600m

1:18700m

1:18800m

1:18900m

1:19000m

1:19100m

1:19200m

1:19300m

1:19400m

1:19500m

1:19600m

1:19700m

1:19800m

1:19900m

1:20000m

1:20100m

1:20200m

1:20300m

1:20400m

1:20500m

1:20600m

1:20700m

1:20800m

1:20900m

1:21000m

1:21100m

1:21200m

1:21300m

1:21400m

1:21500m

1:21600m

1:21700m

1:21800m

1:21900m

1:22000m

1:22100m

1:22200m

1:22300m

1:22400m

1:22500m

1:22600m

1:22700m

1:22800m

1:22900m

1:23000m

1:23100m

1:23200m

1:23300m

1:23400m

1:23500m

1:23600m

1:23700m

1:23800m

1:23900m

1:24000m

1:24100m

1:24200m

1:24300m

1:24400m

1:24500m

1:24600m

1:24700m

1:24800m

1:24900m

1:25000m

1:25100m

1:25200m

1:25300m

1:25400m

1:25500m

1:25600m

1:25700m

1:25800m

1:25900m

1:26000m

1:26100m

1:26200m

1:26300m

1:26400m

1:26500m

1:26600m

1:26700m

1:26800m

1:26900m

1:27000m

1:27100m

1:27200m

1:27300m

1:27400m

1:27500m

1:27600m

1:27700m

1:27800m

1:27900m

1:28000m

1:28100m

1:28200m

1:28300m

1:28400m

1:28500m

1:28600m

1:28700m

1:28800m

1:28900m

1:29000m

1:29100m

1:29200m

1:29300m

1:29400m

1:29500m

1:29600m

1:29700m

1:29800m

1:29900m

1:30000m

1:30100m

1:30200m

1:30300m

1:30400m

1:30500m

1:30600m

1:30700m

1:30800m

1:30900m

1:31000m

1:31100m

1:31200m

1:31300m

1:31400m

1:31500m

1:31600m

1:31700m

1:31800m

1:31900m

1:32000m

1:32100m

1:32200m

1:32300m

1:32400m

1:32500m

1:32600m

1:32700m

1:32800m

1:32900m

1:33000m

1:33100m

1:33200m

1:33300m

1:33400m

1:33500m

1:33600m

1:33700m

1:33800m

1:33900m

1:34000m

1:34100m

1:34200m

1:34300m

1:34400m

1:34500m

1:34600m

1:34700m

1:34800m

1:34900m

1:35000m

1:35100m

1:35200m

1:35300m

1:35400m

1:35500m

1:35600m

1:35700m

1:35800m

1:35900m

1:36000m

1:36100m

1:36200m

1:36300m

1:36400m

1:36500m

1:36600m

1:36700m

1:36800m

1:36900m

1:37000m

1:37100m

1:37200m

1:37300m

1:37400m

1:37500m

1:37600m

1:37700m

1:37800m

1:37900m

1:38000m

1:38100m

1:38200m

1:38300m

1:38400m

1:38500m

1:38600m

1:38700m

1:38800m

1:38900m

1:39000m

1:39100m

1:39200m

1:39300m

1:39400m

1:39500m

1:39600m

1:39700m

1:39800m

1:39900m

1:40000m

1:40100m

1:40200m

1:40300m

1:40400m

1:40500m

1:40600m

1:40700m

1:40800m

1:40900m

1:41000m

1:41100m

1:41200m

1:41300m

1:41400m

1:41500m

1:41600m

1:41700m

1:41800m

1:41900m

1:42000m

1:42100m

1:42200m

1:42300m

1:42400m

1:42500m

1:42600m

1:42700m

1:42800m

1:42900m

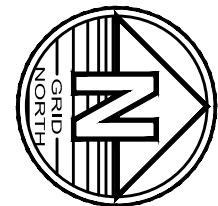
1:43000m

1:43100m

1:43200m

1:43





Cutline - See Sheet 2

LTN 1-20  
Design Speed 40kph

LTN 1-20  
Design Speed 30kph

LTN 1-20  
Design Speed 30kph

CD 195  
Design Speed 30kph

"LCC Works"

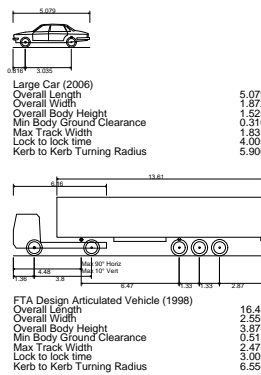
"NH Works"

Cutline - See Sheet 4

© Crown copyright and database rights 2025 OS 0100023343

- Notes**
- Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.
  - This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
  - All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
  - Any discrepancies noted on site are to be reported to the engineer immediately.
  - Visibility sight lines shown are in plan view only. These are to be checked vertically against the design / existing surfaces at detailed design stage.

**Legend**



**ISSUES & REVISIONS**

Rev	Date	Details of issue / revision	Drw	Rev
P01	14.05.25	Issue for information	MS	SH



- ☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

Drawn: M.S.      Reviewed: S.H.

BWB Ref: 220500      Date: 05.06.25      Scale@A1: 1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

**FOR INFORMATION**

Drawing Title

**A453  
Vehicle Swept Paths &  
Visibility  
Sheet 3 of 4**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-HGN-A453-DR-H-0112**

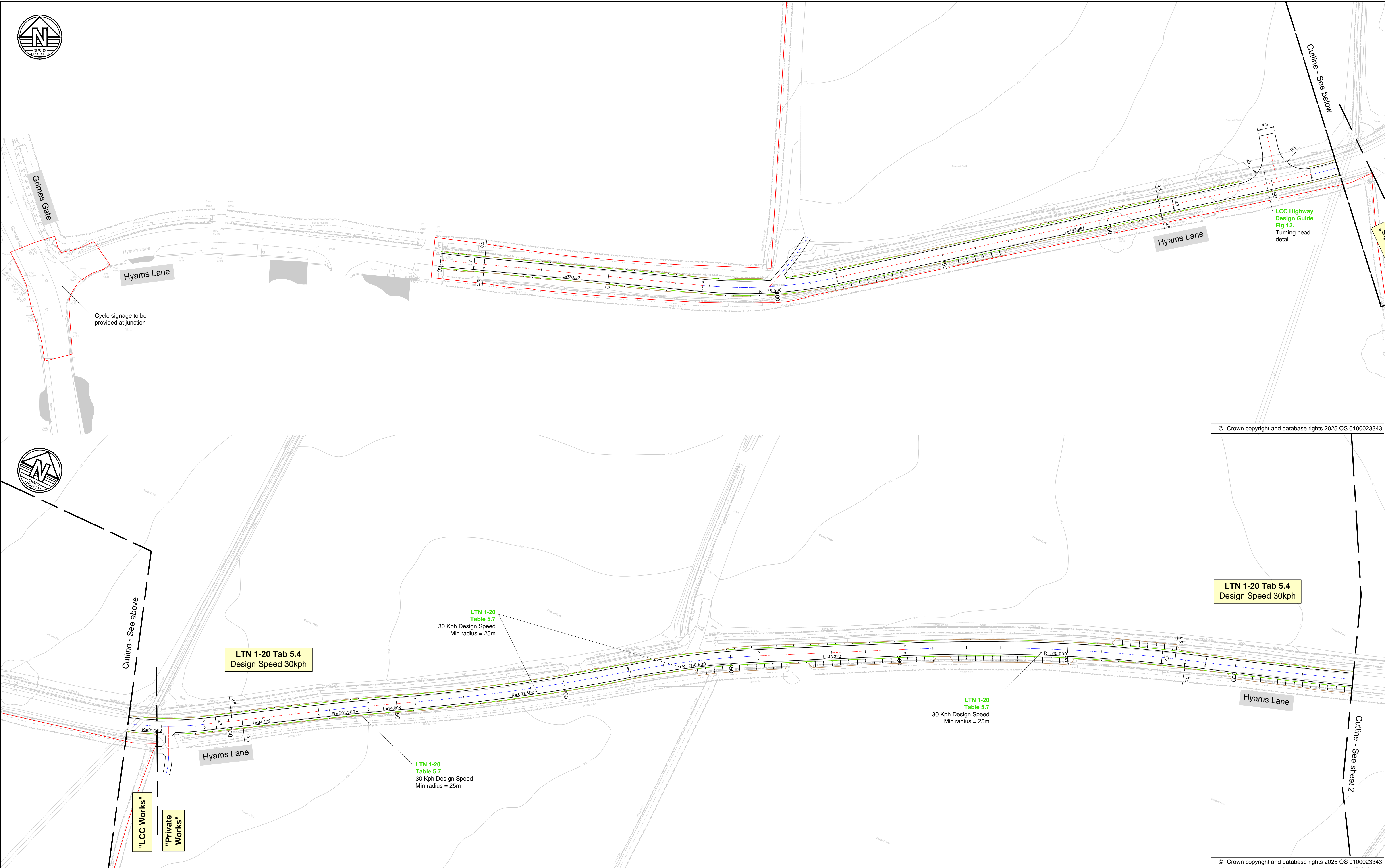
Status

**S2**

Rev

**P01**





© Crown copyright and database rights 2025 OS 0100023343

LTN 1-20 Tab 5.4  
Design Speed 30kph

LTN 1-20 Tab 5.4  
Design Speed 30kph

LTN 1-20  
Table 5.7  
30 Kph Design Speed  
Min radius = 25m

LTN 1-20  
Table 5.7  
30 Kph Design Speed  
Min radius = 25m

LTN 1-20  
Table 5.7  
30 Kph Design Speed  
Min radius = 25m

© Crown copyright and database rights 2025 OS 0100023343

**Notes**

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- Annotation shown coloured green achieves design standards
- Annotation shown coloured amber is a relaxation from design standards
- Annotation shown coloured red is a departure from design standards

Legend					
	Draft Order Limits		Alignment - Straights		Alignment - Curves
	Alignment - Transitions		Carriageway area		Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	14.05.25	Issue for information	MS	SH	



☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	14.05.25
		Scale@A1:	1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

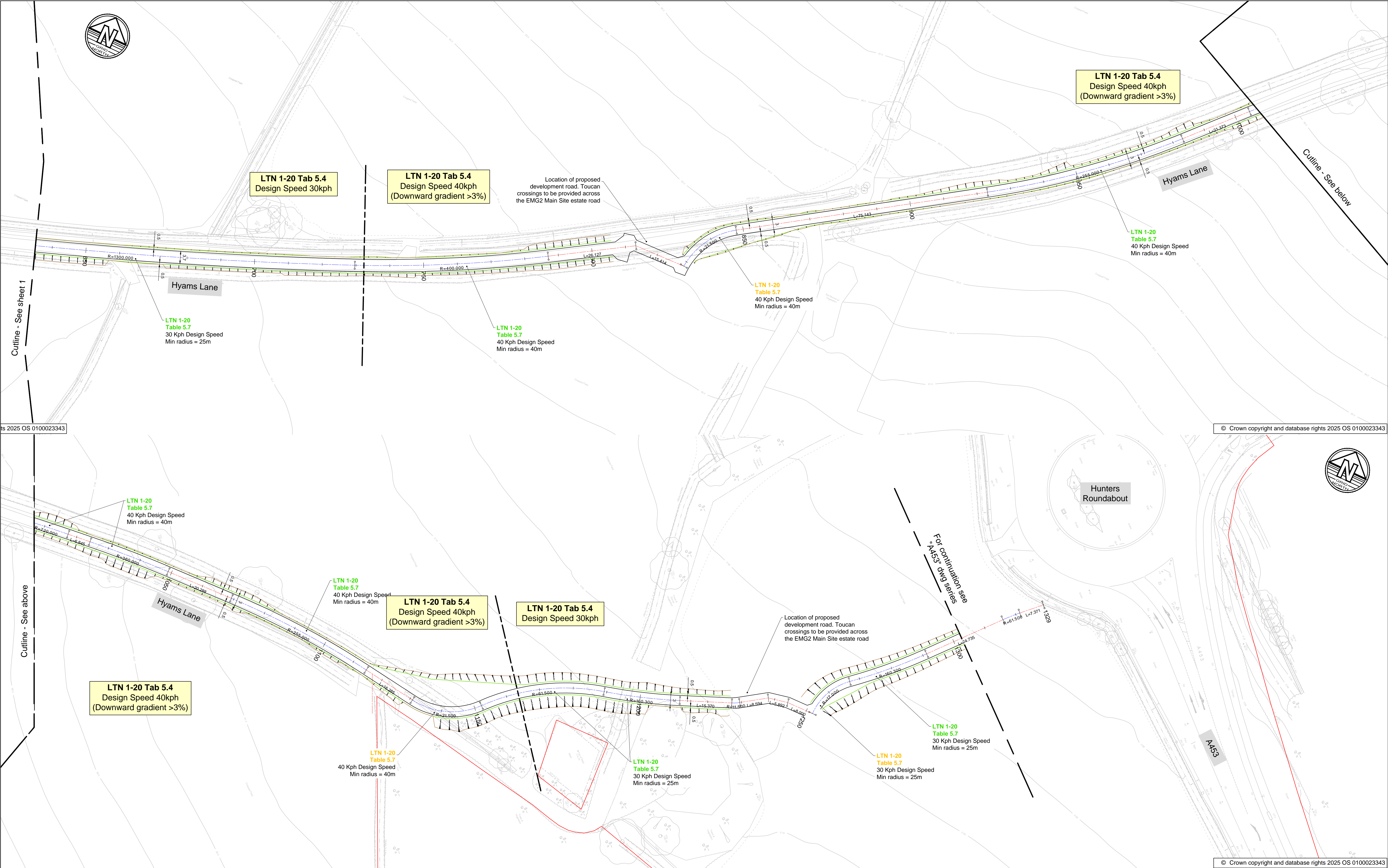
**FOR INFORMATION**

Drawing Title

**Hyam Lane  
Geometry Plans  
Sheet 1 of 2**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-HGN-HYAM-DR-H-0101	S2	P01





**Notes**

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.

2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.

4. Any discrepancies noted on site are to be reported to the engineer immediately.

5. Annotation shown coloured green achieves design standards

6. Annotation shown coloured amber is a relaxation from design standards

7. Annotation shown coloured red is a departure from design standards

Legend	
	Draft Order Limits
	Alignment - Straights
	Alignment - Curves
	Alignment - Transitions
	Carriageway area
	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	14.05.25	Issue for information	MS	SH	



A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client



Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	14.05.25
		Scale@A1:	1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

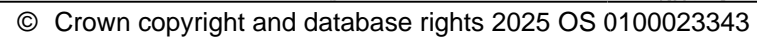
**FOR INFORMATION**

Drawing Title

**Hyam Lane  
Geometry Plans  
Sheet 2 of 2**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-HGN-HYAM-DR-H-0102	S2	P01





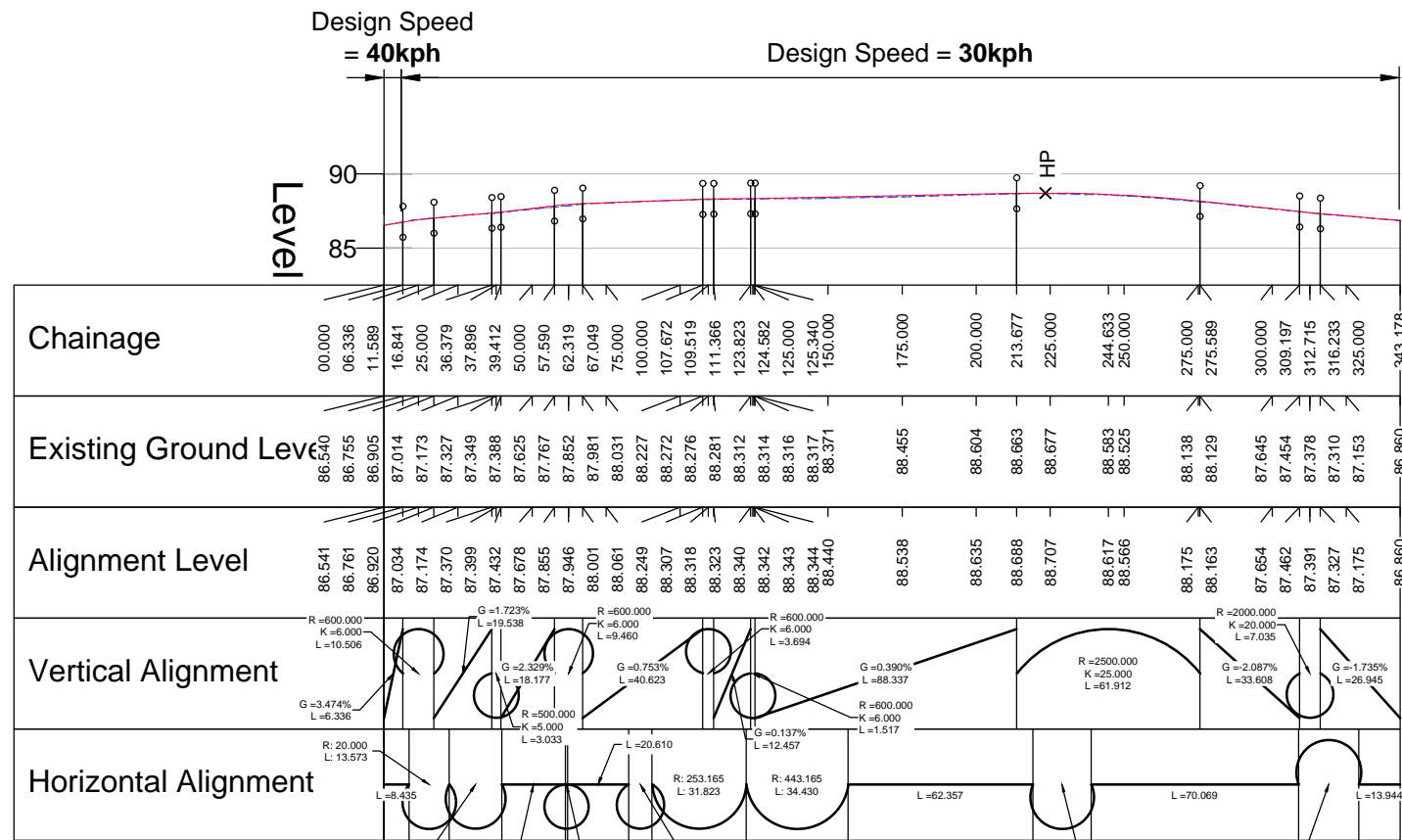
## Drawing Title

- |  |        |     |
|--|--------|-----|
| Project - Originator - Zone - Level - Type - Role - Number | Status | Rev |
| EMG2-BWB-HGN-HYAM-DR-H-0110                                | S2     | P01 |

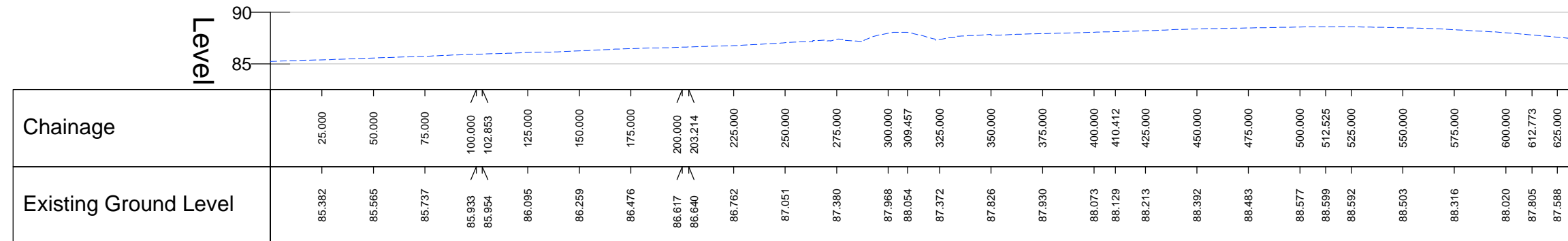




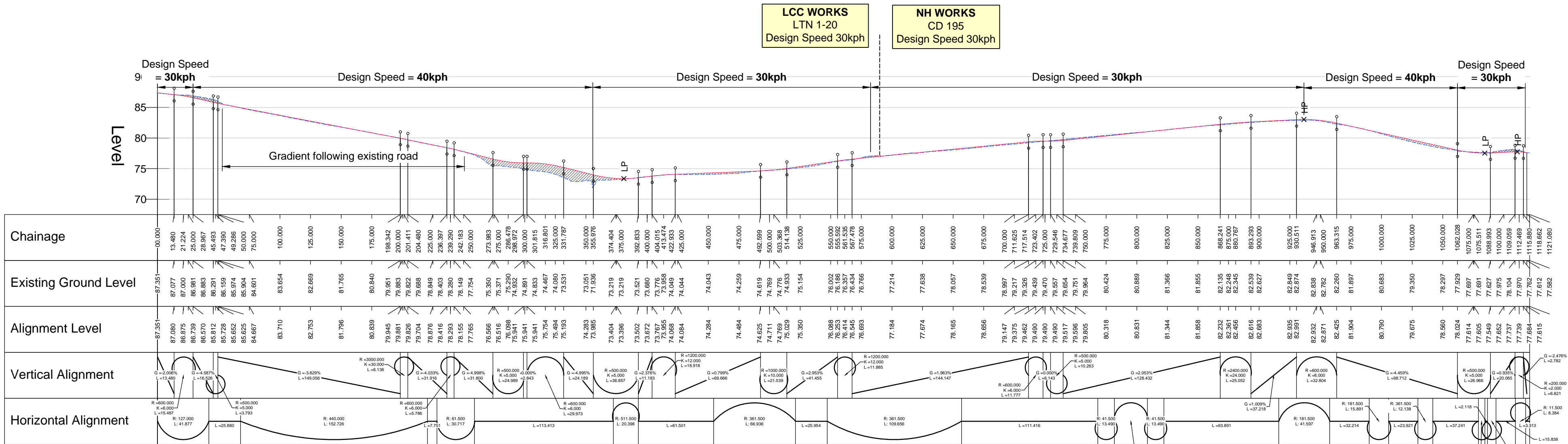




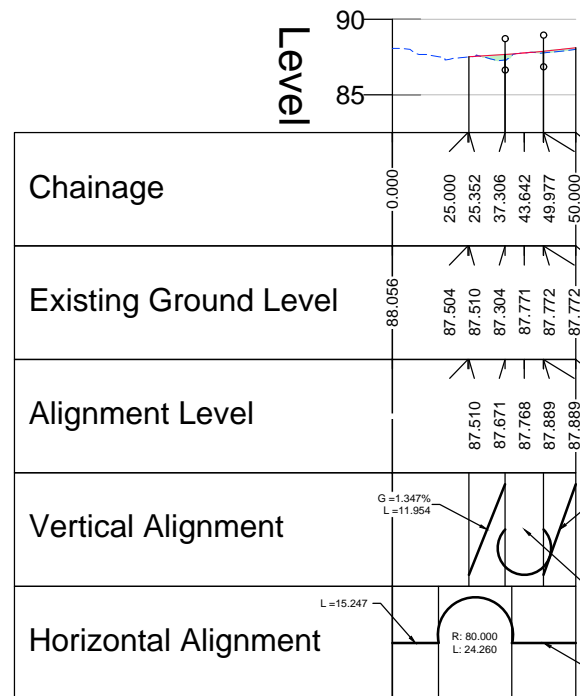
NCR15 (SECTION A) LONGSECTION  
SCALE: H 1:2500,V 1:500. DATUM: 85.000



A453 EXISTING CL LONGSECTION  
SCALE: H 1:2500,V 1:500. DATUM: 85.000



NCR15 (SECTION B) LONGSECTION  
SCALE: H 1:2500,V 1:500. DATUM: 70.000



A453 SITE ACCESS CL LONGSECTION  
SCALE: H 1:2500,V 1:500. DATUM: 85.000

**Notes**

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. Geometry drawings EMG2-BWB-HGN-A453-DR-H-0101 to 0104 are to be used as a location reference for each highway centre line shown on this drawing.
6. The height of proposed bridges, embankments and depths of cuttings are indicative subject to the limits of deviation referred to in the order.
7. All structure positions and sizes shown are indicative only.
8. The proposed works including their specific alignment will be subject to detailed design within the limits of deviation identified on the works plans.

Legend	
	Existing ground level
	Proposed ground level
	Area of cutting
	Area of Fill
	Departure from standards
	High / Low point

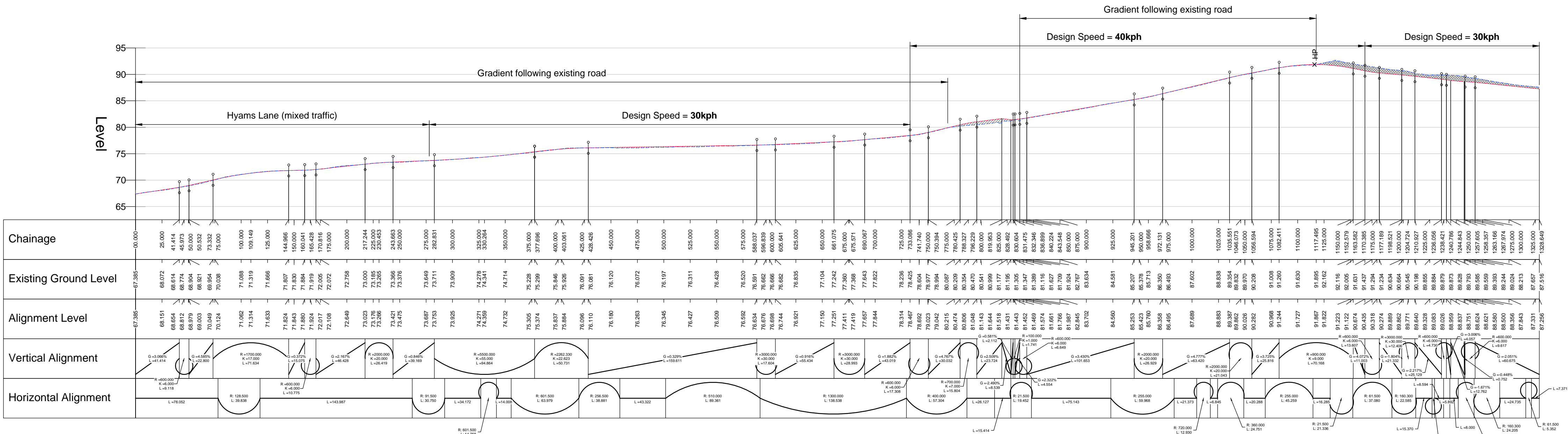
ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	15.05.25	Issue for information	MS	SH	



☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client		Project Title	
<b>SEGRO</b>		<b>East Midlands Gateway 2</b>	
Drawn: M.S	Reviewed: S.H	Drawing Status	
BWB Ref: 220500	Date: 30.01.25	Scale@A1: 1:500	<b>FOR INFORMATION</b>

Drawing Title		Project - Originator - Zone - Level - Type - Role - Number		Status	Rev
<b>A453 Geometry Profiles</b>		<b>EMG2-BWB-HGT-A453-DR-H-0651</b>		<b>S2</b>	<b>P01</b>



HYAM LANE CL LONGSECTION  
SCALE: H 1:2500,V 1:500. DATUM: 65.000

Notes

- Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- Geometry drawings EMG2-BWB-HGN-HYAM-DR-H-0101 to 0102 are to be used as a location reference for each highway centre line shown on this drawing.
- The height of proposed bridges, embankments and depths of cuttings are indicative subject to the limits of deviation referred to in the order.
- All structure positions and sizes shown are indicative only.
- The proposed works including their specific alignment will be subject to detailed design within the limits of deviation identified on the works plans.

Legend

- Existing ground level
- Proposed ground level
- Area of cutting
- Area of Fill
- Departure from standards
- High / Low point

ISSUES & REVISIONS

Rev	Date	Details of issue / revision	Drw	Rev
P01	15.05.25	Issue for information	MS	SH



- ☐ Birmingham | 0121 233 3322
  - ☐ Leeds | 0113 233 8000
  - ☐ London | 020 7234 9122
  - ☒ Manchester | 0161 233 4260
  - ☐ Nottingham | 0115 924 1100
- www.bwbconsulting.com

Client

SEGRO

Drawn:

M.S

Reviewed:

S.H

BWB Ref:

220500

Date:

15.05.25

Scale@A1:

1:500

Project Title

East Midlands Gateway 2

Drawing Status

FOR INFORMATION

Drawing Title

Hyams Lane  
Geometry Profiles

Project - Originator - Zone - Level - Type - Role - Number

EMG2-BWB-HGT-HYAM-DR-H-0651

Status

S2

Rev

P01



**APPENDIX 27: Geometric Design Strategy Record for the Strategic Road Network  
(document reference EMG2-BWB-GEN-XX-RP-CH-0013\_S3-P01)**

---

## **INFRASTRUCTURE**

SEGRO

East Midlands Gateway 2

Leicestershire

Geometric Design Strategy Record  
(National Highways Network)

**INFRASTRUCTURE**

SEGRO

East Midlands Gateway 2

Leicestershire

Geometric Design Strategy Record

(National Highways Network)

Nottingham

5<sup>th</sup> Floor, Waterfront House, Station Street










Nottingham, NG2 3DQ

T: 0115 924 1100

June 2025

## DOCUMENT ISSUE RECORD

Document Number:	EMG2-BWB-GEN-XX-RP-CH-0013
BWB Reference:	220500

Revision	Date of Issue	Status	Author:	Checked:	Approved:
1	04.03.2025	For comment	Simon Hilditch MEng (Hons) CEng MICE MCIHT	Darren Ball IEng MICE	Simon Hilditch MEng (Hons) CEng MICE MCIHT
					
2	10.03.2025	For comment	Simon Hilditch MEng (Hons) CEng MICE MCIHT	Darren Ball IEng MICE	Simon Hilditch MEng (Hons) CEng MICE MCIHT
					
3	27.06.2025	For comment	Simon Hilditch MEng (Hons) CEng MICE MCIHT	Darren Ball IEng MICE	Simon Hilditch MEng (Hons) CEng MICE MCIHT
					

### Notice

This document has been prepared for the sole use of the Client in accordance with the terms of the appointment under which it was produced. BWB Consulting Limited accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of BWB.

## CONTENTS

1.	INTRODUCTION.....	1
	Instruction .....	1
	Acronyms and Abbreviations .....	2
	Objectives .....	2
	Traffic data .....	3
	List of Drawings.....	3
2.	SCHEME OVERVIEW AND DESIGN STANDARDS .....	5
	Scheme overview .....	5
	Overview of Standards .....	5
	Safety Risk Assessment .....	6
	Highway Authority, Road Class, Design Speed and Speed Limit .....	6
3.	M1 Jct 24 Northbound Diverge.....	7
	Layout .....	7
	Design Speed and Geometry .....	8
	Stopping Sight Distance / Visibility .....	9
	Cross Section (Connector Road – Slip Road).....	9
4.	M1 Jct 24A Northbound Diverge TO A50 .....	11
	Diverge Layout.....	11
	Weaving and spacing of successive diverges .....	14
	Visibility (SSD) into the J24A diverge .....	17
	M1 mainline cross-section.....	17
	Provision of directional signs and signalling .....	18
	Visibility of the J24 diverge .....	20
	Gradient of the M1 on the approach to the two diverges.....	20
	Length of the downstream interchange link to the A50.....	21
	Summary and preferred option .....	22
	Further measures to maximise weaving length .....	23
	Departures From Standard .....	25
5.	M1 Northbound to A50 Westbound Interchange Link.....	26
	Layout .....	26
	Traffic flows .....	26
	Design Speed and Geometry .....	26
	Stopping Sight Distance / Visibility .....	28
	Cross-section (Connector Road – Interchange Link) .....	29
	Summary and preferred option .....	30

Departures From Standard .....	31
6. A50 WESTBOUND MERGE .....	32
Layout .....	32
Design Speed and Geometry .....	34
Stopping Sight Distance / Visibility .....	35
Speed limit .....	36
Departures From Standard .....	36
7. M1 Southbound / A50 Eastbound to M1 Jct 24 Interchange Links .....	37
Layout .....	37
Traffic Flows .....	37
Design Speed and Geometry .....	38
Stopping Sight Distance / Visibility .....	39
Weaving.....	39
Cross Section .....	40
8. A453 Shared Use Cycle/Footway .....	41
Layout .....	41
Traffic Flows .....	41
Design Speed and Geometry .....	41
Visibility .....	42
Departures From Standard .....	42
9. A453 / A6 / EMG1 ACCESS JUNCTION .....	43
Layout .....	43
Traffic Flows .....	43
Design Speed and Geometry .....	43
Visibility .....	44
10. Other works on the SRN.....	45
M1 J24 signalised roundabout traffic signing and road marking alterations.....	45
M1 J24 signalised roundabout west side .....	45
Finger Farm directional signage .....	45
M1 northbound directional signage .....	45
11. PRINCIPLES OF GOOD ROAD DESIGN .....	46

## FIGURES

Figure 1.1 Location plan

Figure 3.1 M1 J24 northbound diverge layout requirement using traffic data

Figure 4.1 M1 J24A northbound diverge layout requirement using traffic data

Figure 5.1 High load routes and location of proposed bridge



Figure 6.1 A50 westbound merge layout requirement using traffic data

## **APPENDICES**

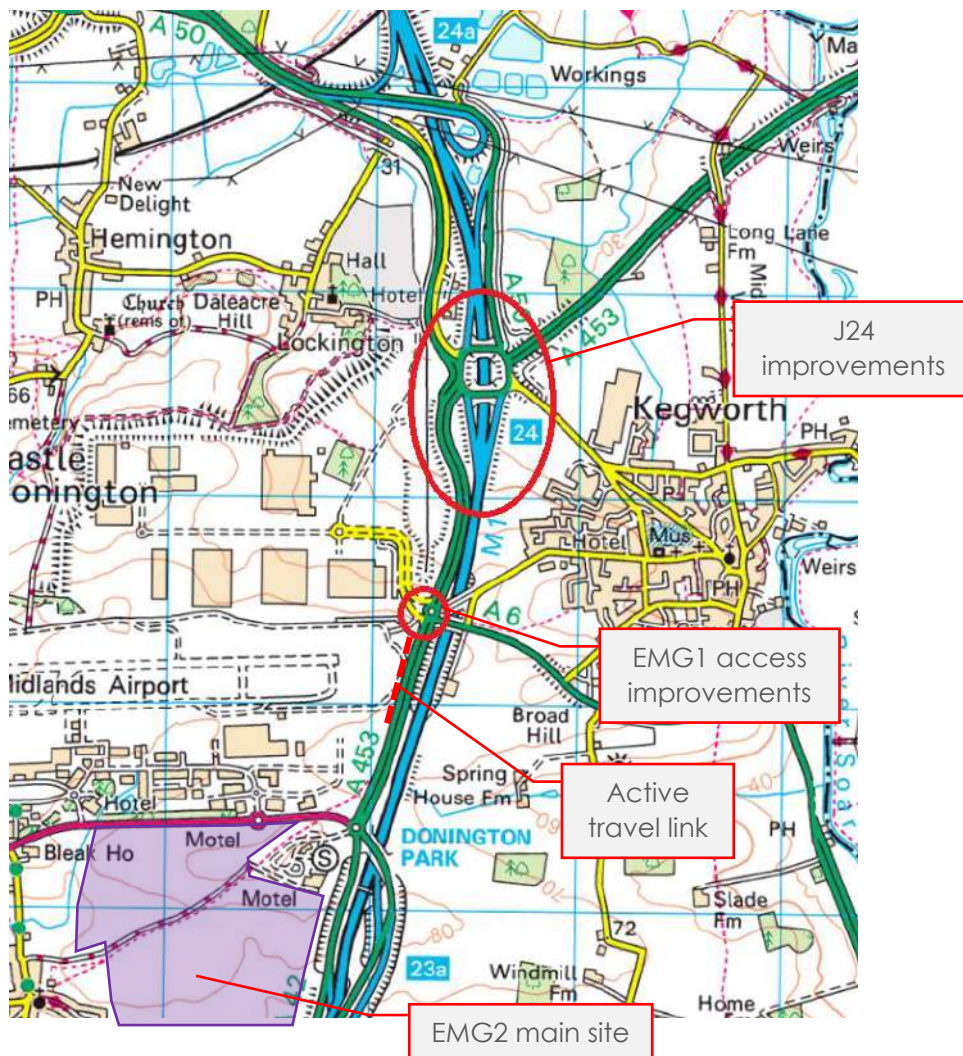
APPENDIX 1: Safety Risk Assessment for M1 NB diverge and weaving length

APPENDIX 2: List of Road Layout departures from standard for proposed scheme

## 1. INTRODUCTION

### Instruction

- 1.1 The EMG2 development, which although located south of East Midlands Airport (EMA), proposes substantial improvements to the strategic road network (SRN) at M1 junction 24 along with works to the A453 south of J24.
- 1.2 BWB Consulting (BWB) has been instructed by SEGRO (the Client) to develop the highway design for the works on the SRN which includes the preparation of this Design Strategy Record (DSR).
- 1.3 **Figure 1.1** below shows the overall location of the works in the context of EMG2 and the existing road network.



**Figure 1.1** Location plan

- 1.4 This report contains consideration of several options relating to specific elements of the scheme (namely the M1 northbound diverge and A453 bridge). These have been discussed with National Highways and feedback received. Formal submissions for departures from standard will be made separately to this report

## Acronyms and Abbreviations

ALR	All-lane running
ALS	Above-lane signals
DMRB	Design Manual for Roads and Bridges
DfT	Department for Transport
DSR	Design Strategy Record
EMA	East Midlands Airport
EMG1	East Midland Gateway 1
EMG2	East Midland Gateway 2
LCC	Leicestershire County Council
NH	National Highways
SLTL	Segregated left-turn lane
SMP	Smart Motorway Project
SRN	Strategic Road Network
VMSL	Variable mandatory speed limits
VMS	Variable message sign
VRS	Vehicle Restraint System

## Objectives

- 1.5 The objective of this DSR report, is to record the key decisions made during the layout design.
- 1.6 The report will record the relaxations and departures from standards contained within the highway design. A detailed narrative for the justification, including a safety risk assessment, is to be submitted separately for approval for each departure.
- 1.7 The DSR is also used to record how the scheme complies with the principles of good road design set out in GG 103.
- 1.8 The following reports and documents are to be provided separately to this DSR:
- Transport assessment and modelling;
  - Geotechnical reporting to CD 622;
  - Directional signage strategy;
  - Lighting strategy;
  - Structures options reports and AIPs to CG 300;
  - Maintenance and repair statement to GD 304;
  - WCHAR assessment and review to GG 142; and
  - Stage 1 road safety audit to GG 119.

## Traffic data

- 1.9 Traffic data has been obtained from the LCC 2019 pan regional transport model (PRTM 2019). The modelling is detailed within the EMG2 project Transport Assessment.
- 1.10 For the purposes of the highway design two sets of data have been provided as follows:
- Model '2A' for 2038 which includes draft local plan allocations but does not include associated highway mitigation in all cases; and
  - Model '2B' for 2038 which excludes draft local plan allocations.
- 1.11 Both of the above are reviewed in this report.

## List of Drawings

- 1.12 The table below sets out the scheme design and option drawings that are to be read in conjunction with this report. They are provided at the end of this report.

Drawing no.	Title	Report section
EMG2-BWB-GEN-XX-SK-CH-SK037	Overview of works on the strategic road network	All
EMG2-BWB-GEN-XX-SK-CH-SK032	M1 Northbound diverge options Sheet 1	3 & 4
EMG2-BWB-GEN-XX-SK-CH-SK033	M1 Northbound diverge options Sheet 2	3 & 4
EMG2-BWB-GEN-XX-SK-CH-SK034	M1 J24 and J24A NB Diverge Layout Option A	3 & 4
EMG2-BWB-GEN-XX-SK-CH-SK035	M1 J24 and J24A NB Diverge Layout Option C	3 & 4
EMG2-BWB-GEN-XX-SK-CH-SK036	M1 J24 and J24A NB Diverge Layout Option D	3 & 4
EMG2-BWB-GEN-XX-SK-CH-SK030	M1 Northbound to A50 Westbound Interchange Link Option 1	5
EMG2-BWB-GEN-XX-SK-CH-SK018	M1 Northbound to A50 Westbound Interchange Link Option 2A K17	5
EMG2-BWB-GEN-XX-SK-CH-SK031	M1 Northbound to A50 Westbound Interchange Link Option 2B K30	5
EMG2-BWB-HGN-A50WB-DR-H-0101	A50 Westbound Geometry Plans Sheet 1 of 2	6
EMG2-BWB-HGN-A50WB-DR-H-0102	A50 Westbound Geometry Plans Sheet 2 of 2	6
EMG2-BWB-GEN-XX-SK-CH-SK046	A50 westbound link schematic	6
EMG2-BWB-HGN-A50EB-DR-H-0101	A50 Eastbound Geometry Plans Sheet 1 of 2	7
EMG2-BWB-HGN-A50EB-DR-H-0102	A50 Eastbound Geometry Plans Sheet 2 of 2	7
EMG2-BWB-HGN-A453-DR-H-0103	A453 Geometry Plans Sheet 3 of 4	8
EMG2-BWB-HGN-A453-DR-H-0104	A453 Geometry Plans Sheet 4 of 4	8
EMG2-BWB-HGN-EMG1-DR-H-0101	Existing EMG1 Junction Geometry Plan	9
EMG2-BWB-GEN-XX-SK-CH-SK038	Existing EMG1 Junction Vehicle Tracking	9

- 1.13 Based on the findings of this report, the highway design for the highway works on the SRN is shown on the following formal DCO Documents:

Drawing no.	Title	DCO document no.
EMG2-BWB-HGN-XX-DR-H-0100	Highways Plans General Arrangement Key Plan	DCO 2.8
EMG2-BWB-HGN-XX-DR-H-0101	Highways Plans General Arrangement Sheet 1	DCO 2.8A
EMG2-BWB-HGN-XX-DR-H-0102	Highways Plans General Arrangement Sheet 2	DCO 2.8B
EMG2-BWB-HGN-XX-DR-H-0103	Highways Plans General Arrangement Sheet 3	DCO 2.8C
EMG2-BWB-HGN-XX-DR-H-0104	Highways Plans General Arrangement Sheet 4	DCO 2.8D
EMG2-BWB-HGN-XX-DR-H-0132	Highway Plans Cross Sections Sheet 2 of 3	DCO 2.9B
EMG2-BWB-HGN-XX-DR-H-0133	Highway Plans Cross Sections Sheet 3 of 3	DCO 2.9C
EMG2-BWB-HGT-M1NBS-DR-H-0651	EMG2 M1 Northbound to A50 Westbound Interchange Link Geometry Profiles	DCO 2.10A
EMG2-BWB-HGT-A50EB-DR-H-0651	EMG2 A50 Eastbound Geometry Profiles	DCO 2.10B
EMG2-BWB-HGT-A453-DR-H-0651	EMG2 A453 Geometry Profiles-S2-P02	DCO 2.10C
EMG2-CH-SBR-BR-DR-CB-00024	A453 Bridge Plan	DCO 2.11

## 2. SCHEME OVERVIEW AND DESIGN STANDARDS

### Scheme overview

2.1 The proposed works on the SRN are listed below, collectively referred to within this report as the SRN works.

- J24 Improvements comprising:
  - M1 northbound to A50 westbound link – providing a new free-flow link road from the M1 northbound at J24 to provide a direct link to the A50 westbound, which will cross over the A453, and will include the A50 westbound merge alterations;
  - M1 southbound and A50 eastbound link to J24 widening – providing widening of the A50 eastbound link at J24 and other related works and traffic management measures in this location;
  - Works to the west side of the M1 Junction 24 roundabout and A453 northbound approach;
  - Works to the east side of the M1 Junction 24 roundabout and A453 southbound approach; and
  - M1 northbound alterations – providing the new M1 northbound exit and associated gantry/signage improvements on the M1.
- EMG1 Access Improvements and pedestrian crossing comprising:
  - widening at the EMG1 signalised junction to increase capacity; and
  - A controlled pedestrian crossing and footway link between the proposed EMG1 Wilders Way drop-off lay-by and EMG1 Bus Interchange.
- Active Travel works (so far as they fall within the SRN) comprising an Active Travel Link – providing a dedicated shared unsegregated cycle/footway adjacent to the A453 between EMG1 and the EMG2 Main Site; and
- Directional signage works at the Finger Farm roundabout and on the M1 Northbound approach to J23A (this is not covered by this report but will be provided in the directional signage strategy).

2.2 **Drawing EMG2-BWB-GEN-XX-SK-CH-SK037** shows the locations of the above works and **Figure 1.1** above shows the overall location of the SRN works in the context of EMG2 and the existing road network.

### Overview of Standards

2.3 The scheme spans across two highway authority boundaries, NH and LCC. This report provides design commentary on the NH areas of responsibility only i.e. the SRN works. The LCC design commentary is covered by a separate report.

2.4 The SRN works will be designed in accordance with the following DMRB standards:

Doc. Ref.	Document Title	Version / Revision
CD 109	Highway link design	Revision 1
CD 116	Geometric design of roundabouts	Version 2.1.0
CD 122	Geometric design of grade separated junctions	Version 1.1.1
CD 123	Geometric design of at-grade priority and signal-controlled junctions	Version 2.1.0
CD 127	Cross-sections and headrooms	Version 1.0.1
CD 143	Designing for walking, cycling and horse-riding	Version 2.0.1
CD 146	Positioning of signalling and advance direction signs	Version 2.0.0
CD 195	Designing for cycle traffic	Version 1.0.1

### Safety Risk Assessment

- 2.5 A safety risk assessment to GG 104 has been completed to inform the decision making process for the M1 Northbound diverge and weaving section and can be found at **Appendix 1**.
- 2.6 Other safety risk assessments to GG 104 will be provided in support of formal applications for departures from standard which will be submitted in due course.

### Highway Authority, Road Class, Design Speed and Speed Limit

- 2.7 The road classes and design speeds for each section of the scheme are listed below. Design speeds have been determined in accordance with CD 109, table 2.5 and CD 122, table 5.4.

Section of scheme	Road class	Design speed (kph)	Existing or proposed signed speed limit (mph)
M1 northbound mainline J23A-J24	Motorway	120	Existing national with VMSL
M1 J24 northbound diverge slip road	Motorway	70	Existing national with VMSL
M1 northbound to A50 westbound interchange link	Motorway	85	Proposed national with VMSL followed by mandatory 50
M1 J24 to A50 westbound interchange link	All-purpose	85	50 followed by national (change in speed limit to be relocated to end of proposed merge)
A50 eastbound to M1 J24 interchange link	All-purpose	85	Existing 50
A50 eastbound & M1 southbound to M1 J24 interchange link	All-purpose	85	Existing 50



### 3. M1 JCT 24 NORTHBOUND DIVERGE

#### Layout

3.1 The proposal is to amend the existing M1 J24 diverge by introducing a separate interchange link between the M1 northbound and A50 westbound, and reuse the existing slip road connector between the M1 northbound and J24 roundabout. The spacing between the two diverges is considered in the review of the proposed new diverge to the A50 found at section 4 below.

3.2 The following table sets out the 2038 design year traffic data for the diverge using the 2A model data:

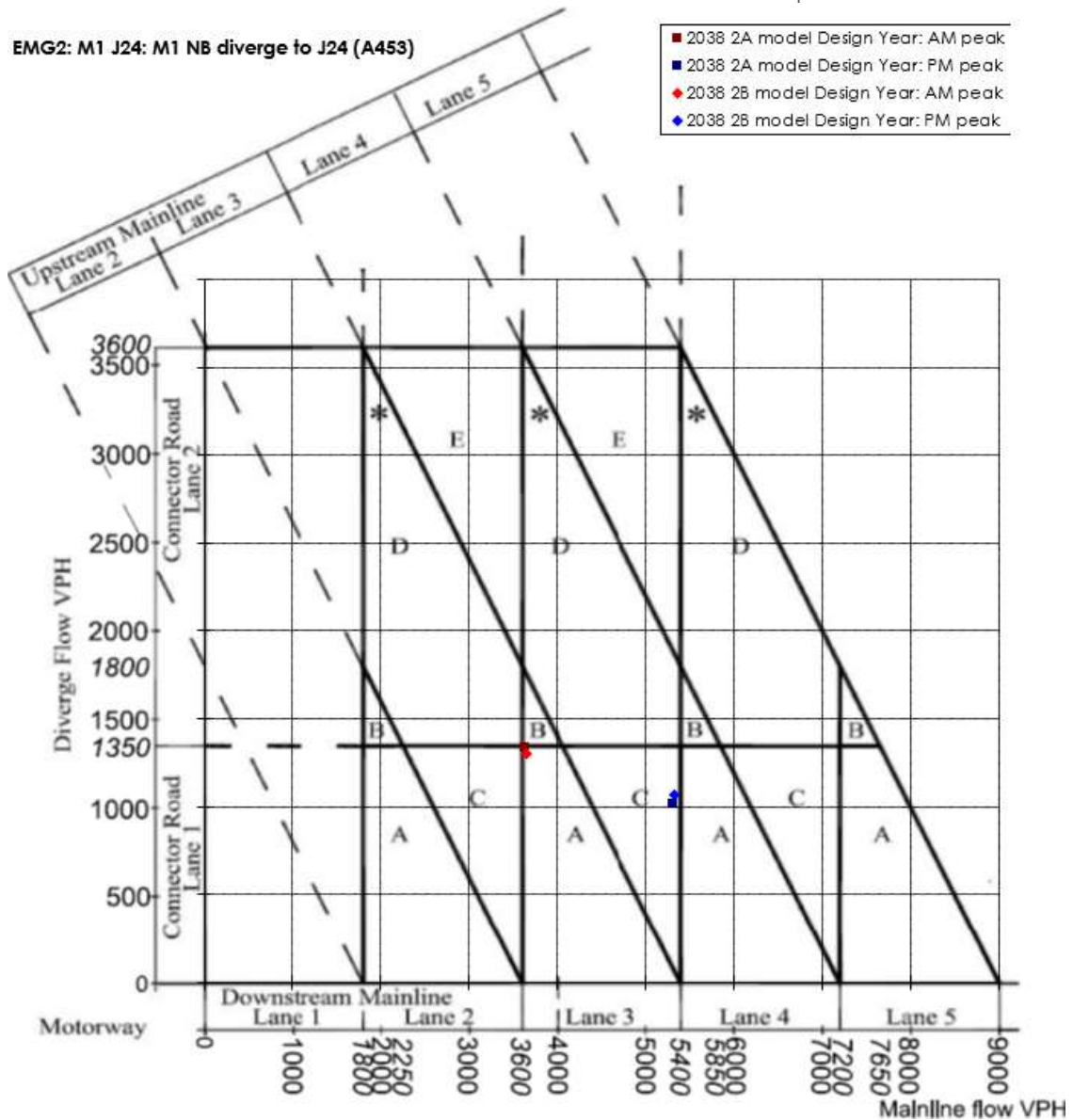
Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
M1 upstream of J24 diverge	4972	712	6326	802
M1 downstream of J24 diverge	3636	525	5308	650
J24 diverge slip road	1336	187	1018	152

3.3 The following table sets out the 2038 design year traffic data for the diverge using the 2B model data:

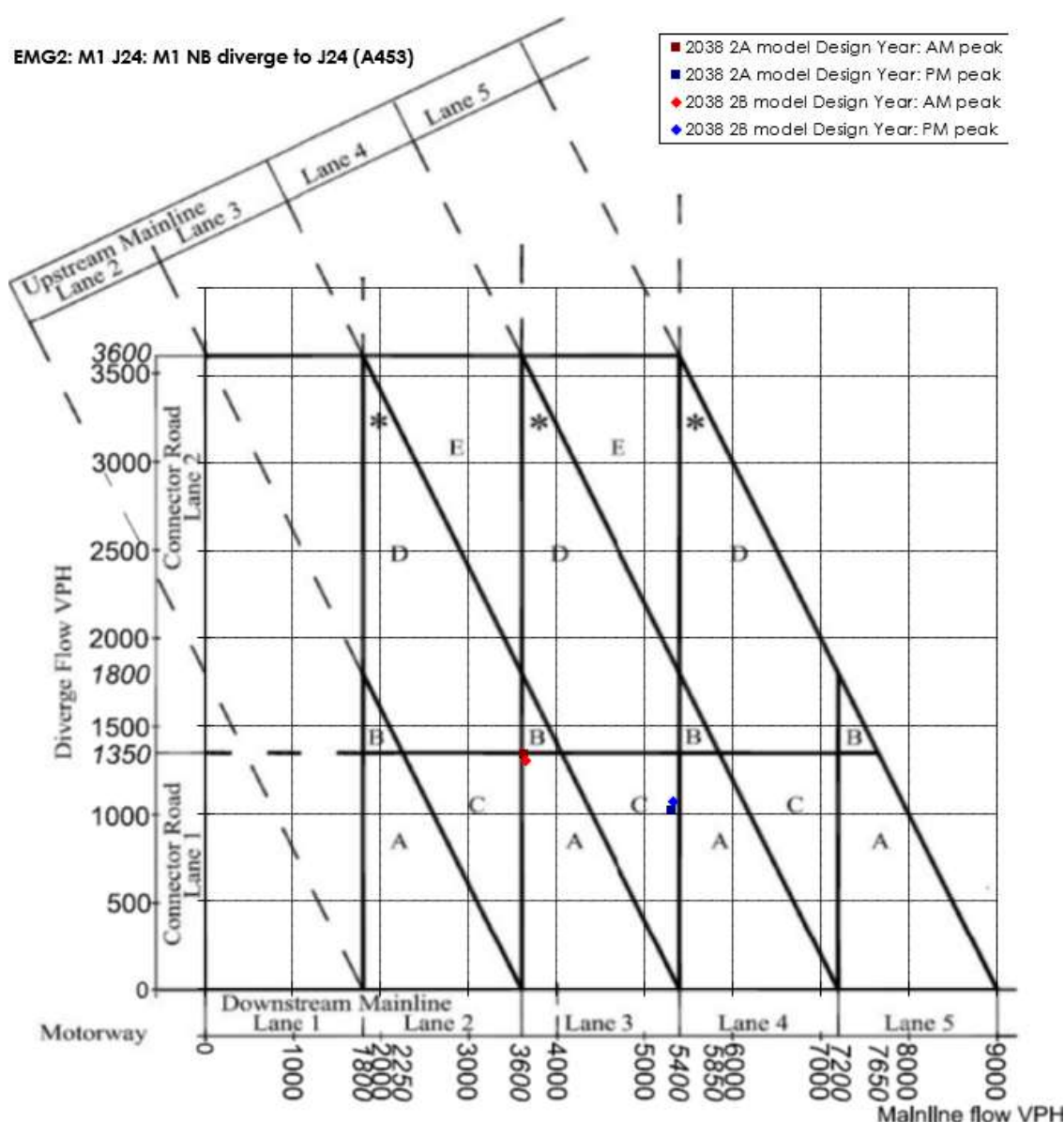
Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
M1 upstream of J24 diverge	4956	546	6396	959
M1 downstream of J24 diverge	3658	351	5327	799
J24 diverge slip road	1298	195	1069	160

3.4 Based on CD 122, para 3.9, an adjustment factor for the presence of HGVs is not required on downhill gradients or diverge flows.

3.5 Using the traffic data above, and in accordance with CD 122 para 3.26 and Figure 3.26b the data has been plotted on



3.6 Figure 3.1 below. Based on this it is proposed to amend the diverge from the existing Layout B, option 1 'ghost island diverge' to a Layout A option 1, 'taper diverge' as shown in CD122 Figure 3.30a. Whilst in the PM peak a layout C diverge is suggested, if the main line flows increase then a layout A diverge would be required and therefore the layout A diverge has sufficient capacity.



**Figure 3.1** M1 J24 northbound diverge layout requirement using traffic data

### Design Speed and Geometry

- 3.7 In accordance with CD 122, para 5.4 and Table 5.4, the minimum design speed for a slip road connector shall be 70kph where the mainline design speed is 120kph.
- 3.8 As the mainline alignment is on a left-handed horizontal curve and is not at an up/downhill gradient of 3% or steeper for longer than 1.5km on approach, the use of a Layout A option 1 is not excluded in accordance with CD 122, para 3.28 (further analysis of this is found within section 4).
- 3.9 The geometry of the J24 diverge is shown on **Document DCO 2.8C**.
- 3.10 The required geometry stated is in accordance with CD 122, para 3.32 and Table 3.32 and is assessed as follows.

- Length of exit taper is 185m and in accordance with the required standard for a two-lane slip road;
- Nose ratio is 1:15 and nose length is 70m. The standard length is 80m. This is an **existing relaxation** from standards based on CD 122, para E/3.7 as 70m is compliant for a 'rural all-purpose 120kph' road class; and
- The maximum width of the hatch marking forming the nose is 4.6m and therefore within the 8m maximum width stated within the Traffic Signs Regulations and General Directions.

3.11 A radius of 1000m is proposed at the edge of the start of the diverge in accordance with CD 122, para 3.32.1.

3.12 Beyond the back of the nose the existing slip road is retained and is therefore not assessed further.

### **Stopping Sight Distance / Visibility**

3.13 As stated within CD 122, para 3.34 mainline SSD shall be provided along the diverge and into the connector road up to the back of the nose.

3.14 CD 109, Table 2.10, states that the desirable SSD for a 120kph design speed is 295m.

3.15 The existing confirmatory gantry (reference GA-01) and the VRS in front restricts visibility into the existing diverge to around 180m minimum SSD. With the revised diverge layout (i.e. amending the diverge to a taper) this will slightly improve the visibility into the diverge but it won't be fully compliant. However, this is an **existing relaxation** from standards based on CD 122, para E/3.9.

### **Cross Section (Connector Road – Slip Road)**

3.16 In accordance with CD 127, para 2.1, Figure 2.1.1N1b provides the required cross-sectional dimensions for a rural motorway connector road.

3.17 Based on predicted vehicle per hour traffic flows for the slip road highlighted above, and in accordance with CD 122, para 5.17 and Table 5.17b, the minimum connector road type is DG1A. However, due to the downstream split of lanes (into four lanes at the traffic signal stop line) the existing cross-section of the slip road is DG2A and it is not proposed to amend this. The two-lanes are marked to the tip of the nose in accordance with CD 127, para 2.19.

### Lane Widths

3.18 The cross section of the proposed length of revised slip road at the nose remains as existing with two 3.65m wide traffic lanes.

3.19 CD 127, para 2.1 and Figure 2.1.1N1b states for a rural connector road, as well as having a horizontal curvature of greater than 400 metres radius (CD 127, para 2.2 and 5.18), the lanes widths shall be 3.65m wide and accords with the existing connector road lane widths.

---

Hard Shoulders / Hard Strips / Verges

- 3.20 Connector road type DG2A states that a 1.0m hard strip and 2.5m verge shall be provided on the nearside, and a 1.0m hard strip and 2.0m verge on the offside. These widths are provided at the start of the existing slip road at the back of the nose where the proposed works will tie-in to the existing layout.
- 3.21 From the upstream extent of the nosing for the proposed M1 northbound to A50 westbound interchange link diverge, a 3.3m hard shoulder is proposed on the M1 mainline. It should be noted this improves the existing sub-standard hard shoulder on the M1 nearside.
- 3.22 The mainline hard shoulder tapers into the nearside hard strip on the slip road in accordance with CD 127, para 2.30.
- 3.23 A 1.5m minimum verge width is provided but will be widened as necessary to accommodate relevant assets e.g. motorway communications ducting, lighting, signage, VRS and the like.

## 4. M1 JCT 24A NORTHBOUND DIVERGE TO A50

### Diverge Layout

- 4.1 As noted within section 3 of this report, the scheme proposes a new exit from the M1 to the A50 which would be a direct free-flow link. The new exit would be provided upstream of the existing J24 diverge and downstream of the A42 merge at J23A. This is a weaving section and as such detailed consideration has been given to weaving and the spacing of the two diverges.
- 4.2 The existing J24 diverge is a 2-lane layout B option 1 ghost island diverge, but with the first exit having the form of an auxiliary lane rather than a taper. The diverge layout incorporates the permitted relaxation in the road class to "rural all-purpose 120kph" in accordance with CD 122, para E/3.7, but has a substandard auxiliary lane length.
- 4.3 At present the first exit is signed for the A50 westbound and the second for the A453 northbound, but both exits come back together on the exit slip road where there is in effect a short weaving section before the stop line, but if drivers take the appropriately signed exit from the M1 then there would be no weaving on the slip road.
- 4.4 Various options have been developed for the layout of the two successive diverges and these are shown diagrammatically, alongside the existing layout, on **drawings EMG2-BWB-GEN-XX-SK-CH-SK032 and 033**.

### Single diverge option (Option B)

- 4.5 Based on CD 122, para 3.36.2, the starting point is to consider a single diverge from the mainline into a connector road, followed by a split into the different destinations. This is shown as Option B on drawing SK032.
- 4.6 Option B would provide a layout B option 1 ghost island diverge and then provide a fork diverge on the exit slip road to separate the A50 westbound traffic and traffic wishing to use the J24 roundabout. However, to create an adequate length for the fork diverge and appropriate geometry leading to the two separate destinations, the diverge would need to move farther south, closer to J23A creating several significant issues with this layout:
- The existing weaving length would be reduced by around 370m (which would be a departure from standard);
  - It would create a new weaving length on the link between the end of the diverge ghost island and the start of the fork, which would be very short at approximately 189m;
  - There is insufficient space under the Ashby Road overbridge to provide the additional carriageway width needed for the taper (note that even if the diverge layout was amended to the rural all-purpose 120kph road class this would still be the case); and
  - Visibility into the diverge would be compromised due to the VRS for the existing A6 Kegworth Bypass and Ashby Road overbridges and would require a departure from standard.

- 4.7 For the above reasons Option B is not considered feasible and is not considered further.

#### Two diverges (Options A, C and D)

- 4.8 For these options the proposed scheme will in effect utilise the existing first exit and provide a direct free-flow link from the M1 northbound to the A50 westbound, with the second exit for A453 northbound (and any local) traffic using the J24 roundabout, and could also be used for A50 traffic if required. Hence the two exit points would operate in much the same way as currently, albeit with formal separate diverges.
- 4.9 For the purposes of this report it is assumed that, in line with the other free-flow links to and from the A50, this exit would be signed as M1 J24A.
- 4.10 The following table sets out the 2038 design year traffic data for the diverge using the 2A model data:

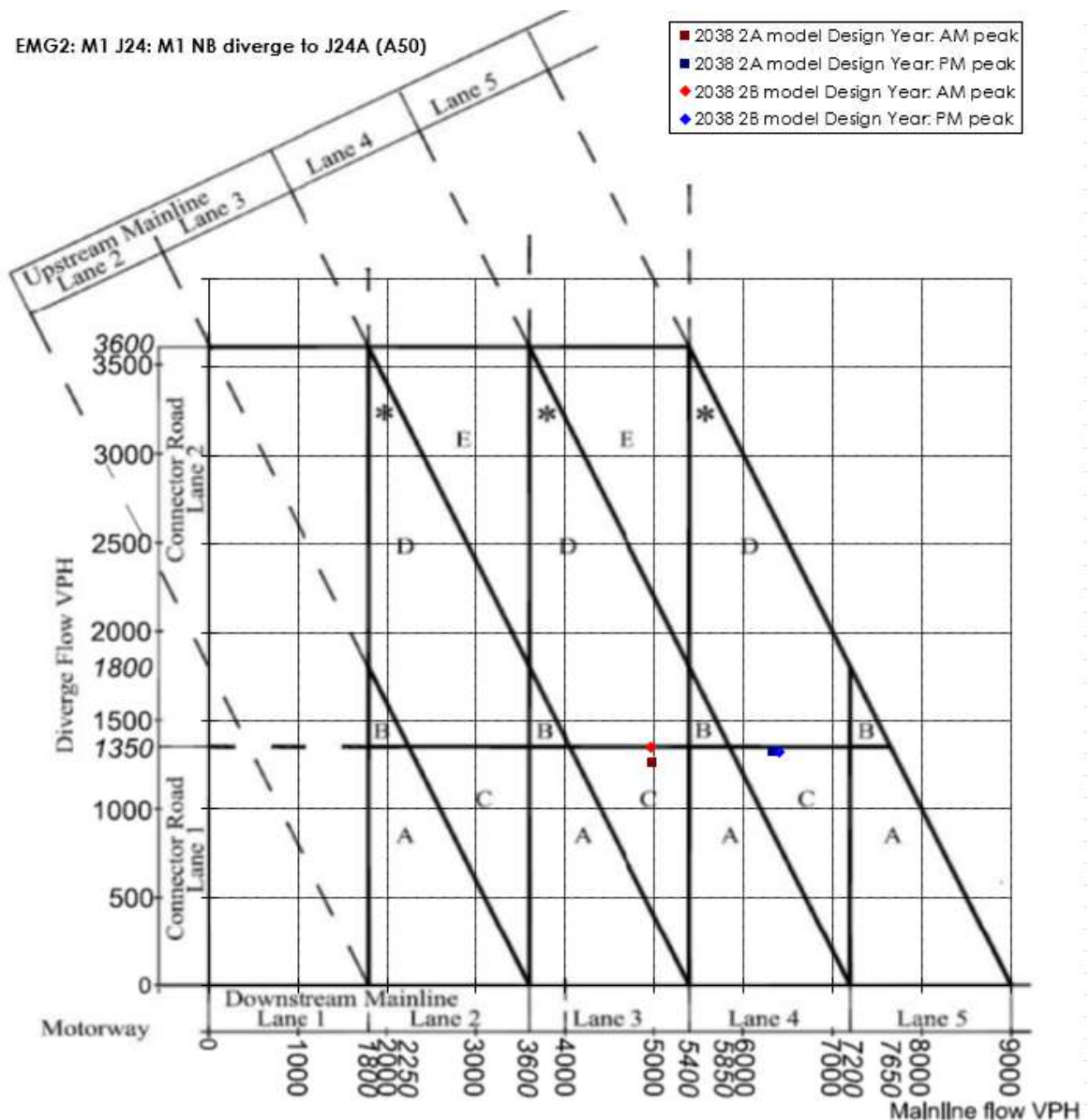
Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
M1 upstream of J24A diverge	6235	901	7648	1000
M1 downstream of J24A diverge	4972	712	6326	802
Diverge (link to A50)	1263	189	1322	198

- 4.11 The following table sets out the 2038 design year traffic data for the diverge using the 2B model data:

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
M1 upstream of J24A diverge	6301	749	7714	1165
M1 downstream of J24A diverge	4956	546	6396	959
Diverge (link to A50)	1345	203	1318	206

- 4.12 Based on CD 122, para 3.9, an adjustment factor for the presence of HGVs is not required on downhill gradients or diverge flows.
- 4.13 Using the traffic data above, and in accordance with CD 122 para 3.26 and Figure 3.26b, the data has been plotted on **Figure 4.1** below. This suggests a Layout C lane drop is required from four to three lanes in the AM peak, and five to four lanes in the PM peak.





**Figure 4.1** M1 J24A northbound diverge layout requirement using traffic data

- 4.14 The M1 northbound at this location is a four-lane Smart Motorway, and the current J24 diverge is the transition point from a four-lane controlled motorway (i.e. with hard shoulder) to four-lane all-lane running (ALR), i.e. without hard shoulder. The smart motorway (constructed around 2018) provides four lanes through J24.
- 4.15 This scheme does not propose to reduce the number of lanes through J24 to achieve the 'layout C lane drop', as would reduce the capacity of the mainline. CD 122, Figure 3.26b demonstrates that as mainline traffic increases and the diverge flow is constant then a layout A would be appropriate regardless. However, the flows are indicating that five lanes are required prior to the diverge and this is discussed below in the weaving analysis.

- 4.16 As discussed in detail below, there is a balance to be achieved between the weaving length and spacing of successive diverges. Three options for the J24A diverge have therefore been developed and are shown on the detailed drawings as follows:

Option	Layout type	Spacing to J24 diverge (m)	Detailed layout shown on drawing EMG2-BWB-GEN-XX-SK-CH-
A	A option 1 (taper)	450	SK034
C	A option 2 (auxiliary lane)	345 (i.e. with Exit Datum Point as Option A)	SK035
D	A option 2 (auxiliary lane)	450	SK036

- 4.17 The following factors require consideration when assessing the preferred layout:

- Weaving and spacing of successive diverges;
- Visibility (SSD) into the J24A diverge;
- M1 mainline cross-section;
- Provision of directional signs and signalling;
- Visibility of the J24 diverge and associated signing;
- Gradient of the M1 northbound on the approach to the two diverges; and
- Length of the downstream interchange link to the A50.

- 4.18 It is noted that options A, C or D can provide the geometrical layout requirements of CD 122, table 3.32 as shown on the drawings listed and therefore the diverge geometry is not a deciding factor.

### Weaving and spacing of successive diverges

- 4.19 The M1 northbound between the J23A merge and J24 diverge is an existing weaving section. Using the relevant measuring points in CD 122, the weaving length is 1.8km. This is shorter than the minimum required for a rural motorway, which is 2km (CD 122, para 4.5).
- 4.20 The following table sets out the spacing of the diverges and weaving lengths for the three options and compares them to the existing layout.

Option	Layout type	Spacing to J24 diverge (m)	Weaving length to J24A diverge from J23A merge (m)	Weaving length to J24 diverge from J23A merge (m)
Existing	B option 1 with auxiliary lane	n/a	n/a	1830
A	A option 1 (taper)	450	1547	1982
C	A option 2 (auxiliary lane)	345	1652	1982
D	A option 2 (auxiliary lane)	450	1547	1982

- 4.21 As note above the existing J24 diverge is a 'layout B option 1' diverge but with an auxiliary lane for the first (A50) exit. The weaving length is measured to the mid-point of the first exit and ghost island head, as per CD 122. Figure 4.4g, but as discussed above

the two exits are signed for different routes which is how the proposed layout with separate diverges would also operate. As such a comparison between the J23A entry datum point and both J24A and J24 exit datum points is also useful when considering the operation of this section of the M1.

Option	Distance from J23A entry datum point to J24A exit datum point (m)	Distance from J23A entry datum point to J24 exit datum point (m)	Distance from J23A entry datum point to J24 (2 <sup>nd</sup> exit) taper (m)	Change from existing J23A-J24 to proposed J23A-J24A (m)	Change from existing to proposed J23A-J24 exit datum (m)	Change from existing to proposed J23A-J24 exit taper (m)
Existing	n/a	1437	1812	n/a	n/a	n/a
A	1342	1777	n/a	-95	+340	-35
C	1342	1777	n/a	-95	+340	-35
D	1237	1777	n/a	-200	+340	-35

4.22 As can be seen from the above the provision of the new J24A diverge would be closer to the J23A merge but only by 95m for options A and C. In all options the distance between the J23A entry datum point and J24 exit datum point increases by 340m in absolute terms, but reduces by 35m in terms of the exit taper and this is due to the proposed J24 taper being to motorway road class whereas the existing is relaxed to the 'rural all-purpose 120kph' road class.

4.23 CD 122 para 3.36 requires a minimum distance of  $3.75V$ m between the tips of successive noses, where V is the design speed of 120kph, giving a minimum distance of 450m. The table below shows the spacing of the diverges for each option and gives the corresponding distance between the exit datum points.

Option	Distance between tips of noses J24A to J24 (m)	Distance between successive exit datum points J24A to J24 (m)
A	450	435
C	345	435
D	450	540

### Summary

4.24 In summary the proposed layout providing two separate diverges will operate in a similar way to the existing diverge, given that at present the first exit is signed for the A50 and the second exit for the A453.

4.25 Option C is preferable in terms of maximising the weaving length. As the existing weaving length is reduced in all options then as CD 122, para E/3.11 does not apply and this is a **departure**, reference **G1**.

4.26 Options A and D are preferable over option C in terms of providing the standard distance between two successive exits. Option C would be a **departure**, reference **G2**.

## Weaving section number of lanes

- 4.27 CD 122, equation 4.7 applies to smart motorways as well as standard motorways. As the weaving length is reduced below the existing, and is below the 2km minimum, the actual weaving and minimum lengths are set in the calculation to be the same value, thus meaning the weaving length doesn't impact the calculation (as per CD 122, para 4.7 note 2).
- 4.28 CD 122 does not however specifically state how to assess the numbers of lanes within a weaving length where there are two downstream exits. Therefore, two calculations have been undertaken:
- Weaving lane calculation to the first (J24A) exit with traffic to the downstream (J24) assumed to be on the mainline; and
  - Weaving lane calculation using the total of J24A and J24 exits as exiting traffic.
- 4.29 The results of the above are shown below. The number of lanes have been calculated for the two scenarios as follows:

Scenario	Traffic model	No. lanes AM	No. lanes PM
To first (J24A) exit only	2038 2A	4.52	5.24
To both exits	2038 2A	4.75	6.01
To first (J24A) exit only	2038 2B	4.56	5.33
To both exits	2038 2B	4.84	6.14

- 4.30 The results above highlight that the scenario for 'both exits' is more onerous than for 'J24A only' with the PM peak hour being more onerous still. There is little difference between the 2A and 2B scenarios.
- 4.31 It is not proposed as part of the scheme to provide five lanes from the J23A merge to J24A (or J24) diverge and this is a **departure**, reference **G3** applying to all options. We note that provision of five lanes is in itself a departure from CD 127, para 2.15.
- 4.32 CD 122 para E/1.8.2 states that where the weaving length on an existing motorway is less than the length derived from CD 122 Figure 4.6b, options for reducing or eliminating weaving should be assessed and implemented where practicable. The minimum weaving lengths derived from CD 122 Figure 4.6b are as follows:

Scenario	Traffic model	CD 122 Figure 4.6b minimum weaving length (m)	
		AM	PM
To first (J24A) exit only	2038 2A	510	640
To both exits	2038 2A	640	770
To first (J24A) exit only	2038 2B	510	650
To both exits	2038 2B	660	780

- 4.33 As can be seen the proposed weaving length in all options is higher than the minimum required by this figure and therefore options to reduce or eliminate weaving do not need to be considered further.
- 4.34 VISSIM modelling has been undertaken to fully assess the impact of the weaving on the traffic flow and the VISSIM modelling does not identify any significant flow breakdown over the weaving length.

### Visibility (SSD) into the J24A diverge

- 4.35 In accordance with CD122, para 3.34, the visibility into the diverge to mainline SSD (i.e. 295m based on 120kph design speed) up to the back of the nose shall be achieved.
- 4.36 For the proposed J24A (A50) diverge the SSD into the diverge is restricted by the Ashby Road overbridge and the VRS in front of the bridge. For the three options the SSD into the diverge reduces as set out in the table below. This is based on the driver and object heights stated (note the 1.05m eye height is considered to be the most onerous case).

Eye height (m)	Object height (m)	Option A min SSD (m)	Option C min SSD (m)	Option D min SSD (m)
1.05	0.26	261	251	171
1.05	1.05	292	286	254

- 4.37 From the above, whilst none of the options are fully compliant, it can be seen that options A and C are substantially more compliant than option D. The reduction below desirable minimum SSD into the diverge is **departure**, reference **G4**.

### M1 mainline cross-section

- 4.38 At present between M1 J23A and Ashby Road overbridge (just before the start of the J24 diverge), the M1 northbound is a D4M cross-section with above-lane signals, making it a controlled motorway. From Ashby Road overbridge the hard shoulder is discontinued as this initially is used to form the J24 diverge. Then downstream of the diverge becomes lane 1 of the D4-ALR motorway leading north to J25.
- 4.39 For the new J24A diverge layout for the A50, and amended J24 diverge, and with land available for the scheme, a hard shoulder can be re-instated from a point north of the Ashby Road overbridge up to the J24 diverge (where the hard shoulder tapers over the length of the diverge nose, as a hard shoulder is not required on the J24 slip road).
- 4.40 The re-instated hard shoulder would provide an improvement, significantly reducing the potential for a stopped vehicle to be present within the live lanes of the diverge as vehicles would be able to pull off to the side onto the hard shoulder.
- 4.41 The re-instatement of the hard shoulder can be achieved by all three options A, C and D.

## Provision of directional signs and signalling

### Directional signs

- 4.42 CD 146 sets out the requirements for directional signing. The locations of directional signs are based on the exit datum point for the diverge. With the change to the diverge layout i.e. providing two separate diverges, there will be two different exit datum points (ExDP) and both need to be checked for compliance against CD 146.
- 4.43 The table below reviews the signing sequence for each option and compares this to the existing layout and identifies any departures from standard that may be required.

Sign type	CD 146 requirement	Option	J24A exit	J24 exit
Confirmatory sign	30-50m downstream of tip of nose	Existing	n/a	<b>Gantry GA-01</b> 90m beyond tip of nose <b>Existing departure</b>
		A, C or D	30 downstream of tip of nose <b>Compliant</b>	As existing (sign changed on existing gantry GA-01) <b>Existing departure</b>
Final direction sign	0-50m upstream of ExDP	Existing	n/a	<b>Gantry GA-02</b> 105m downstream of the ExDP <b>Existing departure</b>
		A and C	<b>Gantry GA-03*</b> 377m upstream of ExDP <b>Departure S1</b>	<b>New Gantry GA-01A</b> At ExDP <b>Compliant</b>
		D	<b>Gantry GA-03*</b> 272m upstream of ExDP <b>Departure S1</b>	
Secondary direction sign	½ mile or ½ mile or ¾ mile with tolerance +10% -20m	Existing	n/a	<b>Gantry GA-03</b> ½ mile, 472m upstream of the ExDP, 44m out of tolerance <b>Existing departure</b>
		A and C	<b>Gantry GA-04</b> ½ mile, 907m upstream of ExDP, 22m out of tolerance <b>Departure S2</b>	<b>Gantry GA-03</b> ½ mile, 812m upstream of ExDP <b>Compliant</b> **see below regarding gantry GA-04
		D	<b>Gantry GA-04</b> ½ mile, 802m upstream of ExDP <b>Compliant</b>	
Primary direction sign	¾ mile, 1 mile or 1 ½ mile with tolerance +10% -20m or 1 ¼ mile with	Existing	n/a	<b>Gantry GA-04</b> ¾ mile, 1002m upstream of the ExDP, 51m out of tolerance <b>Existing departure</b>
		A and C	<b>New Gantry GA-04A</b> ¾ mile, 1174m upstream of ExDP	<b>New Gantry GA-04A</b>



Sign type	CD 146 requirement	Option	J24A exit	J24 exit
	tolerance +115m -20m		<b>Compliant</b>	1 mile, 1609m upstream of ExDP
		D	<b>New Gantry GA-04A</b> $\frac{2}{3}$ mile, 1609m upstream of ExDP <b>Compliant</b>	<b>Compliant</b>

\* Gantry GA-03 is upstream of the A6 Kegworth Bypass and Ashby Road overbridges and it is not possible to locate a gantry between these bridges and the ExDP as it would be obscured by the bridges. Subject to non-prescribed sign authorisation it may be beneficial to provide a distance plate in yards to the J24A ExDP.

\*\* Gantry GA-04 would also be used to provide signage for the J24 exit, and this would be an additional secondary direction sign. It is located 1342m upstream of the ExDP and the distance  $\frac{3}{4}$  mile would be most suitable.  $\frac{3}{4}$  mile is 1207m and plus 10% is 1328m so it would be 14m out of tolerance upstream.  $\frac{3}{4}$  mile is not permitted in CD 146 but is permitted in the traffic signs regulations. It would therefore require a **departure**, reference **S3**.

- 4.44 It should be noted that none of the four existing J24 exit gantries are in compliant locations. This can be improved with any of the proposed layout options.
- 4.45 The most compliant option for directional signing is Option D as all of the signs for J24A would be in compliant locations except for the final direction sign. The signing to J24 would be the same in all three options.
- 4.46 In options A and C the spacing between the J24A confirmatory sign on gantry GA-02A and J24 final direction sign on gantry GA-01A is 236m. In option C this is reduced to 130m. Traffic Signs Manual Chapter 7 Appendix E sets out that for 70mph roads minimum clear visibility of 180m to signs is required, with a greater distance recommended. Option C does not meet this minimum standard for the J24 final direction sign on gantry GA-01A as it would be partially obscured by the upstream gantry GA-02A.

### Signalling

- 4.47 The existing motorway signalling is above-lane signals (ALS) between the J23A merge and J24 diverge completed by VMS. These were originally provided when this section of the M1 was widened in the early 1990s for the A42 scheme. They were then upgraded during the smart motorway project (SMP) in the late 2010s to mandatory signals (VMSL) using the original gantries. This means that there are some **existing departures** for ALS as follows:
- The first ALS after the J23A merge are located 435m downstream of the entry datum point (they should be between 200 and 400m, CD 146 para 4.17); and
  - The confirmatory ALS after the existing J24 diverge are located 90m downstream of the tip of the diverge nose (they should be between 30 and 50m, CD 146 para 4.19).
- 4.48 Options A, C and D would change the ALS provision as follows:

- The new Gantry GA-04A would provide ALS as it would become the new First ALS after the J23A merge. As it would be located 168m downstream of the J23A entry datum point it would be a **departure S4** (superseding the existing departure).
- The existing final direction sign gantry GA-02 (which has ALS) would be removed;
- A new final direction sign gantry GA-01A would be provided with ALS for the J24 diverge; and
- ALS is not proposed for new confirmatory gantry GA-02A on the basis that this is very close to the proposed GA-01A and the upstream gantry would obscure the downstream one if it was extended across the motorway to provide ALS. This would be a **departure S5**.

4.49 Overall there would be a net increase of one set of ALS for all three options.

4.50 Variable message signs (VMS) are provided in addition to the ALS. There are various existing departures for VMS as follows:

- VMS are co-located with ALS, exit directional signs and ahead directional signs on the primary signage gantry (they should be between 200 and 400m upstream, CD 146 para 4.25); and
- VMS are co-located with ALS, exit directional signs and ahead directional signs on the secondary signage gantry (they should be between 200 and 400m upstream, CD 146 para 4.26).

4.51 For Options A, C and D the provision of an additional confirmatory sign for J24A means that VMS would be provided on the confirmatory gantry in accordance with CD 146 para 4.27. The existing final direction signage gantry GA-02 for J24 would be removed but this does not provide a VMS at present. No other changes to VMS would be proposed with the above existing departures retained. Hence there would be a net increase of one VMS.

4.52 As discussed above for the directional signage, options A, C and D introduce a new primary directional signage gantry (GA-04A). This means that a VMS is required between 200 and 400m upstream of this gantry, but this is within the area of the J23A merge. An existing VMS is present 773m upstream of the proposed gantry and this would be the primary VMS. This would, however, be a **departure S6**.

### **Visibility of the J24 diverge**

4.53 Aside from the existing relaxation associated with the existing gantry GA-01 discussed at section 3 above, the visibility into the J24 diverge is compliant with CD 122 and the proposed final gantry GA-01A does not reduce visibility into the diverge below the required 295m. Therefore visibility into the J24 diverge does not affect the choice of options.

### **Gradient of the M1 on the approach to the two diverges**

4.54 CD 122 para 3.28 sets out requirements where a layout A option 2 (auxiliary lane) diverge is to be used in lieu of a layout A option 1 (taper) diverge. Options C and D consider auxiliary lanes and option A is a taper.

- 4.55 The mainline is on a gradual left-hand radius so the consideration for using an auxiliary lane is the gradient before the diverge. The following table sets out the levels in mAOD at 500m intervals prior to the ExDP for each diverge.

Level (mAOD) at Location	J24 diverge	J24A diverge
ExDP	51.3	63.9
500m prior to ExDP	65.7	73.7
1km prior to ExDP	74.5	77.5
1.5km prior to ExDP	77.5	74.7

- 4.56 Based on the above the average gradients are calculated:

Average gradient	J24 diverge	J24A diverge
Over 500m before ExDP	2.9% downhill	2.0% downhill
Over 1km before ExDP	2.3% downhill	1.4% downhill
Over 1.5km before ExDP	1.7% downhill	0.7% downhill

- 4.57 It can be seen from the above that the gradient is less than 3% on the 1.5km approach to both diverges, and does not go above 3% average on the 500m before the diverge, and there is therefore no requirement to provide an auxiliary lane.

### Length of the downstream interchange link to the A50

- 4.58 Based on the forecast traffic flows for the M1 northbound to A50 westbound interchange link (see detail provided at section 5 below), a minimum cross-section of IL1A is required. However, CD 122 para 5.3 does not permit single-lane interchange links of greater than 1km. Depending on the options for the bridge on the interchange link over or under the A453 (see section 5 below) and the M1 northbound diverge options discussed here the link may or may not be greater than 1km. The following table gives a summary of this.

Bridge Option	Link length for Diverge option A or D (km)	Link length for Diverge option C (km)
1 or 2A/2C	1.0	0.9
2B/2D	1.05	0.95
No. lanes required on interchange link	2	1
Minimum cross-section	IL2A	IL1A

- 4.59 As discussed above a single lane diverge is required for the M1 northbound to A50 westbound diverge. Based on the A50 westbound merge layout a single lane gain at the merge is required and it would not be possible to provide a two-lane merge. Hence a single lane prior to the merge is required.

- 4.60 The first 200m or so of the interchange link in options A and D is located between the M1 mainline and the A453. This is a tight corridor and it is not considered feasible to provide a two-lane interchange link to cross section IL2A within the available space. Hence options A and D would require a **departure** from standard reference **G5** for the provision of a single-lane interchange link in excess of 1 km.

### Summary and preferred option

- 4.61 The following table sets out a summary of each aspect considered above.

Consideration	Preferred option	Summary of reasoning
Weaving	C then A then D	Option C Maximises weaving length
Spacing of successive diverges	A or D	Provides standard spacing between exits
Visibility (SSD) into the diverge	A or C	Options A and C although not fully compliant are significantly better than option D
M1 mainline cross-section	A, C or D	All options allow for re-instatement of the hard shoulder north of the Ashby Road bridge to the J24 diverge
Provision of directional signing	D then A then C	Higher level of compliance with CD 146 is achieved with option D Option C final direction sign for J24 partially obscured by the upstream gantry.
Provision of signalling	A, C or D	Net increase of one ALS and one VMS in all options, no discernible differences between the options
Visibility of the J24 diverge	A, C or D	No discernible difference
Gradient of the M1 on the approach to the two diverges	A	There is no requirement in gradient terms to us an auxiliary lane
Length of the downstream interchange link to the A50	C	Option C allows for a single-lane interchange link as the length is less than 1 km

- 4.62 From the above it is clear that there are advantages and disadvantages with all options. However, aside from the directional signing, option D performs least well, and option D is significantly worse when considering visibility into the diverge.

- 4.63 A scoring system has therefore been used to assess the various issues with a score of 1 (least preferred) to 3 (most preferred). A score of 0 is used if all options are the same.

Consideration	Option A score	Option C score	Option D score
Weaving	2	3	1
Spacing of successive diverges	3	1	3
Visibility (SSD) into the diverge	3	3	1

Consideration	Option A score	Option C score	Option D score
M1 mainline cross-section	0	0	0
Provision of directional signing	2	1	3
Provision of signalling	0	0	0
Visibility of the J24 diverge	0	0	0
Gradient of the M1 on the approach to the two diverges	0	0	0
Length of the downstream interchange link to the A50	1	3	1
<b>Total</b>	<b>11</b>	<b>11</b>	<b>9</b>

- 4.64 From the above options A and C score best, followed by D. Of the above, weaving, spacing of successive diverges and visibility into the diverge are key user safety issues. As noted above option D performs notably worse for visibility into the diverge and for this reason it is discounted.
- 4.65 The key decision therefore is between maximising the weaving length (option C) vs the compliant spacing of successive diverges (option A).
- 4.66 To inform the decision-making process a safety risk assessment to GG 104 has been undertaken which is found at **Appendix 1**. This has reviewed the risks in the existing layout against those for the proposed options A and C. In particular this has reviewed risks associated with weaving and closely spaced exits. The conclusion of this work is that Option C presents the least risk, with the main differentiating factor being the risks associated with 'swooping' (i.e. drivers trying to exit at the last moment) is lower in Option C because it has an increased weaving length. The risk assessment has included for mitigation measures for improving the signage and signalling over the weaving section over and above the current layout.
- 4.67 Therefore **Option C** is to be progressed.

### Further measures to maximise weaving length

- 4.68 CD 122 para E/1.8.1 states that "The weaving length to be provided on an existing motorway should be as close as practicable to the requirements of CD 122".
- 4.69 Whilst the layout of the J24 and J24A diverges have been discussed in detail above, the other reference point for weaving length is the upstream merge at J23A from the A42 which is a layout E option 1 merge.
- 4.70 A review of the existing merge layout has been undertaken and it has been determined that the existing merge layout nose, taper and ghost island tail, all exceed the lengths required by CD 122 which constitute **existing departures** from para 3.21. The table below summarises the existing lengths against CD 122 table 3.21.

Element	Existing merge (m)	CD 122 requirement (m)
Nose	150	115
Taper (lane 2 merge taper)	220	205
Ghost island tail	205	180

- 4.71 Adjusting the merge layout such that it complies with standard will reduce the footprint of the merge, thus moving the entry datum point and the point from which weaving is measured (at the end of the lane two entry taper as per CD 122 figure 4.4c) south, away from J24 and thereby increasing the weaving length. The weaving length can be increased by 50m and the distance between J23A entry datum point and J24A exit datum point increased by 75m.
- 4.72 As this amendment to the merge is a relatively straightforward intervention which clearly aligns with CD 122 para E/1.8.1, this has been implemented into the design. This revised option is referred to as **Option C+**.
- 4.73 The geometry of the J24A diverge Option C is shown on **Documents DCO 2.8B and DCO 2.8C**.
- 4.74 The following tables show the comparison between weaving lengths and spacing of datum points.

Option	Weaving length (m)
Existing	1830
CD 122 minimum standard	2000
C	1652
C+	1702

Option	Distance from J23A entry datum point to J24A exit datum point (m)	Distance from J23A entry datum point to J24 exit datum point (m)	Distance from J23A entry datum point to J24 (2 <sup>nd</sup> exit) taper (m)	Change from existing J23A-J24 to proposed J23A-J24A (m)	Change from existing to proposed J23A-J24 exit datum (m)	Change from existing to proposed J23A-J24 exit taper (m)
Existing	n/a	1437	1812	n/a	n/a	n/a
C	1342	1777	n/a	-95	+340	-35
C+	1417	1852	n/a	-20	+415	+40

- 4.75 It can be seen from the above that option C+ would result in a 20m reduction in distance between the successive entry and exit datum points on the motorway.
- 4.76 Option C+ will also have a beneficial impact on the following aspects:



- The length of the existing M1 mainline hard shoulder discontinuity at the J23A merge can be reduced in length; and
- The distance between the J23A entry datum point and new gantry GA-04A is 243m which is **compliant** to CD 146 as a 'first' gantry and therefore the departure S4 is not required.

### **Departures From Standard**

- 4.77 **Appendix 2** provides a summary of the road layout departures from standard within this section which apply to option C+.

## 5. M1 NORTHBOUND TO A50 WESTBOUND INTERCHANGE LINK

### Layout

- 5.1 The scheme proposes to provide a direct (free-flow) link between the M1 northbound and the A50 westbound. At present this movement takes place using the J24 roundabout or via J23A and the A453 parallel to the M1. All the other movements between the M1 and A50 are already direct free-flow links.
- 5.2 The new link is termed the M1 Northbound to A50 Westbound interchange link which is a type of connector road under CD 122.
- 5.3 Five options are under consideration for this link which relate to how it crosses the A453, namely if it goes under or over. A separate **report EMG2-BWB-GEN-XX-RP-CH-0015** is provided to consider the bridge options in more detail but the geometrical design of each is recorded here. The three geometrical options are:
- Option 1B/1C: Underbridge;
  - Option 2A: Three-span overbridge with crest curve K17;
  - Option 2B: Single-span overbridge with crest curve K17;
  - Option 2C Three-span overbridge with crest curve K30; and
  - Option 2D: Single-span overbridge with crest curve K30.
- 5.4 The structures options report recommends that options 2B/2D (single span overbridge) should be pursued, with the choice of option 2B or 2D depending on the outcome of the geometrical assessment contained in this report.

### Traffic flows

- 5.5 The following table sets out the design year traffic data for the interchange link.

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
M1 NB to A50 WB Interchange link	1341	214	1176	176

### Design Speed and Geometry

- 5.6 As noted above this is considered as an interchange link. Therefore, the design speed in accordance with CD 122, para 5.4, and Table 5.4 for a rural mainline design speed of 120kph is 85kph.

### Horizontal alignment

- 5.7 The horizontal alignment for each option is summarised as follows:

Option	1B/1C	2A/2C	2B/2D
Description	<ul style="list-style-type: none"> <li>Near straight after diverge compliant to CD 122</li> <li>Left hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Transition</li> <li>Straight</li> <li>Right hand radius 1440m (minimum R with adverse camber and without transitions)</li> <li>Near straight before merge compliant to CD 122</li> </ul>	<ul style="list-style-type: none"> <li>Near straight after diverge compliant to CD 122</li> <li>Left hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Transition</li> <li>Straight</li> <li>Transition</li> <li>Left hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Transition</li> <li>Straight</li> <li>Transition</li> <li>Right hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Near straight before merge compliant to CD 122</li> </ul>	<ul style="list-style-type: none"> <li>Near straight after diverge compliant to CD 122</li> <li>Left hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Transition</li> <li>Straight</li> <li>Transition</li> <li>Left hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Transition</li> <li>Straight</li> <li>Transition</li> <li>Right hand radius 720m (minimum R with 3.5% superelevation)</li> <li>Near straight before merge compliant to CD 122</li> </ul>
Compliance with DMRB	<b>Compliant</b>	<b>Compliant</b>	<b>Compliant</b>

## Vertical alignment

5.8 The vertical alignment for each option is summarised as follows:

Option	1B/1C	2A/2C	2B/2D
Description	<ul style="list-style-type: none"> <li>Grade 4.6% downhill</li> <li>Sag K 27</li> <li>Grade 2.05% uphill</li> <li>Crest K 55</li> </ul>	<ul style="list-style-type: none"> <li>Grade 6% downhill</li> <li>Sag K 20</li> <li>Grade 6% uphill</li> <li><b>Crest K 17 (two steps below desirable minimum)</b></li> <li>Grade 6% downhill</li> <li>Sag K 20</li> </ul>	<ul style="list-style-type: none"> <li>Grade 6% downhill</li> <li>Sag K 20</li> <li>Grade 6% uphill</li> <li><b>Crest K 30 (one step below desirable minimum)</b></li> <li>Grade 6% downhill</li> <li>Sag K 20</li> </ul>
Compliance with DMRB	<b>Compliant</b>	The use of a crest K of 17 is a <b>departure</b> reference <b>G6</b> on the basis that CD 122 does not permit relaxations below desirable minimum (in this case K 55) on connector roads.	The use of a crest K of 30 is a <b>departure</b> reference <b>G6</b> on the basis that CD 122 does not permit relaxations below desirable minimum (in this case K 55) on connector roads.

5.9 Although Option 1B/1C has compliant vertical alignment geometry, the levels of the new link road would be over 7m below existing ground level. The level goes beyond the level of the adjacent M1 drainage and there is therefore no positive drainage outfall. A surface water pumping station would be required which imposes a long-term

maintenance burden on National Highways and poses a safety risk to road users in the event of flooding.

- 5.10 Option 2B/2D is visually less intrusive being slightly lower in overall elevation and a longer crest meaning it is not as pronounced.

### Stopping Sight Distance / Visibility

- 5.11 The desirable minimum SSD for 85kph, i.e. 160m, is achieved throughout for Option 1B/1C.
- 5.12 Options 2A and 2B the use of a crest K below desirable minimum introduces a reduction in the SSD.
- 5.13 The minimum SSD for each option is therefore assessed as follows:

Option	1B/1C	2A/2C	2B/2D
Description	Minimum SSD of 160m achieved throughout	<p>Minimum SSD:</p> <ul style="list-style-type: none"> <li>to low object height of 90m (two steps below desirable minimum)</li> <li>to 1.05m object height of 120m (one step below desirable minimum)</li> </ul> <p>Minimum SSD of 160m achieved within the immediate approach to the downstream merge.</p>	<p>Minimum SSD:</p> <ul style="list-style-type: none"> <li>to low object height of 120m (one step below desirable minimum)</li> <li>to 1.05m object height of 160m</li> </ul> <p>Reduction below 160m SSD is within the first 13m of the immediate approach to the downstream merge. See further commentary below.</p>
Compliance with DMRB	<b>Compliant</b>	The reduction of SSD below desirable minimum is a <b>departure</b> , and included within reference <b>G6</b> on the basis that CD 122 does not permit relaxations below desirable minimum on connector roads.	The reduction of SSD below desirable minimum is a <b>departure</b> , and included within reference <b>G6</b> on the basis that CD 122 does not permit relaxations below desirable minimum on connector roads.

- 5.14 It can be seen from the above that in options 2B/2D the desirable minimum SSD of 160m can be achieved to a 1.05m object which represents a vehicle on the road ahead. As the link will be under motorway regulations with a hard shoulder the likelihood of a low object on the road is reduced from an all-purpose road. As a mitigation measure a 50mph speed limit is proposed and the speed limit is shown on **Document DCO 2.14**.
- 5.15 CD 109 does not permit relaxations on the immediate approaches to junctions. In the case of a merge designed to CD 122, the immediate approach is defined as a distance of 1.5 times the SSD measured from the back of the nose. i.e. from a point 240m before the back of the nose there cannot be a reduction below the desirable minimum SSD of 160m. This requirement is met in options 2A/2C, but in options 2B/2D due to the longer crest curve the first 13m approximately of the immediate approach has an SSD below 160m measured to the low object height. However, as the merge is a lane gain there is a reduced potential for incidents at the merge. This is **departure** reference **G7**.

### **Cross-section (Connector Road – Interchange Link)**

- 5.16 In accordance with CD 127, para 2.1, Figure 2.1.1N1b provides the required cross-sectional dimensions for a rural motorway connector road.
- 5.17 Based on predicted vehicle per hour traffic flows for the interchange link highlighted above, and in accordance with CD 122 para 5.17 and Table 5.17b, the minimum connector road type is IL1A.
- 5.18 As discussed in section 4 above the diverge layout affects the length of the interchange link. For the selected diverge option C+ the interchange link is less than 1km.

#### Lane width

- 5.19 The lane width is 3.7m as required by CD 127. The horizontal alignment of the interchange link does not have a radius of less than 400m and hence no lane widening is required.

#### Hard shoulder, hard strip and verge

- 5.20 The following are provided in accordance with CD 127 for cross-section IL1A:

- 1.5m (min) nearside verge
- 3.3m hard shoulder
- 0.7m offside hard strip
- 2.3m (min) offside verge

#### Headroom

- 5.21 For the option 1B/1C underbridge the headroom on the interchange link would be a minimum of 5.3m plus compensation for the sag curve.
- 5.22 For the overbridge options, the A453 northbound between M1 J23A and M1 J24, and then onto the A50, is part of High Load Route (HiR) 13a between Wansford (R26 A1/A47) **to** Stoke on Trent (A50/A520). This is an 18' route with other structures on the route having a minimum headroom of the following:
- A42 Doctors Lane bridge: 6.05m;
  - A50 B5460 interchange bridge: 5.81m;
  - A6 Shardlow Road bridge: 19' (5.79m); and
  - A5111 Harvey Rd bridge: 5.66m.
- 5.23 The proposed bridge location in the context of HiR13a is shown on **Figure 5.1** below.



**Figure 5.1** High load routes and location of proposed bridge

- 5.24 Options 2A & 2C provide compliant headroom of 6.45m for a high load route, in accordance with CD 127 table 4.1. High load routes are recorded by the DfT as being either 18' or 20' routes but CD 127 does not distinguish between the types of routes. As the A453 northbound is an 18' route, it is reasonable that the clearance is reduced by 2' i.e. 0.61m to 5.84m and this is the headroom proposed in Options 2B & 2D but this requires a **departure** from standard reference **G8**. As noted above the reduction in headroom allows a greater crest curve value to be provided. The reduction in headroom is not considered to have any safety implications given it would be over 0.5m higher than the standard 5.3m headroom.

### Summary and preferred option

- 5.25 Given the headroom on other structures on the 18' high load route governs the abnormal loads that can be used, it is reasonable that the clearance is reduced by 2' i.e. 0.61m to 5.84m.
- 5.26 In terms of the vertical crest curve although there is a short distance where the minimum SSD to a 0.26m object falls below 160m on the immediate approach to the merge, the overall SSD along the interchange link in option 2D is better than option 2B.
- 5.27 On this basis it is recommended that **Option 2D** be taken forward. This is shown on the following **Documents**:
- **DCO 2.8C:** General arrangement
  - **DCO 2.9C:** Cross-sections
  - **DCO 2.10A:** Profile (long-section)



- **DCO 2.11:** A453 bridge plan

### **Departures From Standard**

5.28 **Appendix 2** provides a summary of the road layout departures from standard within this section based on option 2D.

## 6. A50 WESTBOUND MERGE

### Layout

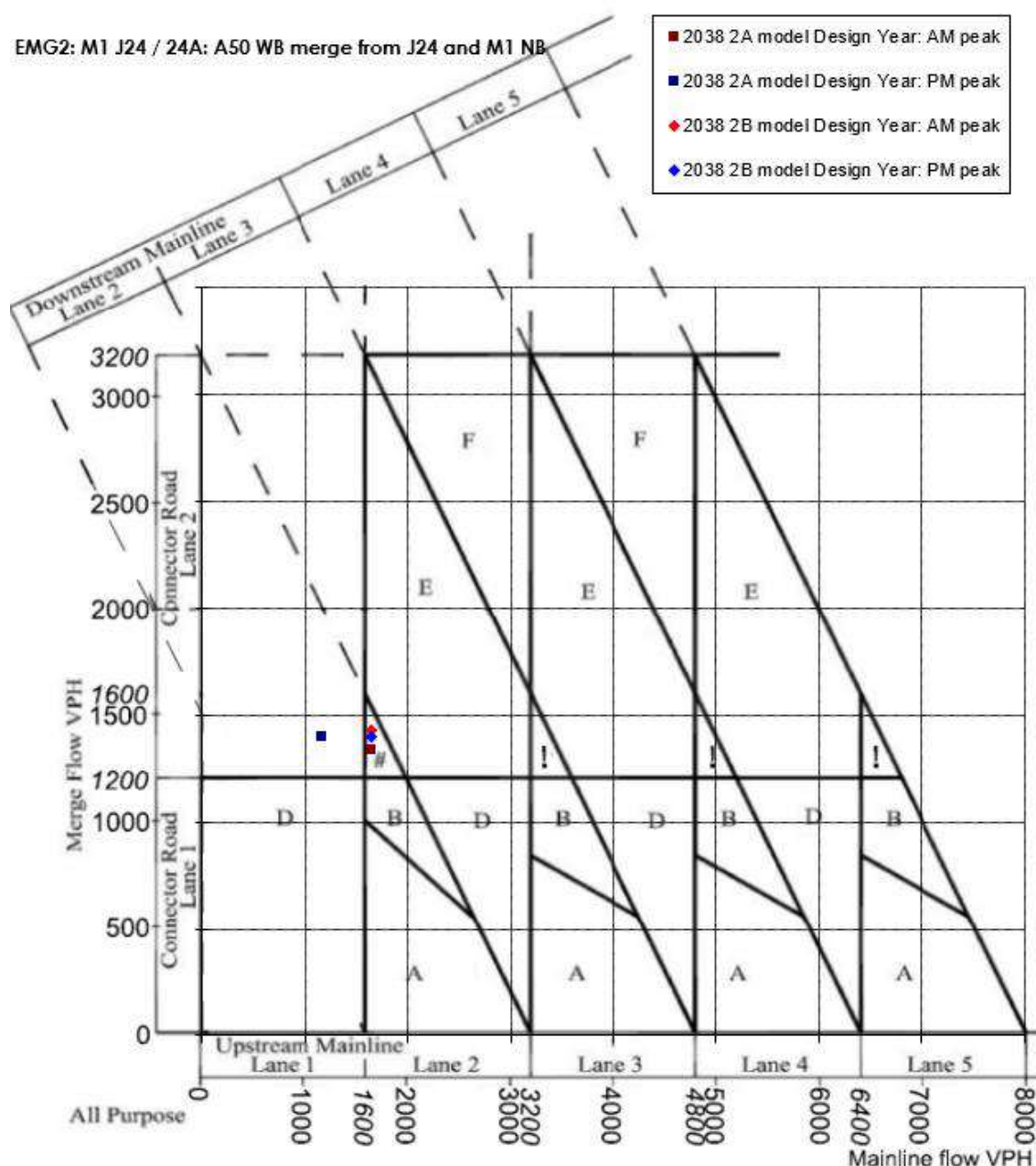
- 6.1 With the proposal to introduce a separate interchange link between the M1 and A50 (see above) a new merge onto the A50 westbound is required downstream of the junction 24 roundabout.
- 6.2 The following table sets out the 2038 design year traffic data for the diverge using the 2A model data:

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
A50 WB upstream of merge	1633	259	1159	173
A50 WB downstream of merge	2896	448	2481	371
Merge from M1 NB	1263	189	1322	198

- 6.3 The following table sets out the 2038 design year traffic data for the diverge using the 2B model data:

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
A50 WB upstream of merge	1486	195	1018	157
A50 WB downstream of merge	2831	398	2336	363
Merge from M1 NB	1345	203	1318	206

- 6.4 Based on CD 122, para 3.9, an adjustment factor of 1.01 is used in the above for the mainline flows and 1.06 for the merge flows due to the percentage of HGVs.
- 6.5 Using the traffic data above, and in accordance with CD 122, Figure 3.12a, the data has been plotted on **Figure 6.1** below and based on this a 'layout D lane-gain' merge is required.



**Figure 6.1** A50 westbound merge layout requirement using traffic data

- 6.6 The provision of the new link will divert traffic away from both the M1 J24 roundabout and the A453 to A50 SLTL and as can be seen from the data above the traffic flows are relatively well balanced.
- 6.7 With this in mind it is proposed that the most appropriate layout for the new merge would be to have a lane gain from 2 to 3 lanes. However, the downstream interchange link is two lanes which then merges into the A50 westbound around 1.5km downstream of the new merge. A lane drop on the interchange link is therefore required prior to the downstream merge and the most appropriate layout is therefore considered to be a form of a layout G option 2 merge with a reduction taper to two lanes prior to the downstream merge. Further information on this is set out below.

- 6.8 The new merge would be located downstream of the roundabout exit and downstream of the end of the segregated left-turn lane (SLTL) which forms a lane-gain from the A453. In addition to the SLTL there is a lane drop on the exit from the M1 junction 24 roundabout (which is a lane reduction to roundabout standards).
- 6.9 The introduction of the additional M1 northbound merge would mean there would be several merges within close proximity to each other. As it is not possible to reduce the A50 westbound exit from the J24 roundabout to a single lane prior to the proposed merge, the layout of the western side of the junction 24 signalised roundabout is to be amended such that a two-lane exit from the roundabout with the SLTL removed. This removes the two existing conflict points. The roundabout geometry is assessed in more detail within section 10.
- 6.10 The overall alignment of the existing and proposed A50 westbound interchange link is shown schematically on **drawing EMG2-BWB-GEN-XX-SK-CH-SK046**.

### **Design Speed and Geometry**

- 6.11 As discussed above the M1 northbound to A50 westbound interchange link has a design speed of 85kph.
- 6.12 The A50 westbound from M1 junction 24 roundabout is itself classified as an interchange link, forming a long slip road from the roundabout to the merge onto the A50 westbound (joining with the interchange link from the M1 southbound to A50 westbound). Therefore in accordance with CD 122 para 5.4 and Table 5.4 this interchange link also has a design speed of 85kph.
- 6.13 The layout of the merge is shown on **Document DCO 2.8C** and **drawings EMG2-BWB-HGN-A50WB-DR-H-0101 and 0102**. The required geometry stated is in accordance with CD 122 para 3.21 and Table 3.21.
- A near straight of radius 720m over a minimum of 75m is provided on the M1 northbound to A50 westbound interchange link prior to the merge;
  - The nose length is 75m (based on rural all-purpose design speed of 100kph or less);
  - The M1 J24 to A50 westbound interchange link has a right-hand curve with horizontal radius of 340m at the point of the merge, which is just below one step below desirable minimum for 85kph but as CD 122 does not permit relaxations below desirable minimum (in this case 510m) on connector roads this is an **existing departure** (DAS ID 72229);
  - The M1 J24 to A50 westbound interchange link then has a transition into a straight and then another transition into a left-hand curve again of 360m radius which for the reasons stated above is an **existing departure**; and
  - At a point 290m downstream of the lane-gain merge it is then proposed to provide a lane-drop, reducing from three lanes to two, prior to the merge onto the A50 westbound mainline. Further information is set out below.

### Lane reduction before the A50 westbound mainline merge

- 6.14 Downstream of the above, the interchange link from the J24 roundabout merges with the interchange link from the M1 southbound. CD 122 para 3.13 states that for three

lane merges a layout G or H merge shall be used. The existing merge has two-lanes from the merge, and the traffic flows do not require three lanes and therefore layout G option 2 can be used.

- 6.15 CD 122 merge layout G option 2 requires a lane reduction with an associated taper. As stated at para 3.19 Note, the reduction taper followed by a merge are successive merges and the requirements for successive merges and diverges applies. This is dealt with at para 3.36 and the minimum spacing of successive merges is  $3.75Vm$ , with  $V$  in this case being 85kph giving a minimum of 319m. This is measured between the end of the reduction taper and the tip of the downstream nose, as per figure 3.14j.
- 6.16 CD 122 provides design requirements for lane reduction tapers on connector roads and at para 3.19 cross references table 7-4 chapter 5 of the traffic signs manual. This table gives preferred and absolute minimum tapers based on the 85<sup>th</sup> %ile of vehicles. Between an 85<sup>th</sup> %ile speed of 40 and 50mph a 1:45 taper is recommended, and between 50 and 60mph a 1:50 taper is recommended.
- 6.17 The actual proposed distance between the successive merges is 1km. This being the case it is not proposed to provide effectively three lanes width of carriageway between the reduction taper and back of nose, with the offside lane hatched out. Instead it is only proposed to provide two lanes after the reduction taper.
- 6.18 It is however considered appropriate to allow for merge overrun. This layout may be considered to be an aspect not covered by standards and would be **departure** reference **G9**.
- 6.19 It is only CD 109 that provides a standard for a lane drop within a link, which is for ending climbing lanes and is shown on Figure 8.7N. This shows, irrespective of design speed, a 1:45 taper followed by an overrun area which then tapers at 1:45. The overall length, assuming 3.65m lanes, is  $2 \times 165m = 330m$ .
- 6.20 CD 127 does, however, state at table 2.28 that for an 85kph design speed mainline lanes should transition at 1:45.
- 6.21 As both standards use the value of 1:45 it is proposed that the transition in number of lanes on the interchange link is as follows:
- Merge taper of 1:45 for a distance of 165m to remove the third lane, but with full paved width provided to allow for merge overrun; and
  - Paved width (hatched out) to then taper at 1:45 for a distance of 165m.

### **Stopping Sight Distance / Visibility**

- 6.22 For an interchange link of design speed 85kph the desirable minimum SSD is 160m in accordance with CD 109 table 2.10.
- 6.23 There is an existing relaxation below desirable minimum to 135m SSD on the M1 J24 to A50 westbound interchange link on the right-hand bend downstream of the SLTL. This is an **existing departure** (DAS ID 72229).

- 6.24 This reduction in SSD will take place on the immediate approach to the proposed merge and therefore requires a further **departure**, reference **G10** as the existing layout would change with the new merge being in place. The changes to the layout of the exit from the J24 signalised roundabout will improve the SSD but it will still fall below 160m.
- 6.25 The SSD prior to the lane drop on the interchange link is at or greater than desirable minimum SSD of 160m. The minimum SSD of 160m is achieved over the immediate approach of 240m prior to the start of the lane reduction taper.

### **Speed limit**

- 6.26 The existing speed limit changes from 50mph to national speed limit at the end of the initial right hand bend when leaving the J24 roundabout. The scheme proposes to relocate this change in speed limit to the end of the lane drop / reduction. The change in speed limit is shown on **Document DCO 2.14**.

### **Departures From Standard**

- 6.27 **Appendix 2** provides a summary of the road layout departures from standard within this section.



## 7. M1 SOUTHBOUND / A50 EASTBOUND TO M1 JCT 24 INTERCHANGE LINKS

### Layout

- 7.1 The SRN works propose to increase the number of lanes from one lane to two lanes through the interchange link between the A50 eastbound and merge with the M1 Jct 24 southbound diverge interchange connector road, and then to three lanes from the merge for the approach to the roundabout junction at M1 J24.
- 7.2 The links affected by these proposals are as follows –
- A50 eastbound to M1 J24 interchange link connector road; and
  - M1 Southbound to M1 J24 interchange link connector road.
- 7.3 The layout is shown on **Document DCO 2.8C** and **drawings EMG2-BWB-HGN-A50EB-DR-H-0101 and 0102**.

### Traffic Flows

- 7.4 The following table sets out the 2038 design year traffic data for the diverge for the 2A model data:

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
A50 eastbound to M1 Jct 24 interchange link	1603	240	1541	231
A50 eastbound to M1 southbound	1392	209	534	83
M1 southbound to M1 Jct 24 interchange link	1114	167	981	147

- 7.5 The following table sets out the 2038 design year traffic data for the diverge for the 2B model data:

Location	AM Peak		PM Peak	
	Vehicles	HGVs	Vehicles	HGVs
A50 eastbound to M1 Jct 24 interchange link	1576	236	1504	225
A50 eastbound to M1 southbound	1365	205	545	81
M1 southbound to M1 Jct 24 interchange link	1011	152	954	142

## Design Speed and Geometry

- 7.6 All the connector roads for this section of the proposals for the purpose of design criteria have been considered as interchange links. Therefore, the design speed in accordance with CD 122, para 5.4 and Table 5.4 for a rural mainline design speed of 120kph is 85kph.

### A50 eastbound interchange link connector road

- 7.7 The proposal is to increase the number of lanes for the A50 interchange link from one to two lanes immediately after the fork diverge for the M1 southbound at M1 J24A. The rate of change of 1:45 is in accordance with CD 127, para 2.28, and Table 2.28.
- 7.8 Through the length of the merge a horizontal curve of 1440m and transition (both compliant with CD 109) ahead of tying into the existing channel geometry are provided.
- 7.9 The centreline of the lane gain continues along the existing channel line until it ties into the existing centreline of the third approaching the roundabout. The geometry of this centreline provides a compliant design to CD 109 with 510m (5% superelevation) and 1440m radius left hand curves with suitable transition between curves.
- 7.10 The vertical alignment follows the existing alignment and the crest and sag K values are at or better than the desirable minimum. **Document DCO 2.10B** shows the vertical alignment.

### M1 southbound diverge connector road

- 7.11 The existing horizontal alignment of the connector road at the location of the merge with the A50 eastbound connector road has a 510m righthand curve. The proposals provide a tighter 360m curve to enable the lane gain introducing a one step below desirable minimum relaxation from standard with a 7% superelevation. The curve is followed by a horizontal transition with a length of 60.271m in accordance with CD 109 para 4.13 albeit with a **relaxation** in the rate of increase of centripetal acceleration of 0.6m/sec<sup>3</sup> in accordance with CD 109 para 4.14 & 4.14.1.
- 7.12 No changes to the existing vertical alignment are proposed.

### A50 eastbound and M1 southbound Jct 24 interchange links merge

- 7.13 For the purposes of designing the geometry for this merge, the A50 2 lane interchange link is considered as the mainline with the M1 southbound diverge connector being the merge.
- 7.14 Although CD122 para 3.1 states that offside merges and diverges shall not be provided at full grade separated junctions, the merge above is within two interchange link connector roads and therefore is not considered to be at a full grade separated junction.
- 7.15 The predicted traffic figures suggest a Layout D, 'lane gain' merge is required in accordance with CD122, para. 3.12, Figure 3.12a and 3.14e.

7.16 The geometry of the merge is shown on drawings EMG2-BWB-HGN-A50EB-DR-H-0101. The required geometry stated is in accordance with CD 122, para 3.12, and Table 3.21 for a rural all-purpose connector road design speed.

- The nose ratio is 1:12 for 75m and matches the existing layout. Although the length of the nose is in accordance with the design standards, the nose ratio is greater than the required 1:25 which is a **relaxation** permitted under CD 122 para 3.21 Note 1.
- The maximum width of the hatch marking forming the nose is 6.25m and therefore within the 8m maximum width.

#### A50 eastbound and M1 southbound Jct 24 approach

7.17 Immediately after the A50 eastbound and M1 southbound Jct 24 interchange link merge the carriageway continues as 3 lanes and ties in with the existing 3 lane approach to M1 J24 roundabout junction.

### **Stopping Sight Distance / Visibility**

#### A50 eastbound & M1 southbound diverge connector roads

7.18 As stated within CD 122, para 3.23, connector road SSD shall be provided along the length of the connector road up to the back of the nosing.

7.19 CD109, Table 2.10, states that the desirable SSD for an 85kph design speed is 160m.

7.20 The A50 eastbound connector road achieves minimum SSD from the diverge with the M1 southbound at J24A to the M1 southbound merge with no obstructions to visibility for the length of the merge nose. The same is true for the M1 southbound diverge connector road.

#### A50 eastbound and M1 southbound Jct 24 approach

7.21 Forward visibility on the approach to the M1 J24 roundabout provides SSD as required by CD 116 paras 3.43 and 3.46 and to the chevron traffic signs to CD 116 para 3.47.

7.22 As the proposals tie into the existing 3 lane approach ahead of the junction other signalised roundabout visibility criteria has not been considered.

### **Weaving**

7.23 There is an existing weaving section from the merge between the A50 eastbound and M1 southbound to the traffic signal stop line at the M1 J24 signalised roundabout. This weaving length is an **existing departure** (DAS ID 7222).

7.24 As the downstream end of the link is a signalised stop line the standard weaving calculation for the number of lanes is not applicable. However, traffic modelling has shown that the existing two-lane section does not provide sufficient capacity and a third lane is proposed over the weaving length.

## Cross Section

- 7.25 The cross-sections are shown on **Document DCO 2.9C**.

### Lane widths

- 7.26 Based on predicted vehicle per hour traffic flows for the interchange links highlighted above, and in accordance with CD 122, para 5.17, and Table 5.17a, the connector roads type is IL2C. However, an additional lane is provided due to the weaving section (see above).
- 7.27 CD 127 para 2.1 and Figure 2.1.1N1f states for a rural all-purpose connector road, as well as having a horizontal curvature of greater than 400 metres radius (CD 127 para 2.2 and CD122.5.18), the lanes widths shall be 3.65m wide.

### Hard Shoulders / Hard Strips / Verges

- 7.28 Connector road type IL2C states that a 1.0m hard strip and 2.5m verge shall be provided on both the nearside and offside of the carriageway.
- 7.29 For the A50 eastbound connector prior to the merge with the M1 southbound diverge connector, the offside of the carriageway maintains the existing hard strip and verge while a 1.0m hard strip with 2.5m verge is proposed on the nearside of the carriageway replacing the hard shoulder.
- 7.30 At the above merge the offside channel provides a 1.0m hard strip and 2.5m verge for the extent of the merge and on approach to Jct 24 roundabout until the channel tie-in to the existing. At this point the hard strip tapers to nothing at a rate of 1:45 in accordance with CD 127 para 2.28 and Table 2.28.

## 8. A453 SHARED USE CYCLE/FOOTWAY

### Layout

- 8.1 The SRN works propose a shared unsegregated cycle/footway ('shared facility') is proposed along the A453 between the existing A453 / A6 Kegworth Bypass / EMG1 (Wilders Way) and the EMG2 development.
- 8.2 The shared facility will connect to the existing shared unsegregated cycle/footway facility at the northern end (that connects to EMG1, Kegworth village and along the A6 Kegworth Bypass) and into the proposed EMG2 development to the south via a new southern arm off the existing A453 / Beverley Road (EMA access) roundabout.
- 8.3 This report provides design information for the section from the northern tie-in point to the extent of the National Highways boundary some 520m south, adjacent to the A453.
- 8.4 The layout of the shared use footway/cycleway is shown on **Document DCO 2.8B** and **drawings EMG2-BWB-HGN-A453-DR-H-0103 & 0104**.

### Traffic Flows

- 8.5 Based on the existing usage of the cycle networks in the vicinity of EMG1 and the proposed EMG2 site the envisaged usage is predicted to be well below 200 users per hour.

### Design Speed and Geometry

- 8.6 The design of the shared facility has been based on CD 143 England National Application Annex. However, this design standard does not provide geometric parameters and criteria for the design for shared facilities. As the design requirements are more onerous for cyclists than pedestrians, CD 195 has been used where appropriate to establish the design requirements.
- 8.7 The design speed for the shared facility is 30kph in accordance with CD 143 Para. E/3.1 and Table E/3.1.
- 8.8 A desirable minimum width of 3.0m is proposed for the shared facility (CD 143, Para. E/3.5) with 1.0m verge either side and a minimum offset to the carriageway of greater than 1.5m (CD 143, Para. E/3.5.1).
- 8.9 The crossfall of the shared facility is 2.5% in accordance with CD 143 Para. E/3.3 and 'Inclusive Mobility, Para. 3.2.
- 8.10 Proposed horizontal curves on the shared facility generally exceed the minimum criteria of 32m radius as stated within CD 195, Para. E/3.20 and Table E/3.20. The exception to this is at the northern tie-in where there is a proposed reverse curve with radii of 11.5m to avoid significant earthworks and to tie into the existing facility perpendicularly. However, this constitutes a **departure** reference **G11**.

- 8.11 Proposed vertical curves on the shared facility are at or greater than the minimum criteria of  $k=5$  for sag curves and  $k=6$  for crest curves.
- 8.12 The vertical alignment of the shared use footway/cycleway is shown on **Document DCO 2.10C** and cross-sections are shown on **Document DCO 2.9B**.

### **Visibility**

- 8.13 Junction visibility at the northern tie-in has been achieved based on the 4.5m set-back (x-distance) and the 31m sight line (y-distance) in accordance with CD195, Para. E/3.5 and Table E/3.5, Table E/3.6 and Table E/3.18. Noting however that the visibility criteria refers to cyclists needing to stop and give way which is not specifically required on a shared facility.

### **Departures From Standard**

- 8.14 **Appendix 2** provides a summary of the departures from standard within this section.



## 9. A453 / A6 / EMG1 ACCESS JUNCTION

### Layout

- 9.1 The proposed works at the existing A453 / A6 Kegworth Bypass / Wilders Way (EMG1 access) junction is to introduce an additional right turn lane on the eastern side of the signalised gyratory.
- 9.2 A new controlled pedestrian crossing is proposed at the Wilders Way eastbound junction approach with the A453. The crossing is to provide access between the proposed drop-off lay-by facility on Wilders Way and the EMG1 bus interchange. This is associated with the EMG1 Works.
- 9.3 **Documents DCO 2.8B, MCO 2.8 and Drawing EMG2-BWB-HGN-EMG1-DR-H-0101** show the proposed layout.

### Traffic Flows

- 9.4 Traffic modelling has shown that there is a requirement to provide two right turning lanes from the A453 southbound to the EMG1 access. The overall junction capacity is reviewed in the transport assessment.

### Design Speed and Geometry

- 9.5 The existing signed speed limit is 50mph. The proposals are minor changes to an existing rural traffic signalised junction and do not affect the approaches.

#### A453 Southbound and Wilders Way Westbound Signalised Junction Arm

- 9.6 The additional right turn lane proposes a lane width of 4.65m with the second existing lane widened to 4.5m albeit the existing single lane approach includes an area of hatched markings to allow additional spaces for large turning vehicles as required by CD 123, para. 7.13. Therefore, both lanes exceed the minimum 3.0m wide lanes required by CD 123, para. 7.9. **Drawing EMG2-BWB-GEN-XX-SK-CH-SK038** shows the vehicle tracking for the design vehicle.
- 9.7 With the existing design speed of 85kph retained, the right turning traffic continues to be maintained by separate signals to the straight-ahead traffic with a traffic island as required by CD123, para. 7.18.
- 9.8 The realigned nearside kerbline reduces the existing kerbline radii to 15m and 70m. These radii accommodate the design vehicle swept paths.

#### A453 Northbound and EMG1 Wilders Way Eastbound Signalised Junction Arm

- 9.9 The purpose of amending the EMG1 Wilders Way approach is to provide a signalised crossing. This will connect a new drop-off lay-by in the EMG1 development to the existing bus interchange. This in turn requires amendments to the left-turn from Wilders

Way onto the A453 northbound to increase the size of the splitter island to accommodate the pedestrian crossing.

- 9.10 The proposals widen the existing eastbound EMG1 Wilders Way left turn lanes for A453 northbound to 4.7m each to improve the swept paths of the design vehicle (CD 123, para 7.13). The widths therefore are greater than the minimum required by CD 123, para. 7.9. **Drawing EMG2-BWB-GEN-XX-SK-CH-SK038** shows the vehicle tracking for the design vehicle.
- 9.11 A 3.0m wide crossing is proposed at both crossing points, with a 3.0m distance between the existing stop line and crossing studs. The footway either side is proposed at 3.0m at the crossing tapering down to a 2.0m footway. A minimum of 1.5m separation between the carriageway and footway is provided.
- 9.12 Additionally, the traffic island is proposed to be altered to provide a minimum 1.5m set-back from the A453 through lanes at the junction in accordance with CD123, para. 7.15.

## **Visibility**

### A453 Southbound and Wilders Way Westbound Signalised Junction Arm

- 9.13 In accordance with CD 123, para. 7.2, each traffic lane has clear visibility of at least one primary signal at desirable SSD from the A453 southbound.
- 9.14 A minimum of 2 signal heads can be seen from the approach arm and stop line.
- 9.15 Junction Intervisibility remains unaltered by the proposals and complies with CD 123, para 7.4.

### A453 Northbound and Wilders Way Eastbound Signalised Junction Arm

- 9.16 In accordance with CD 123, para. 7.2, each traffic lane has clear visibility of at least one primary signal at desirable SSD on the approach to the junction.
- 9.17 A minimum of 2 signal heads can be seen from the approach arm and stop line.
- 9.18 Junction Intervisibility remains unaltered by the introduction of the crossing and complies with CD 123, para 7.4.

## 10. OTHER WORKS ON THE SRN

### M1 J24 signalised roundabout traffic signing and road marking alterations

10.1 The works on the SRN include for works to the J24 signalised roundabout to reassign lanes to maximise capacity. The works are as follows:

- Traffic from the A453 southbound approach seeking the A453 southbound to EMG1, EMG2 and EMA will be signed to use lanes two and three at the A453 southbound signal stop line as opposed to lane three at present; and
- Traffic from the A453 northbound approach seeking the M1 northbound will be signed to use lanes one and two at the A453 northbound signal stop line as opposed to just lane one at present.

10.2 The works require minor alterations to lining and signing and as no significant alterations to the geometrical layout are required they are not considered further in this report. The preliminary design is provided with the directional signage strategy found at **Appendix 28** of the Transport Assessment (**Document DCO 6.6A**).

### M1 J24 signalised roundabout west side

10.3 As well as the changes to lane allocations from A453 northbound to M1 northbound discussed above, two further changes are proposed to the west side of the J24 signalised roundabout:

- Removal of the A453 northbound to A50 westbound and providing two lanes from the exit onto the A50, without a merge/lane-drop, as discussed at section 6 above; and
- Widening the inside of the J24 signalised roundabout to provide an additional lane, to then allow three lanes to be provided from the M1 northbound to A453 northbound through the junction.

10.4 The geometric design of these changes will be assessed in further detail within the next version of this report, which is to be provided for the DCO submission.

### Finger Farm directional signage

10.5 The works at Finger Farm relate solely to directional signage and are therefore not considered further in this report. The preliminary design is provided with the directional signage strategy found at **Appendix 28** of the Transport Assessment (**Document DCO 6.6A**).

### M1 northbound directional signage

10.6 Signage works are proposed to the M1 northbound on the approach to M1 J23A to direct users seeking the A50 to Stoke and Derby to use the new J24A exit rather than J23A as presently signed. The preliminary design is provided with the directional signage strategy found at **Appendix 28** of the Transport Assessment (**Document DCO 6.6A**).

## 11. PRINCIPLES OF GOOD ROAD DESIGN

- 11.1 An assessment of how the scheme design performs against DMRB standard GG 103, which provides principles of good road design, is found in Appendix 1 of the Design Approach Document, **Document DCO 5.3A**.

## ***APPENDICES***

---

## **APPENDIX 1: Safety Risk Assessment for M1 NB diverge and weaving length**



Safety Risk Assessment: GG104	<a href="#">GG 104 version 0.1.0</a>
Document reference	EMG2-BWB-GHS-XX-RA-CH-0001
Assessor	Simon Hilditch
Contact email	<a href="mailto:simon.hilditch@bwbcconsulting.com">simon.hilditch@bwbcconsulting.com</a>
Title of scheme	EMG2
BWB project number	220500
Part of scheme this applies to	M1 NB diverge layout at J24/24A
Location (map reference)	
Scope and purpose of this safety risk assessment	The purpose of this risk assessment is to assess the options for the diverge layout
Safety objective	To manage the risk to affected parties as low as reasonably practicable.

Safety baseline: general comments	<p><u>PIC data</u>: Circa 6 years of accident data has been obtained and this is for the period 1st January 2019 to 23rd October 2024 for the M1 northbound from J23A and to just beyond the J24 diverge.</p> <p>There is a cluster of PICs at the J24 northbound exit slip road and queuing back onto the M1 northbound mainline from the slip road is a regular occurrence at this location.</p>
Any recent changes in last 5 years that could affect safety?	None

Activity category	Type A
Features that need detailed review	2 Type B and 0 Type C

Principal hazard(s)	Weaving lengths are where drivers change lanes between a merge and a diverge and the amount of lane changing that takes place over the weaving length is the principal hazard.
Project description / background / objectives / outcomes	The purpose of the J24 improvements is to increase capacity to then facilitate EMG2. The main element of the works is to provide a free-flow link road from the M1 Northbound to A50 Westbound, taking this traffic out of the signalised roundabout (it is the only movement between the M1 and A50 that goes though the roundabout).

Populations affected	How is it affected and is there a specific safety objective?
Workers	Risks to workers shall be as low as reasonably practicable
Users	See principal hazard and objectives above
Other parties	No other parties are identified
Sub-populations - List	

Options / part of scheme to be assessed	Description of option / part of scheme
Option / Part 1	Existing situation - J24 layout B option 1 diverge with aux lane
Option / Part 2	Option A: J24A taper diverge followed by J24 taper diverge
Option / Part 3	Option C: J24A auxiliary lane diverge followed by J24 taper diverge
Option / Part 4	
Option / Part 5	
Preferred option (if options are assessed)	Option / Part 2
	Option A: J24A taper diverge followed by J24 taper diverge
How type B or C features (if any) affect option selection	Type B feature is because it does not comply with standards
State clear and precise reasons for selection	Overall the proposed options A and C, with mitigation measures, reduce the risks below the existing. Option C provides more length for drivers who may "swoop" and therefore becomes the preferred option overall.


Appraisal	
Are all risks for preferred option or parts as low as reasonably practicable following mitigation?	Yes
How have type B or C features (if any) been addressed?	Yes
Final recommendation for approval	
Recommendation	Option C should be progressed.
Any other comments / recommendations	The assessment shows that the risks in the proposed scheme following mitigation are lower than the existing scenario.

Date	24.06.25
Revision	P01
Status	S4

Safety baseline for M1 NB mainline for extents of scheme

Years	2019-2023		
Slight	10		
Serious	3		
Fatal	0		

Map of PICs for last 5 years



No. risks	Total risk score		Average risk score across all risks		No. risks eliminated
	Before mitigation	After mitigation	Before mitigation	After mitigation	
6	47	47	5.9	5.9	0
7	49	38	6.1	4.8	0
7	44	36	5.5	4.5	0
0	0	0			0
0	0	0			0

Feature (Table E/2.7)	Type	Indicator	Justification for choice of feature type	Select Type
<b>Extent of prior experience of activity</b>  The degree of knowledge available from undertaking the activity previously or the degree to which knowledge is available from the activity being undertaken by other industries or organisations.	A	Activities for which there is significant experience within National Highways. Previous safety studies and data are available, and some activity features are codified in a standard or formal procedure.	Weaving and closely spaced diverges is a common feature	A
	B	Activities for which there is limited experience within National Highways but there is transferable experience elsewhere in the UK or internationally. Activities for which there is limited experience in National Highways but there is experience elsewhere in the UK or internationally, including in different industries, which is deemed sufficiently similar to the activity in question to be deemed relevant. Activities for which there is experience within National Highways but that experience is in a different application of the activity and some adaptation will be required. There might also be local and site specific issues to take into account that can affect the relevance of the available experience		
	C	Activities for which there is no previous applicable experience from either National Highways or other industries.		
<b>Statutory and formal processes and procedures (including standards and legislation)</b>  Consideration of the applicability of current standards, formal processes or procedures, guidance and legislation.	A	The activity is substantially or entirely within the scope of existing standards, guidance, formal processes or procedures and applicable legislation. The activity requires minimal or no safety related departures from standard or safety related changes to formal processes or procedures (including any legislation).	Reduction in weaving is a departure	B
	B	The activity is largely within the scope of existing standards, guidance, formal processes or procedures. There can be some safety related departures from standards needed and/or safety related changes to formal processes or procedures. The activity can need minor changes to existing legislation.		
	C	Activities that are not within the scope of existing standards, formal processes or procedures and require new ones to be developed. Activities for which significant departures from standards, formal processes or procedures are required. Activities which require significant changes to existing legislation or new legislation to be written. Whilst the number of safety departures from standards, formal processes or procedures can affect the categorisation, the most important element in determining this is the nature and type of the departures. For example, a large number of safety departures that can be addressed straightforwardly will have less impact on feature type than a single safety departure that cannot and requires a detailed risk assessment to support it.		
<b>Impact on the organisation</b>  The effect that the activity will have on current Highways England processes, procedures, structure, roles and responsibilities, competencies, policies and strategy, in addition to contractual and workforce arrangements.	A	The activity has no impact on National Highways. The activity has a minor impact on any of these for a finite period of time. Length of time National Highways is affected by decision to undertake the activity is short term.	No impact identified for National Highways	A
	B	The activity can lead to permanent minor changes to any of these. These minor changes can introduce new roles and responsibilities, policies, contractual and workforce arrangements. The activity can require a change to organisational arrangements. Length of time National Highways is affected by decision to undertake the activity is medium term.		
	C	The activity has significant impact on any of these. The activity can change core safety roles and responsibilities. Length of time National Highways is affected by decision to undertake the activity is long term.		
<b>Activity scale</b>  Consideration of the size and/or scale of the activity. Does or can the activity have an impact on the motorway and all-purpose trunk roads, either directly or indirectly.	A	The impact of the activity is limited in nature or scale.	This covers a key section of the M1	B
	B	The impact of the activity is significant in nature or scale.		
	C	The impact of the activity is wide ranging across the network, and/or significantly impacts infrastructure, interventions or workforce.		
<b>Technical</b>  Measure of technical and/or technological novelty and/or innovation the activity involves.	A	An activity where any processes, techniques, methodologies and/or technologies involved are currently in widespread use and re-examination is unlikely to be needed. There can be some experience of the processes, techniques, methodologies and/or technologies.	Such layouts are in widespread use and doesn't involve new technologies.	A
	B	The experience can be from use in either another application, or by another road authority, supplier, industry or perhaps from overseas in which case some additional work can be required to adapt them and/or to demonstrate that safety can be assured for the intended application.		
	C	Activities that use new processes, techniques, methodologies and/or technologies for which there is no previous experience in the UK or elsewhere.		
<b>Stakeholder impact and interest</b>  The quantity and/or impact of stakeholders, their interest in and resulting ability to influence or/impact on the activity. The degree to which the safety issues, as perceived, are capable of being understood and fully addressed.	A	Activities for which the quantity and/or impact of stakeholders, their interest in and resulting ability to influence or impact the activity is low Activities that have only a single or a few stakeholders but their impact, in terms of their attitude towards, or ability to influence, and/or interest in the successful achievement of the activities aim can be significant.	Minimal impact to stakeholders.	A
	B	Alternatively it will represent an activity that has several stakeholders but the amount, or type, of safety issues involved are limited. Activities for which there are a large number of stakeholders and their impact in terms of their attitude towards, or ability to influence can be significant.		
	C	Stakeholders with a strong interest in the potential safety impact of the activity on themselves. Activities where there are conflicting needs arising from different stakeholders or stakeholder groups.		

Type A features	4
Type B features	2
Type C features	0

Table E/2.8.1 category type	Type A
No. other features to be reviewed in more detail	2 Type B and 0 Type C
Final category decision	Type A

Safety Risk Assessment

Project Name	EMG2
BWB Project Number	220500
Design Element	M1 NB diverge layout at J24/24A

Unique Ref.	Phase	Hazard description (before mitigation)	Incident type	Hazard affects	Designer comments and assumptions
1	Operation	Frequent lane changing over short distances	Side swipes	Users	
2	Operation	Flow breakdown due to weaving	Rear shunts or side swipes	Users	
3	Operation	Flow breakdown due to weaving	High speed swerves with loss of control	Users	
4	Operation	Exit slip queuing back onto mainline	Rear shunts or multi vehicle incidents	Users	
5	Operation	Swooping into diverge following last moment lane changing	Side swipes	Users	
6	Operation	Swooping into diverge following last moment lane changing	Loss of control	Users	
7	Operation	Missed first exit and driver panics or attempts reverse	Multi vehicle incident	Users	
8	Operation	Driver enters first exit by mistake and changes lane back	Side swipes	Users	

Safety Risk Assessment

Project Name	EMG2
BWB Project Number	220500
Design Element	M1 NB diverge layout at J24/24A
Option / Part Reference	1
Option / Part Description	Existing situation - J24 layout B option 1 diverge with aux lane

Current design stage	Detailed Design
Notes	

Unique Ref.	Phase	Hazard description (before mitigation)	Incident type	Hazard affects	Is risk present in this option?	Risk without mitigation			Mitigation measures	Mitigation type	Risk with mitigation			Designer comments and assumptions
						Likelihood	Severity	Score			Likelihood	Severity	Score	
1	Operation	Frequent lane changing over short distances	Side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Assessment of existing scenario hence no mitigation set out.		Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	
2	Operation	Flow breakdown due to weaving	Rear shunts or side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Assessment of existing scenario hence no mitigation set out.		Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Existing layout has technology to detect queues and reduce speed limits
3	Operation	Flow breakdown due to weaving	High speed swerves with loss of control	Users	Yes	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Assessment of existing scenario hence no mitigation set out.		Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Existing layout has technology to detect queues and reduce speed limits
4	Operation	Exit slip queuing back onto mainline	Rear shunts or multi vehicle incidents	Users	Yes	May happen: Once every 5-10 years	Serious harm: Serious injury or illness, substantial damage or loss	9 : Low	Assessment of existing scenario hence no mitigation set out.		May happen: Once every 5-10 years	Serious harm: Serious injury or illness, substantial damage or loss	9 : Low	Existing layout has technology to detect queues and reduce speed limits
5	Operation	Swooping into diverge following last moment lane changing	Side swipes	Users	Yes	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	Assessment of existing scenario hence no mitigation set out.		May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
6	Operation	Swooping into diverge following last moment lane changing	Loss of control	Users	Yes	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Assessment of existing scenario hence no mitigation set out.		Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	
7	Operation	Missed first exit and driver panics or attempts reverse	Multi vehicle incident	Users	No	Risk not present	Risk not present	0 : Not present	Assessment of existing scenario hence no mitigation set out.		Risk not present	Risk not present	0 : Not present	
8	Operation	Driver enters first exit by mistake and changes lane back	Side swipes	Users	No	Unlikely: Less than 1 per 10 years	Moderate harm: Slight injury or illness, moderate damage or loss	4 : Low	Assessment of existing scenario hence no mitigation set out.		Unlikely: Less than 1 per 10 years	Moderate harm: Slight injury or illness, moderate damage or loss	4 : Low	Risk present in current layout due to having first exit signed A50 and second A453

Safety Risk Assessment

Project Name	EMG2
BWB Project Number	220500
Design Element	M1 NB diverge layout at J24/24A
Option / Part Reference	2
Option / Part Description	Option A: J24A taper diverge followed by J24 taper diverge

Current design stage	Detailed Design
Notes	

Unique Ref.	Phase	Hazard description (before mitigation)	Incident type	Hazard affects	Is risk present in this option?	Risk without mitigation			Mitigation measures	Mitigation type	Risk with mitigation			Designer comments and assumptions
						Likelihood	Severity	Score			Likelihood	Severity	Score	
1	Operation	Frequent lane changing over short distances	Side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Improved signage and signalling	Reduce	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
2	Operation	Flow breakdown due to weaving	Rear shunts or side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Improved signage and signalling	Reduce	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
3	Operation	Flow breakdown due to weaving	High speed swerves with loss of control	Users	Yes	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Improved signage and signalling		Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Mitigation does not affect the risk as likelihood is already low
4	Operation	Exit slip queuing back onto mainline	Rear shunts or multi vehicle incidents	Users	No	Risk not present	Risk not present	0 : Not present	n/a		Risk not present	Risk not present	0 : Not present	Risk not present in proposed option as scheme provides capacity on J24 diverge slip
5	Operation	Swooping into diverge following last moment lane changing	Side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Improved signage and signalling	Reduce	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
6	Operation	Swooping into diverge following last moment lane changing	Loss of control	Users	Yes	May happen: Once every 5-10 years	Serious harm: Serious injury or illness, substantial damage or loss	9 : Low	Improved signage and signalling	Reduce	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	
7	Operation	Missed first exit and driver panics or attempts reverse	Multi vehicle incident	Users	Yes	Very unlikely: Highly improbable, not known to occur	Major harm: Fatal injury, major damage or loss	4 : Low	No mitigation considered necessary		Very unlikely: Highly improbable, not known to occur	Major harm: Fatal injury, major damage or loss	4 : Low	Risk very unlikely as next exit, with access to all routes, is immediately ahead
8	Operation	Driver enters first exit by mistake and changes lane back	Side swipes	Users	Yes	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	Improved signage and signalling	Reduce	Unlikely: Less than 1 per 10 years	Moderate harm: Slight injury or illness, moderate damage or loss	4 : Low	

Safety Risk Assessment

Project Name	EMG2
BWB Project Number	220500
Design Element	M1 NB diverge layout at J24/24A
Option / Part Reference	3
Option / Part Description	Option C: J24A auxiliary lane diverge followed by J24 taper diverge

Current design stage	Detailed Design
Notes	

Unique Ref.	Phase	Hazard description (before mitigation)	Incident type	Hazard affects	Is risk present in this option?	Risk without mitigation			Mitigation measures	Mitigation type	Risk with mitigation			Designer comments and assumptions
						Likelihood	Severity	Score			Likelihood	Severity	Score	
1	Operation	Frequent lane changing over short distances	Side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Improved signage and signalling	Reduce	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
2	Operation	Flow breakdown due to weaving	Rear shunts or side swipes	Users	Yes	Likely: Once every 1-4 years	Moderate harm: Slight injury or illness, moderate damage or loss	8 : Low	Improved signage and signalling	Reduce	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	
3	Operation	Flow breakdown due to weaving	High speed swerves with loss of control	Users	Yes	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Improved signage and signalling		Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Mitigation does not affect the risk as likelihood is already low
4	Operation	Exit slip queuing back onto mainline	Rear shunts or multi vehicle incidents	Users	No	Risk not present	Risk not present	0 : Not present	n/a		Risk not present	Risk not present	0 : Not present	Risk not present in proposed option as scheme provides capacity on J24 diverge slip
5	Operation	Swooping into diverge following last moment lane changing	Side swipes	Users	Yes	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	Improved signage and signalling	Reduce	Unlikely: Less than 1 per 10 years	Moderate harm: Slight injury or illness, moderate damage or loss	4 : Low	Risk lower prior to mitigation due to increase diverge length with auxiliary lane
6	Operation	Swooping into diverge following last moment lane changing	Loss of control	Users	Yes	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Improved signage and signalling	Reduce	Unlikely: Less than 1 per 10 years	Serious harm: Serious injury or illness, substantial damage or loss	6 : Low	Risk lower prior to mitigation due to increase diverge length with auxiliary lane
7	Operation	Missed first exit and driver panics or attempts reverse	Multi vehicle incident	Users	Yes	Very unlikely: Highly improbable, not known to occur	Major harm: Fatal injury, major damage or loss	4 : Low	No mitigation considered necessary		Very unlikely: Highly improbable, not known to occur	Major harm: Fatal injury, major damage or loss	4 : Low	Risk very unlikely as next exit, with access to all routes, is immediately ahead
8	Operation	Driver enters first exit by mistake and changes lane back	Side swipes	Users	Yes	May happen: Once every 5-10 years	Moderate harm: Slight injury or illness, moderate damage or loss	6 : Low	Improved signage and signalling	Reduce	Unlikely: Less than 1 per 10 years	Moderate harm: Slight injury or illness, moderate damage or loss	4 : Low	



Table D1 - Risk Value, likelihood and severity of outcomes that may be assigned to qualitative data for the purpose of assessment						
Likelihood (L) x Severity (S) = Risk value (R )		Severity (S)				
		Minor Harm, Minor Damage or loss no injury	Moderate harm - slight injury or illness, moderate damage or loss	Serious harm - serious injury or illness, substantial loss or damage	Major harm - Fatal injury, major damage or loss	Extreme harm - Multiple fatalities, extreme loss or damage
Likelihood (L)	Very Unlikely - Highly Improbable not known to occur	1	2	3	4	5
	Unlikely - less than 1 per 10 years	2	4	6	8	10
	May Happen - Once every 5-10 years	3	6	9	12	15
	Likely - Once every 1-4 years	4	8	12	16	20
	Almost Certain - Once a year or more	5	10	15	20	25
Risk Value (R )		Required Action				
Low (1-9)		Ensure assumed control measures are maintained and reviewed as necessary				
Medium (10-19)		Additional control measures needed to reduce risk rating to a level which is equivalent to a test of "reasonably required" for the population concerned				
High (20-25)		Activity not permitted. Hazard avoided or risk to be reduced to tolerable				

## **APPENDIX 2: List of Road Layout departures from standard for proposed scheme**

DAS Reference	Designers Departure Reference	Likely Departure Safety Risk Category	Design Standard	Departure Location	Departure Summary
TBC	G1	A	CD 122 para 4.5	M1 northbound mainline J23A-24	Weaving length is reduced below existing; Minimum weaving length is less than 2km
TBC	G2	A	CD 122 para 3.36	M1 northbound J24A & J24 exit spacing	Spacing of successive diverges is less than 3.75m measured between tips of noses
TBC	G3	A	CD 122 para 4.7	M1 northbound mainline J23A-24	No. lanes is less than that calculated for weaving section
TBC	G4	A	CD 122 para 3.34	M1 northbound J24A exit	SSD into the diverge is below desirable minimum
TBC	G6	A	CD 122 para 1.3	M1 northbound to A50 westbound	Relaxation below desirable minimum crest K value for interchange link (value of crest K varies per option)
TBC	G7	A	CD 122 para 1.3	M1 northbound to A50 westbound	Relaxation below desirable minimum SSD value for interchange link (value of minimum SSD varies per option), for bridge options 2B and 2D it includes a reduction below desirable minimum SSD on the immediate approach to the A50 merge
TBC	G8	A	CD 127 para 4.1	M1 northbound to A50 westbound bridge at A453	Reduction in headroom from 6.45m to 5.84m over a high load route
TBC	G9	A	CD 122	A50 westbound merge	Aspect not covered, layout G option 2 merge but without three lane (width) from reduction taper to downstream merge
TBC	G10	A	CD 122 para 1.3	M1 northbound to A50 westbound	Reduction below desirable minimum SSD on an interchange link and on the immediate approach to the merge
TBC	G11	A	CD 195 para E/3.20	A453 cycle track	Horizontal radii of 11.5m
TBC	S1	A	CD 146 para 3.4	M1 northbound J24A exit	Final direction sign more than 50m upstream of ExDP
TBC	S2	A	CD 146 para 3.2	M1 northbound J24A exit	½ mile secondary direction sign, 907m upstream of ExDP, 22m out of tolerance

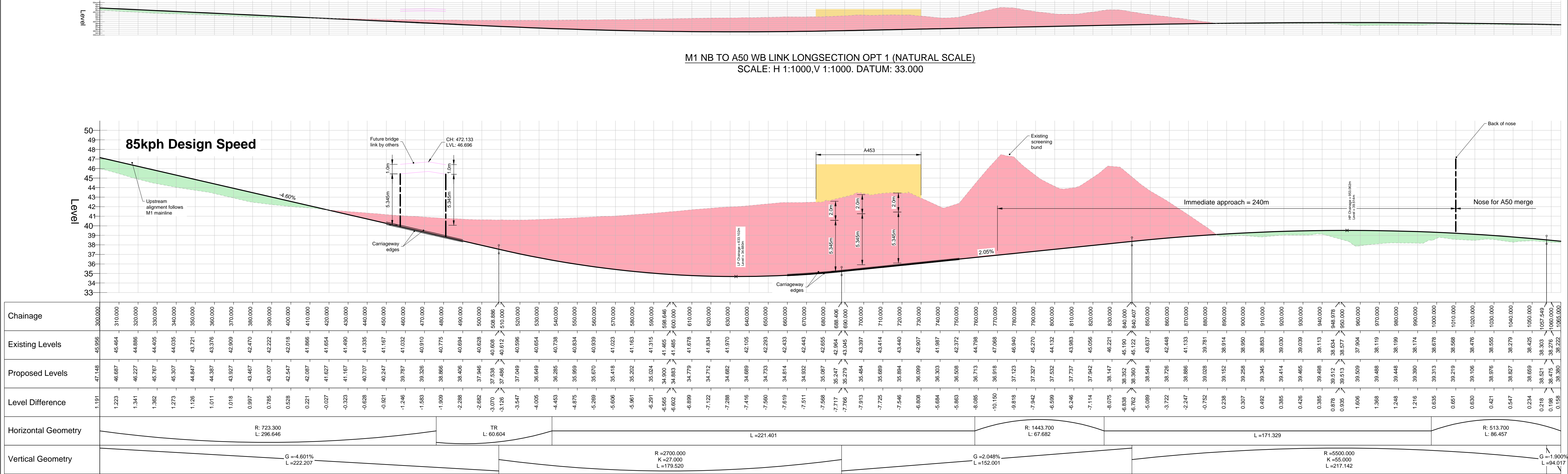
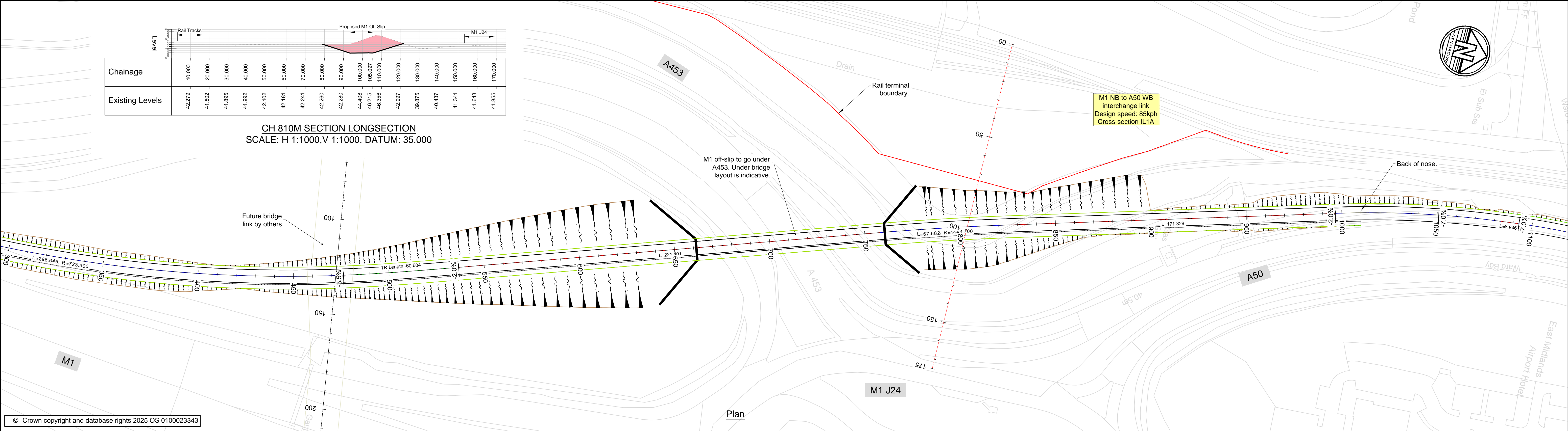


DAS Reference	Designers Departure Reference	Likely Departure Safety Risk Category	Design Standard	Departure Location	Departure Summary
TBC	S3	A	CD 146 para 3.2	M1 northbound J24 exit	¾ mile secondary direction sign is proposed at 14m out of tolerance upstream
TBC	S5	A	CD 146 para 4.19	M1 northbound J24A exit	Omission of confirmatory ALS
TBC	S6	A	CD 146 para 4.25	M1 northbound J24A exit	Primary VMS is located 773m upstream of the primary direction sign



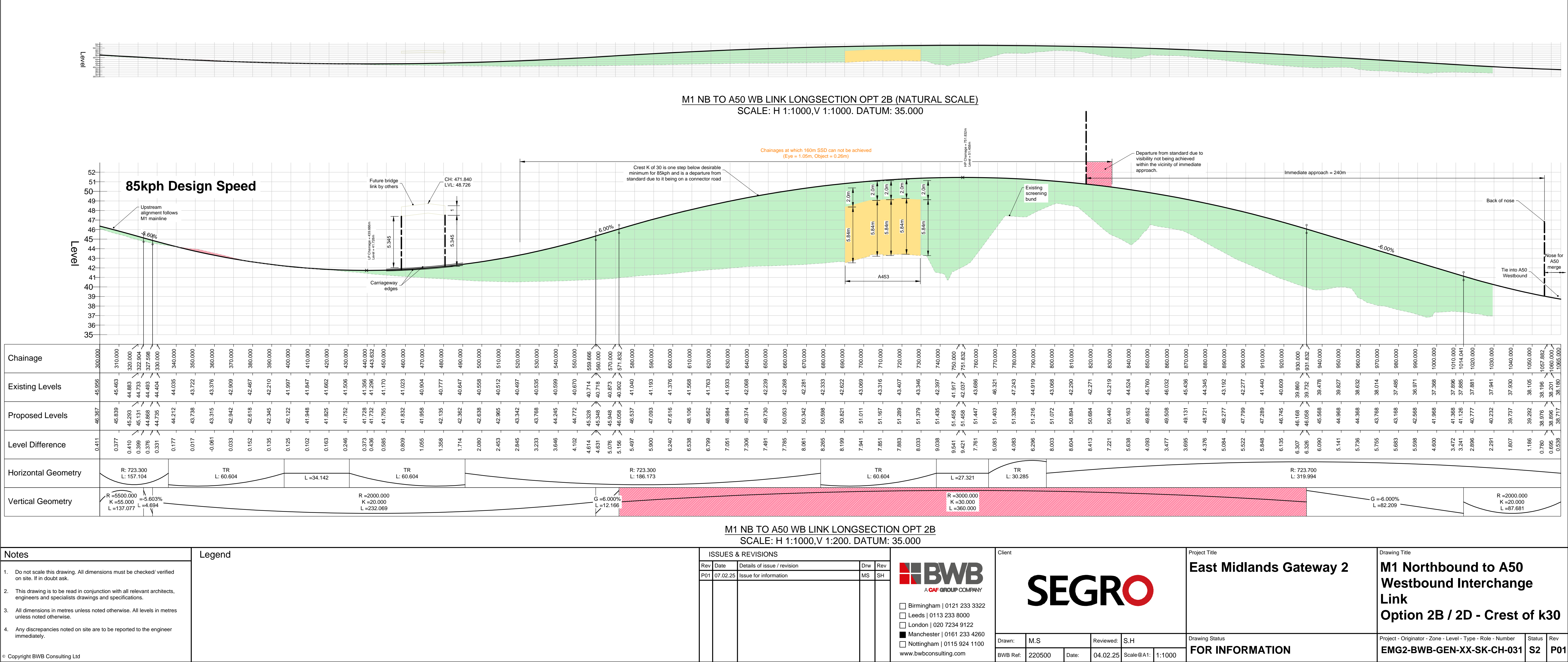
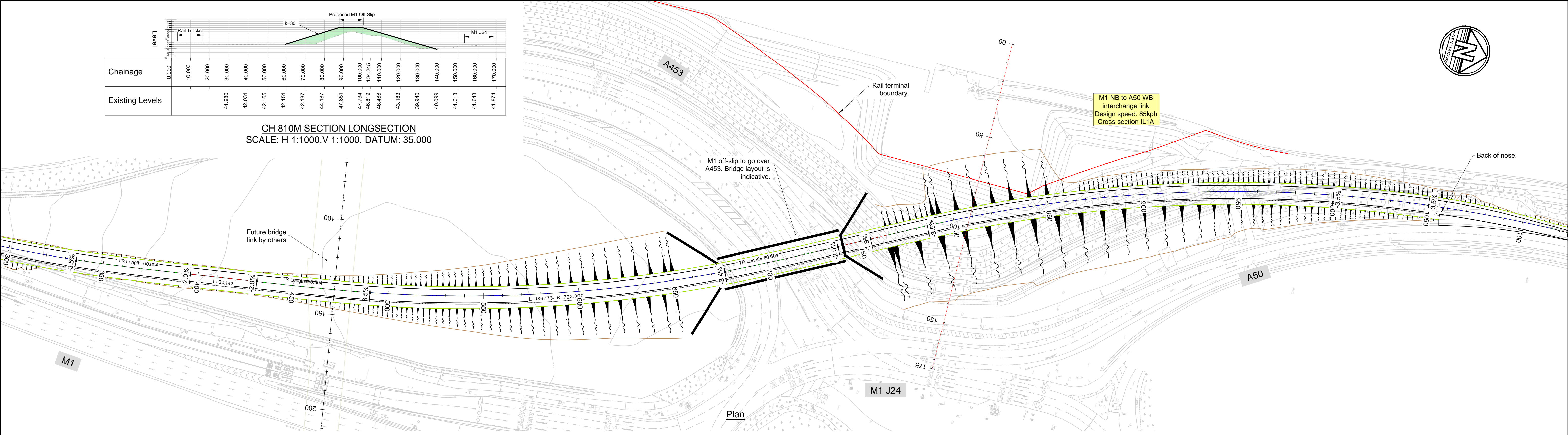






M1 NB TO A50 WB LINK LONGSECTION OPT 1																		
SCALE: H 1:1000,V 1:200. DATUM: 33.000																		
Notes		Legend		ISSUES & REVISIONS					Client		Project Title		Drawing Title					
				Rev			Date	Details of issue / revision							Drw	Rev		
				P01			07.02.25	Issue for information							MS	SH		
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.  2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.  3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.  4. Any discrepancies noted on site are to be reported to the engineer immediately.									<div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div>BWB</div><div>A CAF GROUP COMPANY</div></div></div> <div><input type="checkbox"/> Birmingham   0121 233 3322</div> <div><input type="checkbox"/> Leeds   0113 233 8000</div> <div><input type="checkbox"/> London   020 7234 9122</div> <div><input checked="" type="checkbox"/> Manchester   0161 233 4260</div> <div><input type="checkbox"/> Nottingham   0115 924 1100</div> <div>www.bwbconsulting.com</div>		Drawn: M.SReviewed: S.H		Drawing Status		Project - Originator - Zone - Level - Type - Role - Number		StatusRev	
© Copyright BWB Consulting Ltd									BWB Ref: 220500Date: 04.02.25Scale@A1: 1:1000		FOR INFORMATION		EMG2-BWB-GEN-XX-SK-CH-030		S2P01			



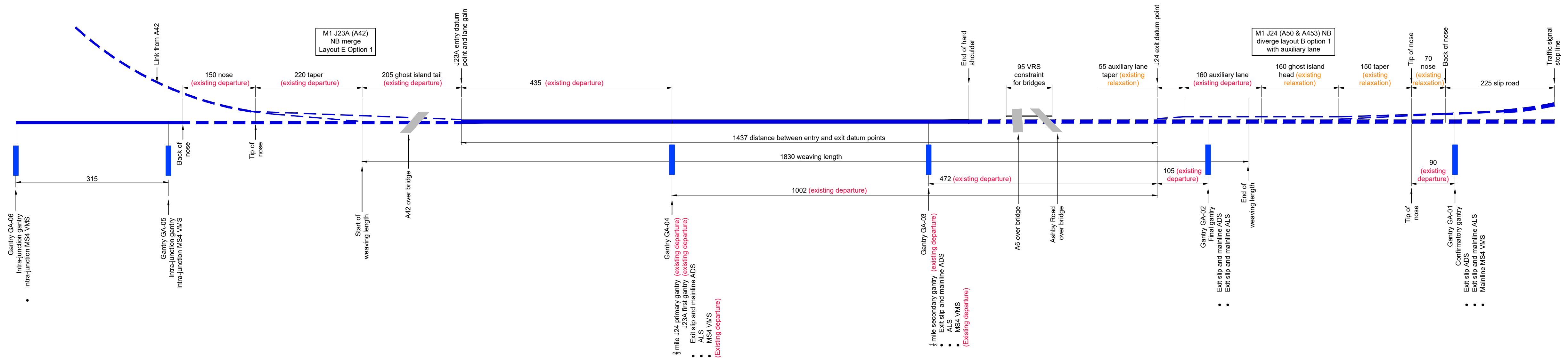




Option B  
Single mainline J24  
diverge followed by fork  
diverge

Option A  
Dual taper  
diverge










Existing layout



## Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

### Legend & CD 146 notes

Motorway links				
No. lanes	Existing with hard shoulder	Existing without hard shoulder	New / amended with hard shoulder	New / amended without hard shoulder
1				
2				
3				
4				

Existing gantry      New gantry      Existing gantry with replacement ADS

## Notes from CD 146 on standard ADS locations

- Confinement ADS shall be 30-50m downstream of tip of diverge nose
- Final ADS shall be 0-50m upstream of the exit datum point
- $\frac{1}{3}$  mile shall be at 536m + 10% - 20m
- $\frac{2}{3}$  mile shall be at 805m + 10% - 20m
- $\frac{4}{5}$  mile shall be at 1073m + 10% - 20m
- 1 mile shall be at 1609m + 10% - 20m

\*  $\frac{3}{4}$  mile is not permitted in CD 146 but is prescribed in the TSRGD.  $\frac{3}{4}$  mile tolerance would be 1207m + 10% - 20m

## ISSUES &amp; REVISIONS

Rev	Date	Details of issue / revision	Drw	Rev
P01	24.02.25	Issued for information	SRH	SRH
P02	10.03.25	Weaving length for options C and D amended	SRH	SRH
P03	24.06.25	J23A merge dimensions updated	SRH	SRH



☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☐ Manchester | 0161 233 4260  
☒ Nottingham | 0115 924 1100  
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client	
--------	--



Drawn:	S. Hilditch		Reviewed:	S.Hilditch	
BWB Ref:	220500	Date:	24.02.25	Scale@A1:	1:5,000

Project

## EAST MIDLANDS GATEWAY 2 (EMG2)

Drawing Status

## FOR INFORMATION

Drawing Title

# M1 NORTHBOUND DIVERGE OPTIONS SHEET 1

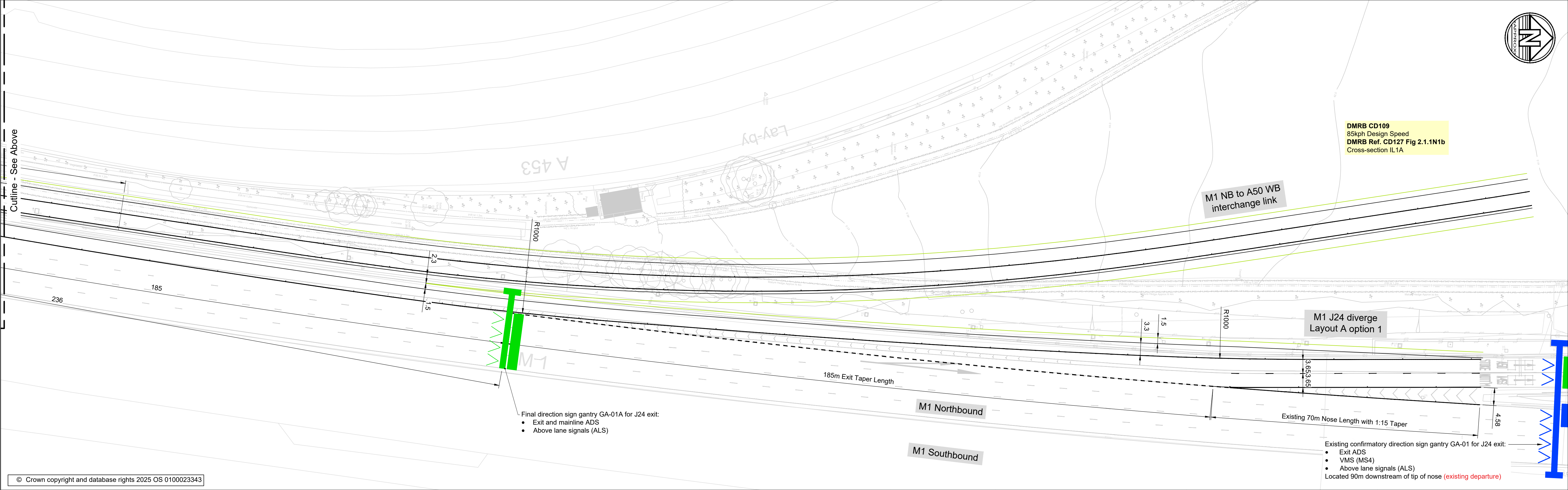
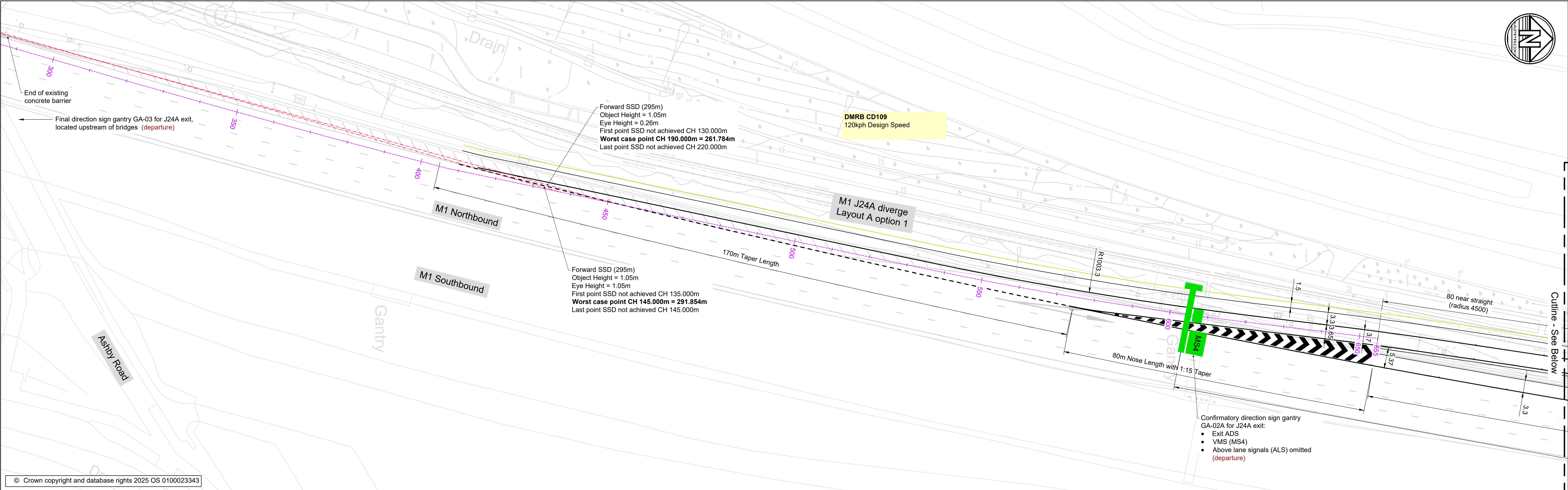
Project - Originator - Zone - Level - Type - Role - Number

Status

Rev
-----

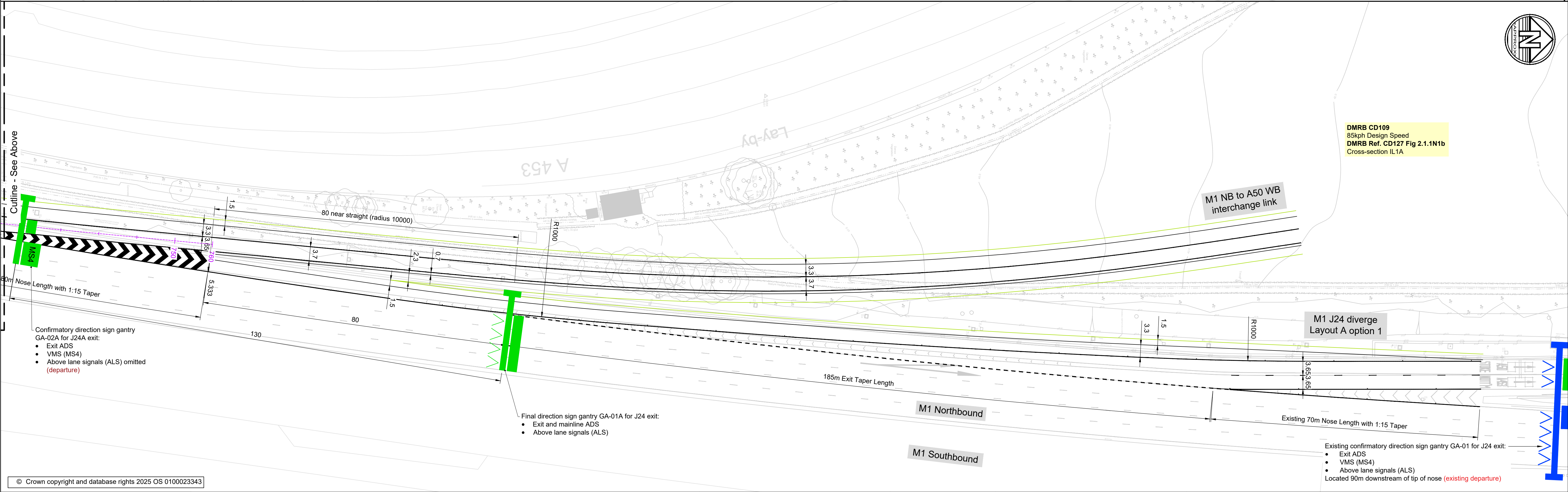
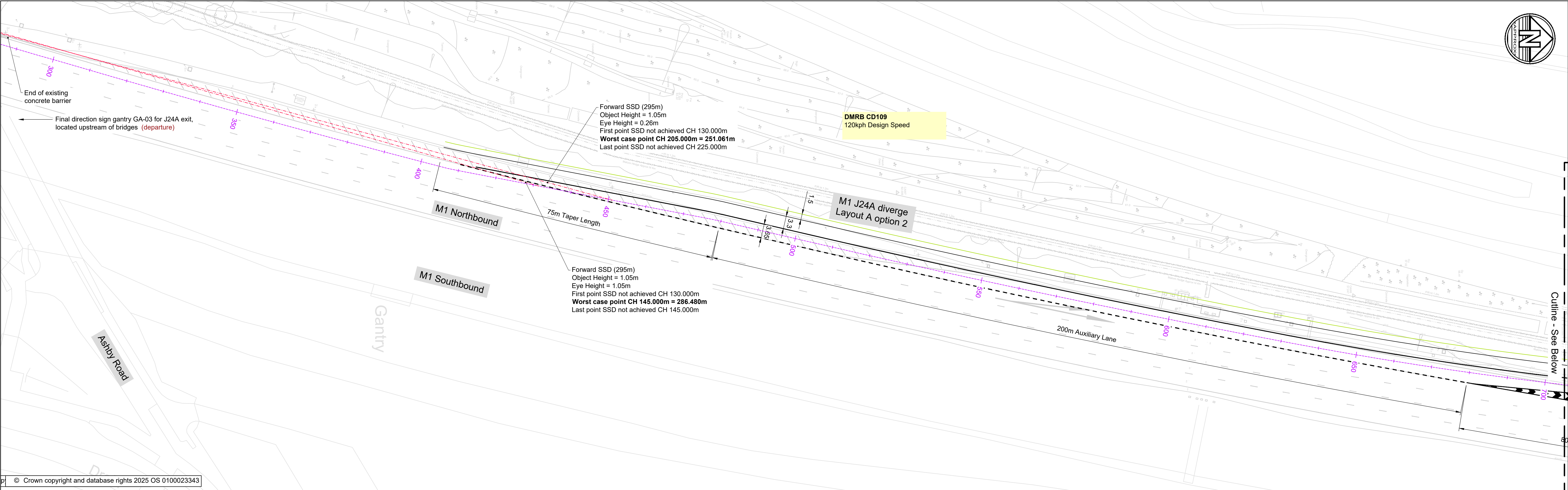
Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-GEN-XX-SK-CH-SK033	S2	P03





Notes		ISSUES & REVISIONS		Client		Project Title		Drawing Title	
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.		Rev Date Details of issue / revision		M.S		East Midlands Gateway 2		M1 J24 & 24A Northbound Diverge Layout Option A	
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.		P01 26.02.25 Issue for information		MS SH		Drawing Status		Project - Originator - Zone - Level - Type - Role - Number	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.						FOR INFORMATION		EMG2-BWB-GEN-XX-SK-CH-034	
4. Any discrepancies noted on site are to be reported to the engineer immediately.						Status		Rev	
© Copyright BWB Consulting Ltd								P01	





- Notes
- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
  - This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
  - All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
  - Any discrepancies noted on site are to be reported to the engineer immediately.
- © Copyright BWB Consulting Ltd

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	SH
P01	28.02.25	Issue for information		MS	SH



☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Drawn: M.S. Reviewed: S.H. Scale@A1: 1:500

BWB Ref: 220500 Date: 27.02.25

Project Title

**East Midlands Gateway 2**

Drawing Status

**FOR INFORMATION**

Drawing Title

**M1 J24 & 24A Northbound Diverge Layout Option C**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-GEN-XX-SK-CH-035**

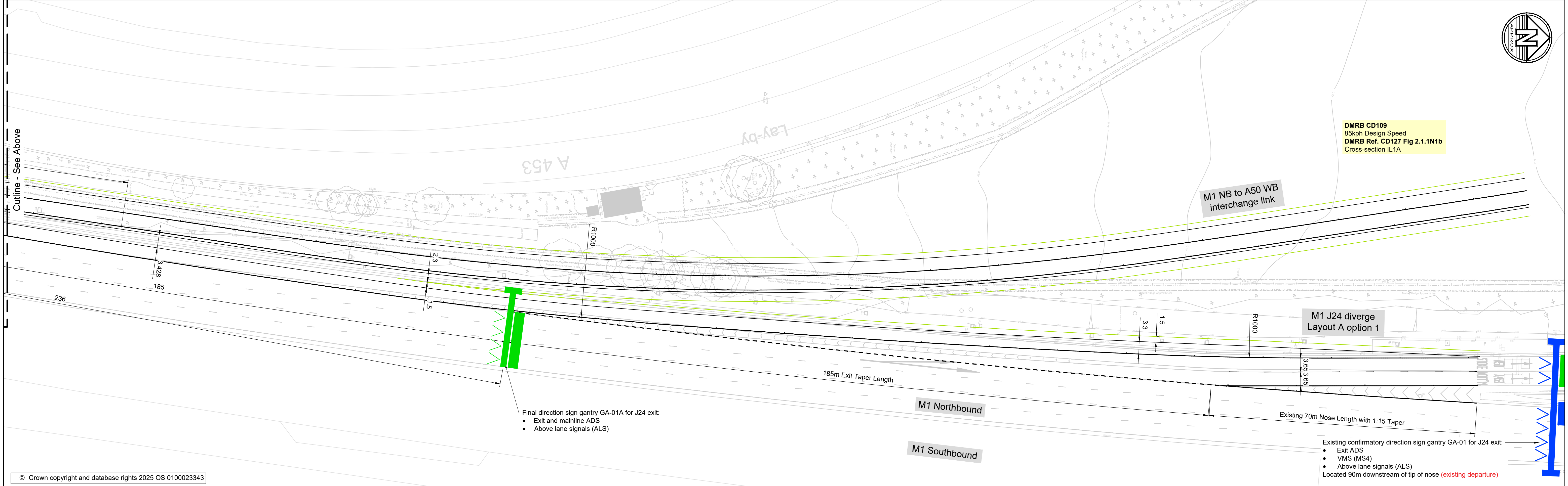
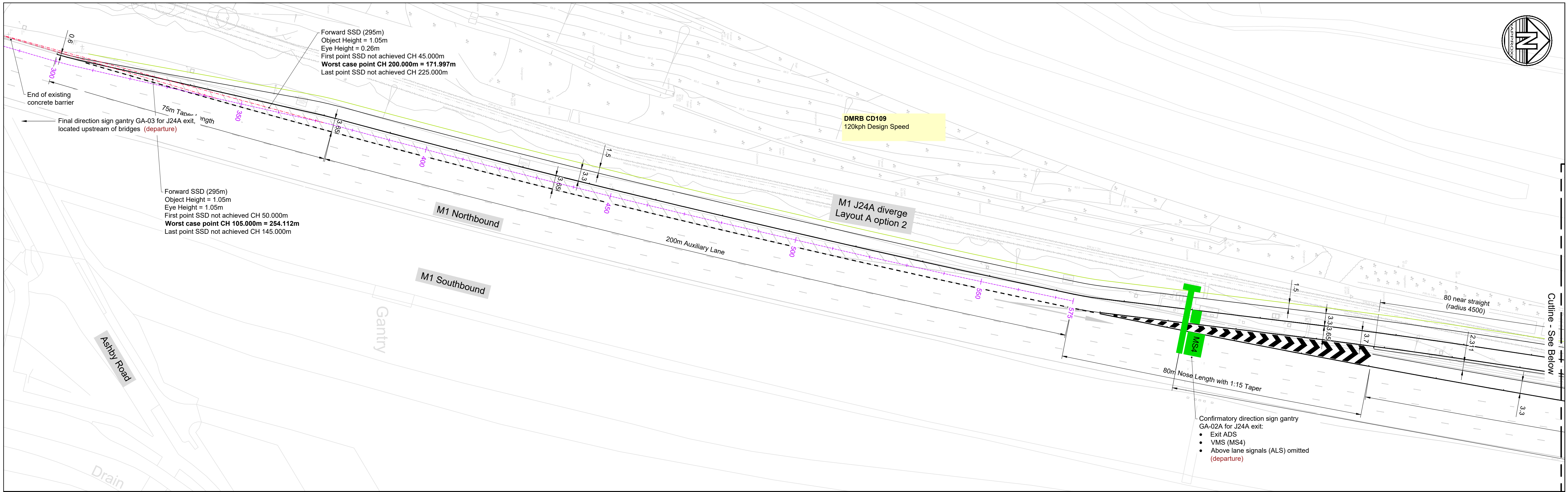
Status

**S2**

Rev

**P01**





## Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.


© Copyright BWB Consulting Ltd

[illegible]

**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100

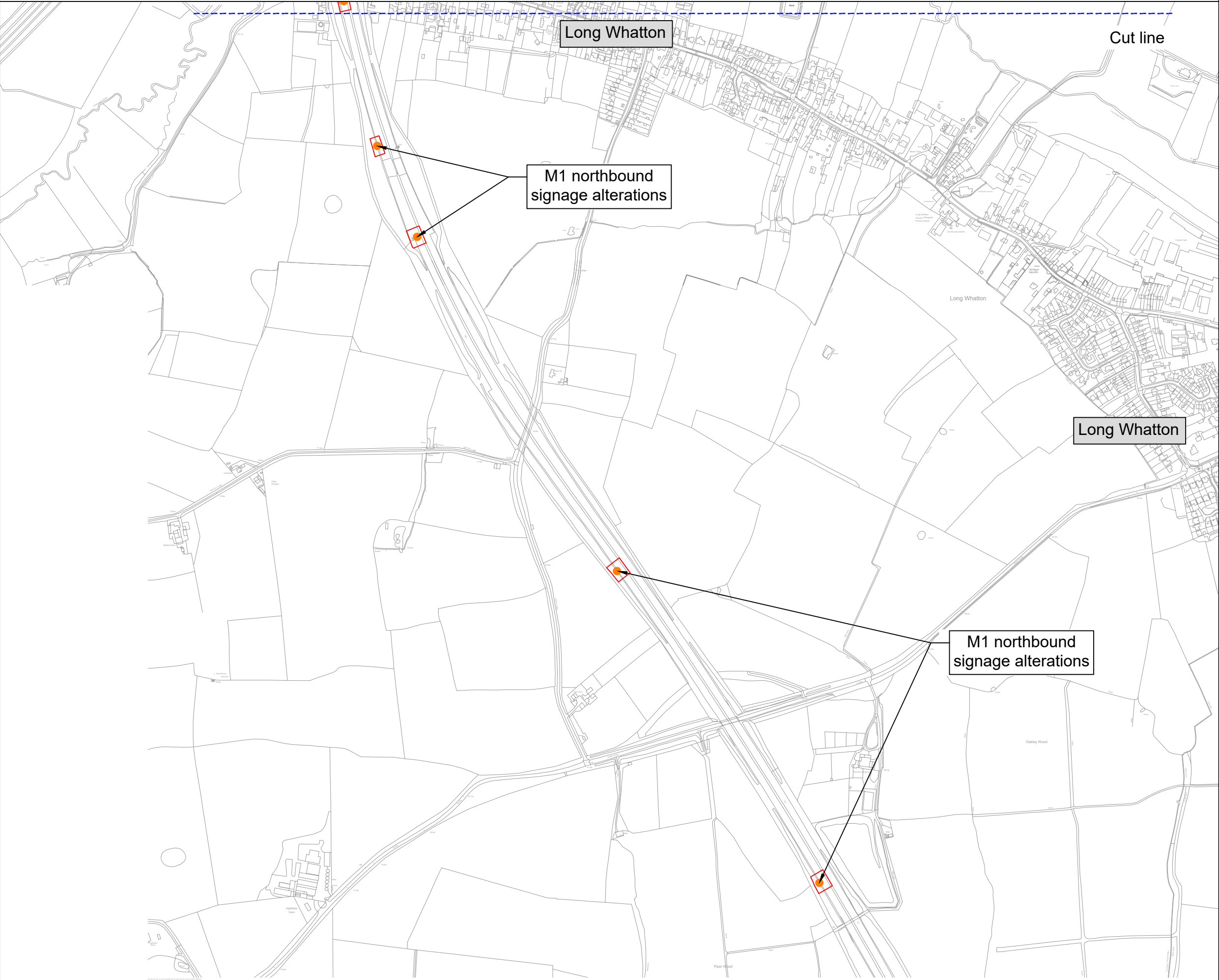
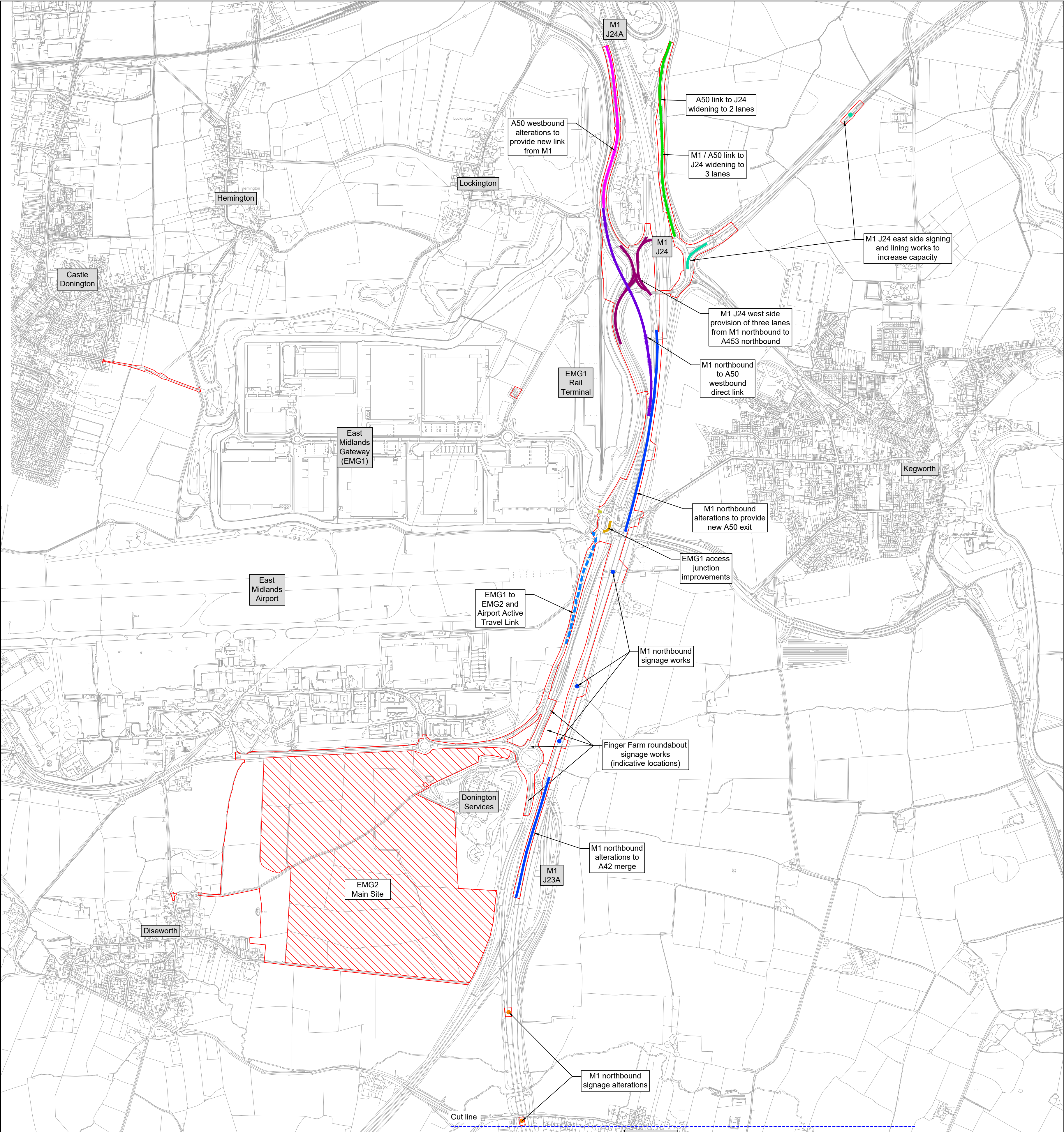
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client			
			
Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	27.02.25
		Scale@A1:	1:500

Project Title	<b>East Midlands Gateway 2</b>
Drawing Status	<b>FOR INFORMATION</b>

Drawing Title			
M1 J24 & 24A Northbound Diverge Layout Option D			
Project - Originator - Zone - Level - Type - Role - Number	Status	Rev	
EMG2-BWB-GEN-XX-SK-CH-036	S2	P01	





**Notes**

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

ISSUES & REVISIONS				Drw		Rev	
Rev	Date	Details of issue / revision		SRH	SRH		
P01	04.03.25	Issued for information		SRH	SRH		
P02	24.06.25	Scheme updated		SRH	SRH		




A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☐ Manchester | 0161 233 4260  
☒ Nottingham | 0115 924 1100  
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client



Drawn:	S. Hilditch	Reviewed:	S.Hilditch
BWB Ref:	220500	Date:	04.03.25
		Scale@A1:	1:10,000

Project Title

**EAST MIDLANDS GATEWAY 2 (EMG2)**

Drawing Status

**FOR INFORMATION**

Drawing Title

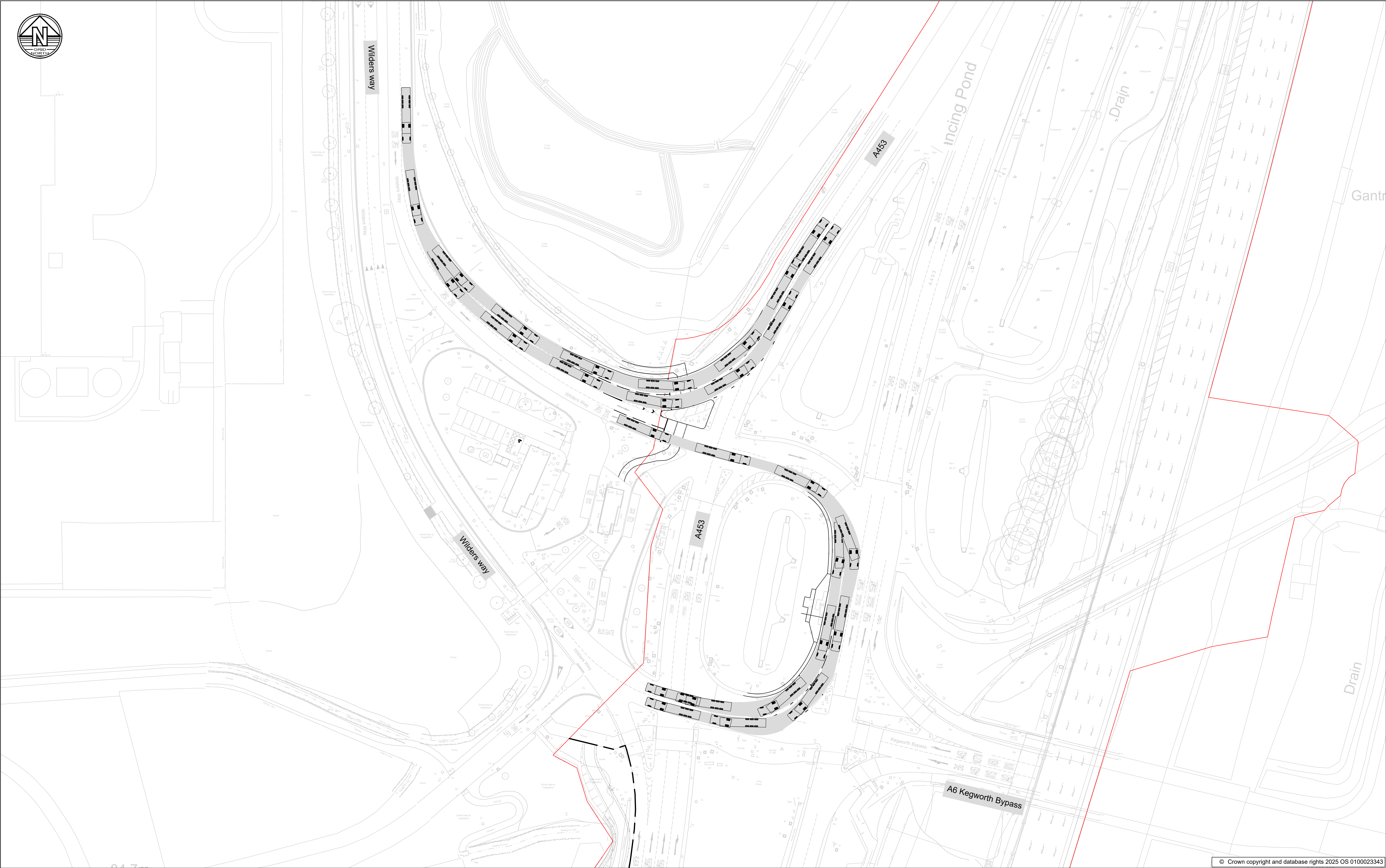
**OVERVIEW OF WORKS ON THE STRATEGIC ROAD NETWORK**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-GEN-XX-SK-CH-SK037**

Status	Rev
<b>S2</b>	<b>P02</b>





## Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

© Copyright BWB Consulting Ltd

FTA Design Articulated Vehicle (1998)

Overall Length	33.01
Overall Width	6.8
Overall Body Height	4.1
Min Body Ground Clearance	1.0
Max Track Width	2.3
Lock to lock time	7.8
Kerb to Kerb Turning Radius	6.55

Rev	Date	Details of issue / revision	Drw	Rev
P01	04.03.25	Issue for information	MS	SH



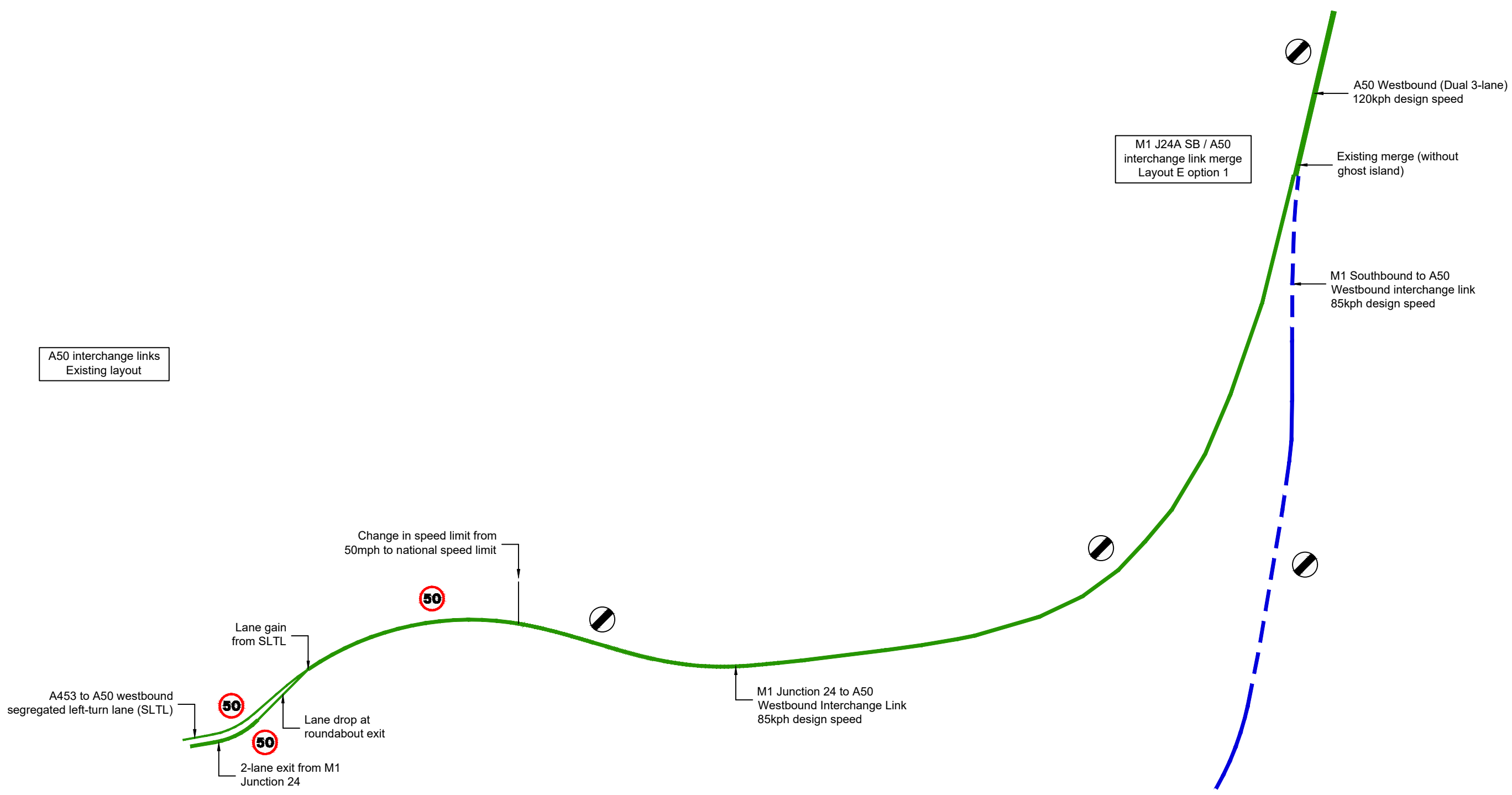
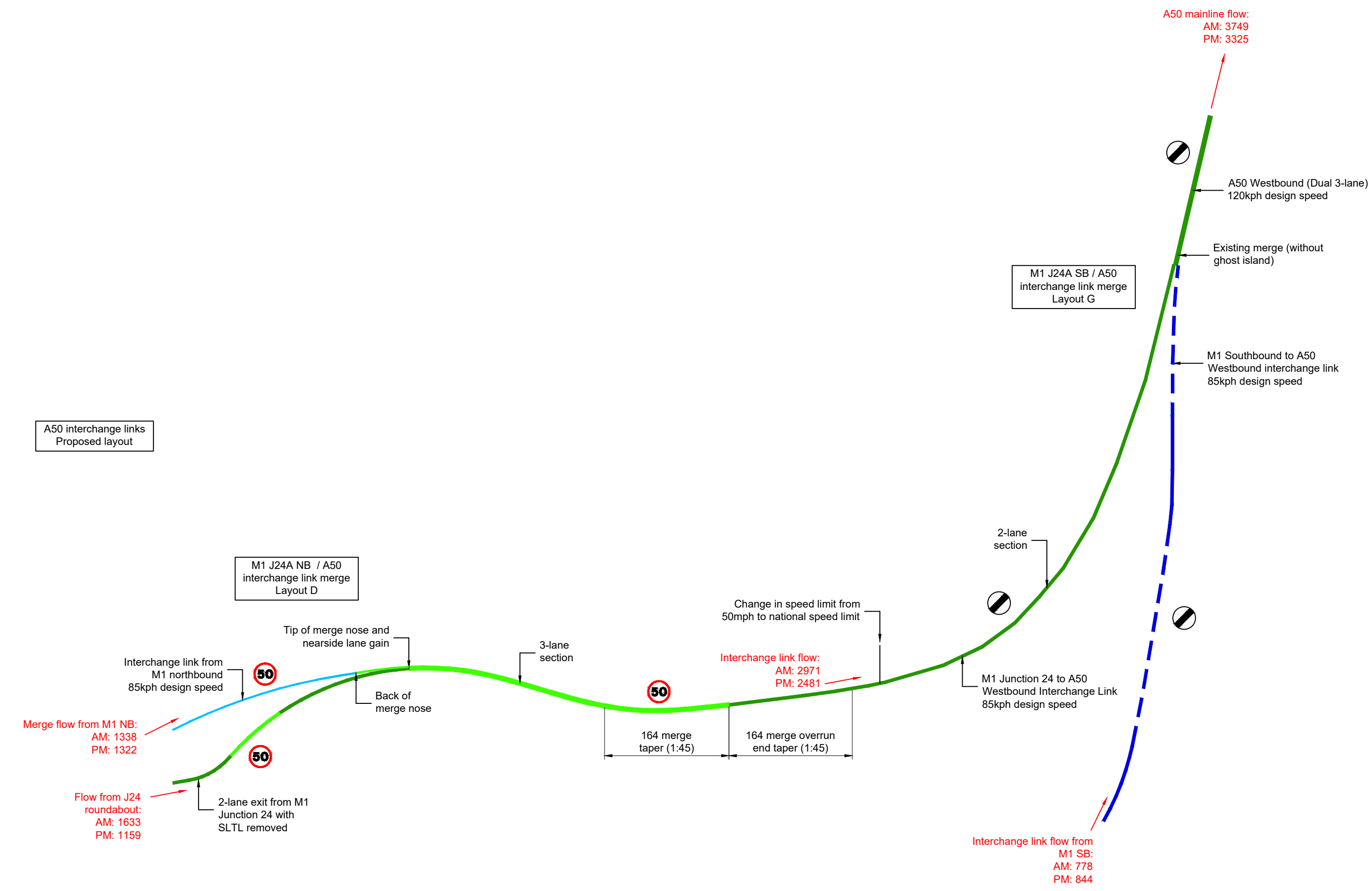
Client					
					
Drawn:		M.S		Reviewed:	
BWB Ref:		220500		Date:	
		04.03.25		Scale@A1:	
				1:500	

**FOR INFORMATION**

EMG2-BWB-GEN-XX-SK-CH-SK038

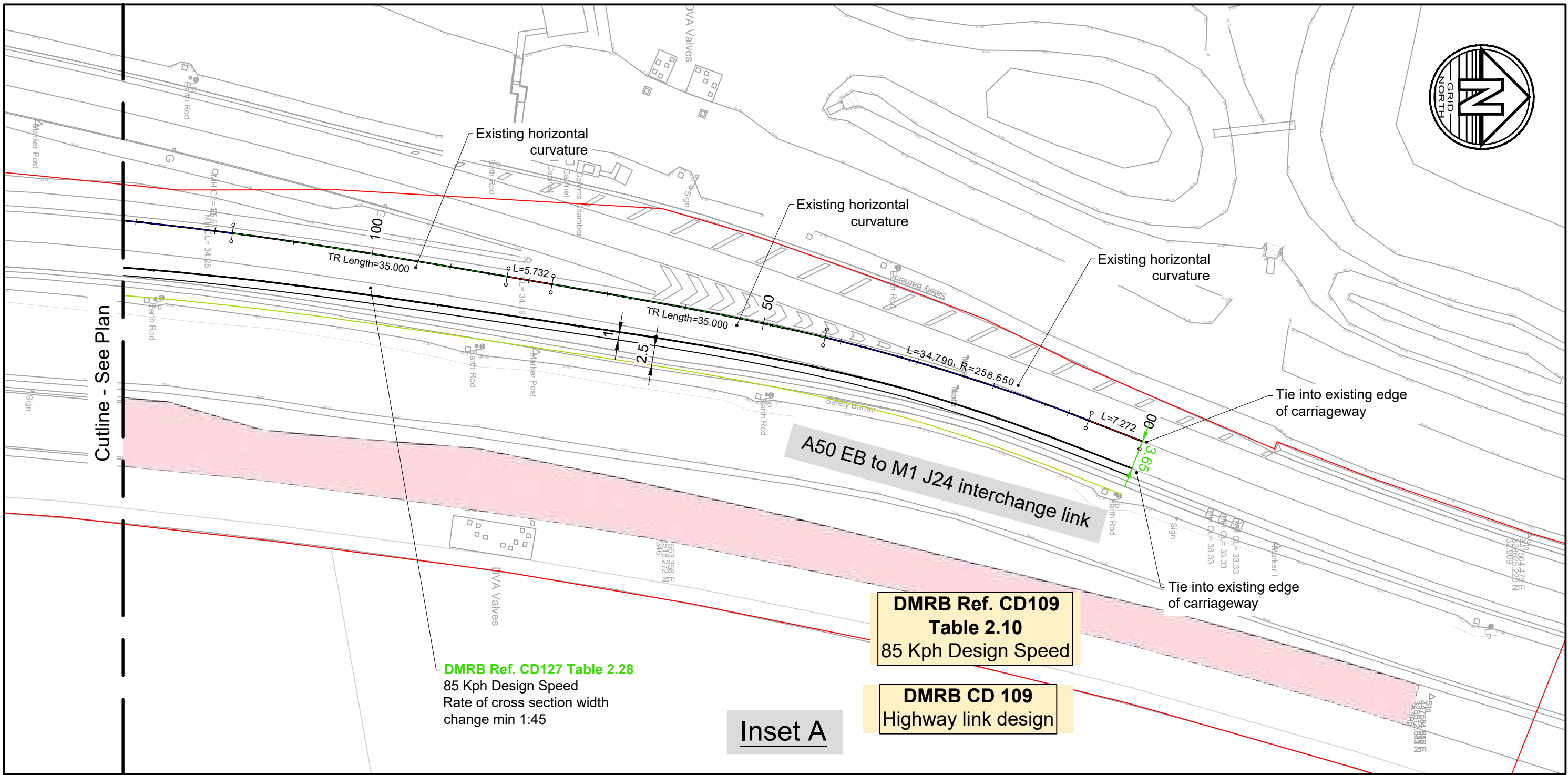
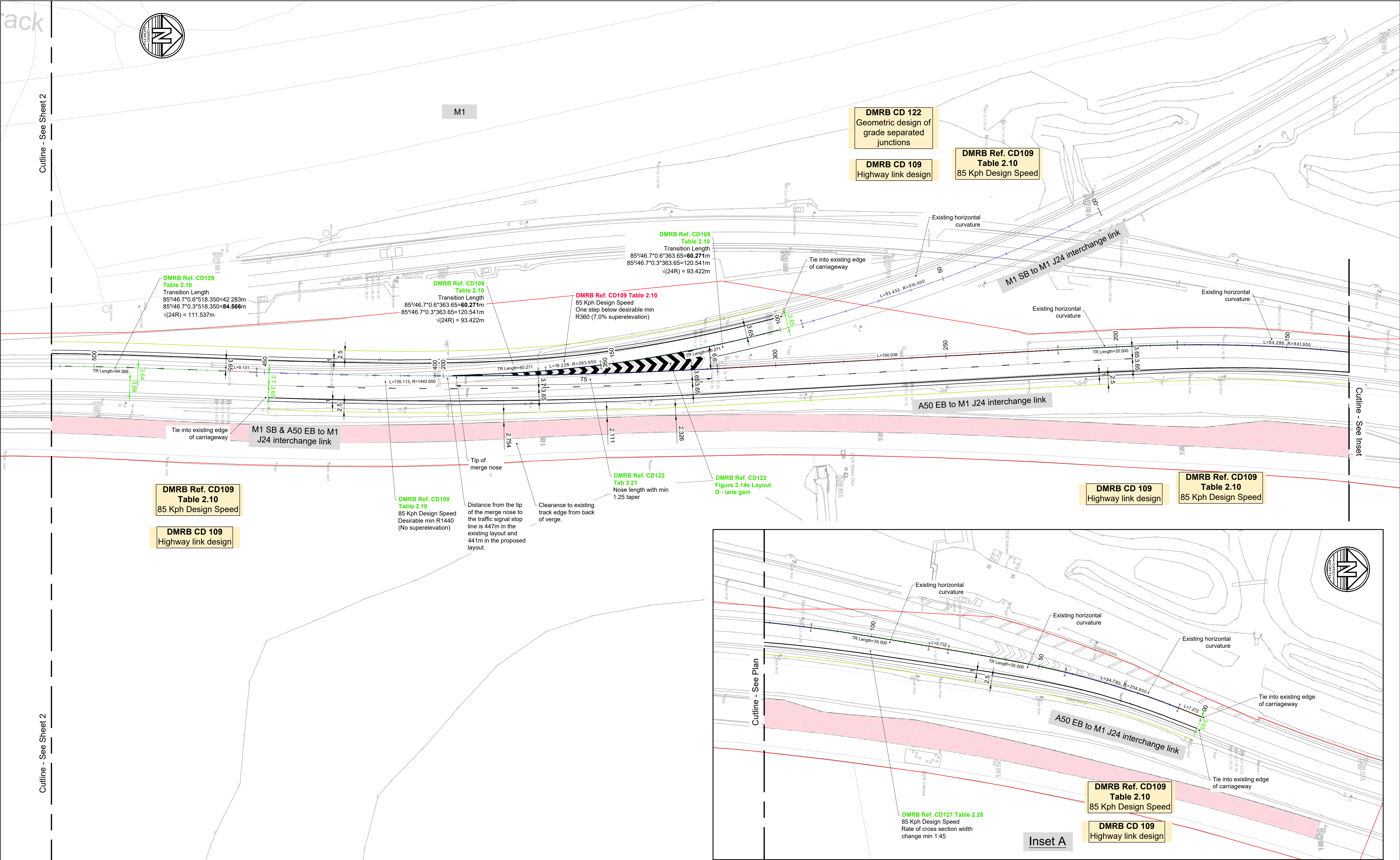
S2	P01
----	-----





Notes		Legend		ISSUES & REVISIONS		Client		Project Title		Drawing Title																																									
<div>1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.</div> <div>2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.</div> <div>3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.</div> <div>4. Any discrepancies noted on site are to be reported to the engineer immediately.</div>		<table><tr><th colspan="6">Links</th></tr><tr><th>No. lanes</th><th>Existing motorway with hard shoulder</th><th>Existing motorway no hard shoulder</th><th>Existing all-purpose</th><th>New motorway with hard shoulder</th><th>New / amended all-purpose</th></tr><tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr></table>		Links						No. lanes	Existing motorway with hard shoulder	Existing motorway no hard shoulder	Existing all-purpose	New motorway with hard shoulder	New / amended all-purpose	1						2						3						<table><tr><th>Rev</th><th>Date</th><th>Details of issue / revision</th><th>Drw</th><th>Rev</th></tr><tr><td>P01</td><td>20.06.25</td><td>Issued for information</td><td>SRH</td><td>SRH</td></tr></table>		Rev	Date	Details of issue / revision	Drw	Rev	P01	20.06.25	Issued for information	SRH	SRH	<div><div><div><div></div><div>BWB</div><div>A CAF GROUP COMPANY</div></div><div><div><input type="checkbox"/> Birmingham   0121 233 3322</div><div><input type="checkbox"/> Leeds   0113 233 8000</div><div><input type="checkbox"/> London   020 7234 9122</div><div><input type="checkbox"/> Manchester   0161 233 4260</div><div><input checked="" type="checkbox"/> Nottingham   0115 924 1100</div></div><div>www.bwbconsulting.com</div></div><div><div>SEGRO</div><div></div></div></div>		EAST MIDLANDS GATEWAY 2 (EMG2)		A50 WESTBOUND LINK SCHEMATIC	
				Links																																															
No. lanes	Existing motorway with hard shoulder	Existing motorway no hard shoulder	Existing all-purpose	New motorway with hard shoulder	New / amended all-purpose																																														
1																																																			
2																																																			
3																																																			
Rev	Date	Details of issue / revision	Drw	Rev																																															
P01	20.06.25	Issued for information	SRH	SRH																																															
<div>© Copyright BWB Consulting Ltd</div>						<table><tr><td>Drawn:</td><td>S. Hilditch</td><td>Reviewed:</td><td>S.Hilditch</td></tr><tr><td>BWB Ref:</td><td>220500</td><td>Date:</td><td>20.06.25</td></tr><tr><td>Scale@A1:</td><td>1:5,000</td><td></td><td></td></tr></table>		Drawn:	S. Hilditch	Reviewed:	S.Hilditch	BWB Ref:	220500	Date:	20.06.25	Scale@A1:	1:5,000			Drawing Status FOR INFORMATION		Project - Originator - Zone - Level - Type - Role - Number EMG2-BWB-GEN-XX-SK-CH-SK046		Status S2	Rev P01																										
Drawn:	S. Hilditch	Reviewed:	S.Hilditch																																																
BWB Ref:	220500	Date:	20.06.25																																																
Scale@A1:	1:5,000																																																		





**Notes**

- Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- Annotation shown coloured green achieves design standards
- Annotation shown coloured amber is a relaxation from design standards
- Annotation shown coloured red is a departure from design standards

Legend	
<span style="color: red;">—</span>	Draft Order Limits
<span style="color: blue;">—</span>	Alignment - Straights
<span style="color: blue;">—</span>	Alignment - Curves
<span style="color: green;">—</span>	Alignment - Transitions
<span style="color: green;">—</span>	Carriageway area
<span style="color: purple;">—</span>	Taper for cross section width change

ISSUES & REVISIONS				
Rev	Date	Details of issue / revision	Drw	Rev
P01	04.03.25	Issue for information	MS	SH

**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Drawn: M.S. Reviewed: S.H.  
BWB Ref: 220500 Date: 04.03.25 Scale@A1: 1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

**FOR INFORMATION**

Drawing Title

**A50 Eastbound Geometry Plans Sheet 1 of 2**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-HGN-A50EB-DR-H-0101**

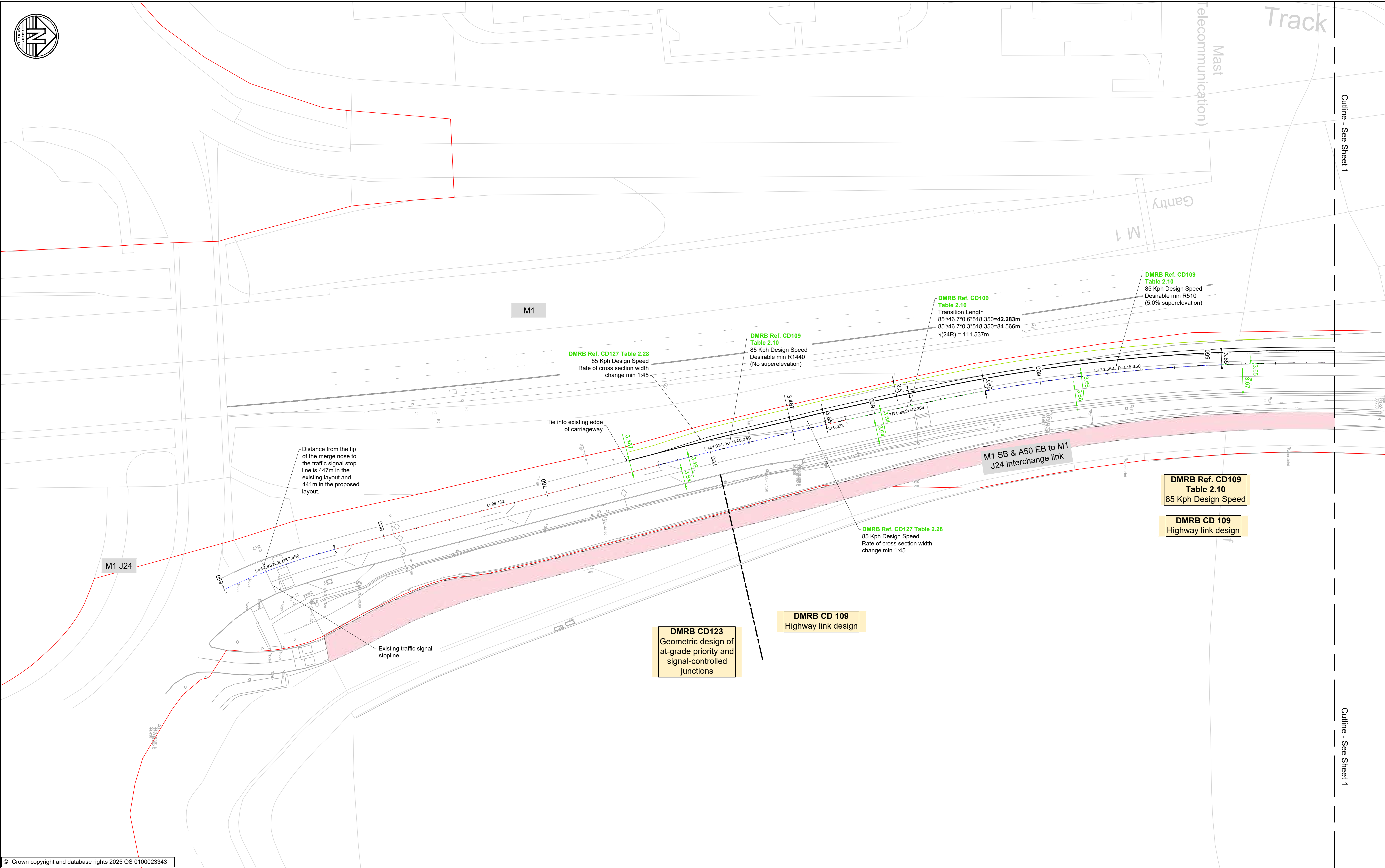
Status

**S2**

Rev

**P01**





© Crown copyright and database rights 2025 OS 0100023343

Notes	
1. Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.	7. Annotation shown coloured red is a departure from design standards
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.	
4. Any discrepancies noted on site are to be reported to the engineer immediately.	
5. Annotation shown coloured green achieves design standards	
6. Annotation shown coloured amber is a relaxation from design standards	

Legend	
—	Draft Order Limits
—	Alignment - Straights
—	Alignment - Curves
—	Alignment - Transitions
—	Carriageway area
—	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	04.03.25	Issue for information	MS	SH	



Birmingham | 0121 233 3322  
Leeds | 0113 233 8000  
London | 020 7234 9122  
Manchester | 0161 233 4260  
Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client			
SEGRO			
Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	04.03.25
		Scale@A1:	1:500

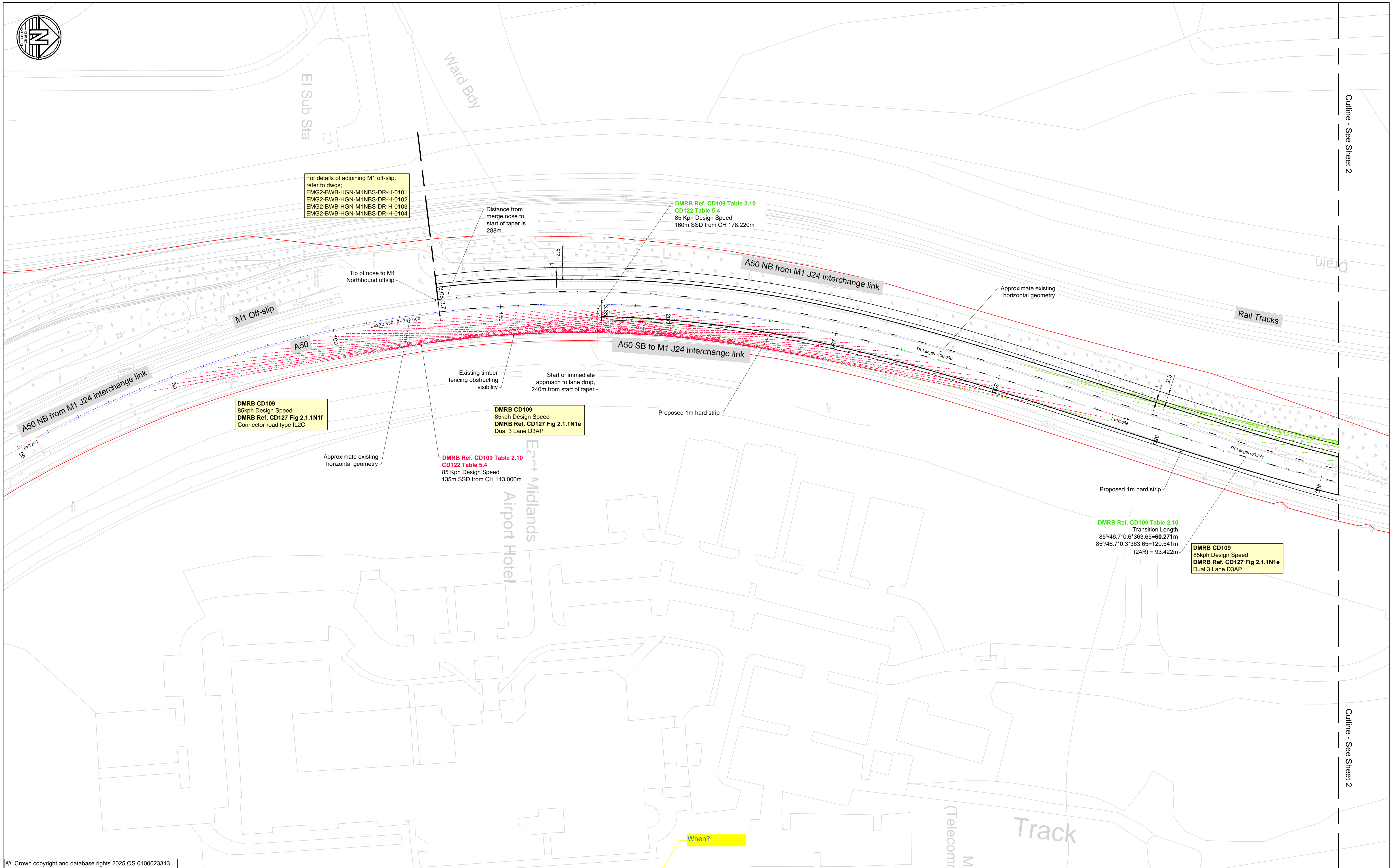
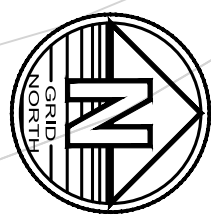
Project Title	
East Midlands Gateway 2	
Drawing Status	
FOR INFORMATION	

Drawing Title

A50 Eastbound  
Geometry Plans  
Sheet 2 of 2

Project - Originator - Zone - Level - Type - Role - Number		Status	Rev
EMG2-BWB-HGN-A50EB-DR-H-0102		S2	P01





© Crown copyright and database rights 2025 OS 0100023343

Notes	
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.	7. Annotation shown coloured red is a departure from design standards
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.	
4. Any discrepancies noted on site are to be reported to the engineer immediately.	
5. Annotation shown coloured green achieves design standards	
6. Annotation shown coloured amber is a relaxation from design standards	

Legend	
— Draft Order Limits	
— Alignment - Straights	
— Alignment - Curves	
— Alignment - Transitions	
Carriageway area	
Taper for cross section width change	



ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	1bc	Issue for information	MS	SH	

**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Drawn: M.S. Reviewed: S.H.  
BWB Ref: 220500 Date: 08.01.25 Scale@A1: 1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

**FOR INFORMATION**

Drawing Title

**A50 Westbound Geometry Plans Sheet 1 of 2**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-HGN-A50WB-DR-H-0101**

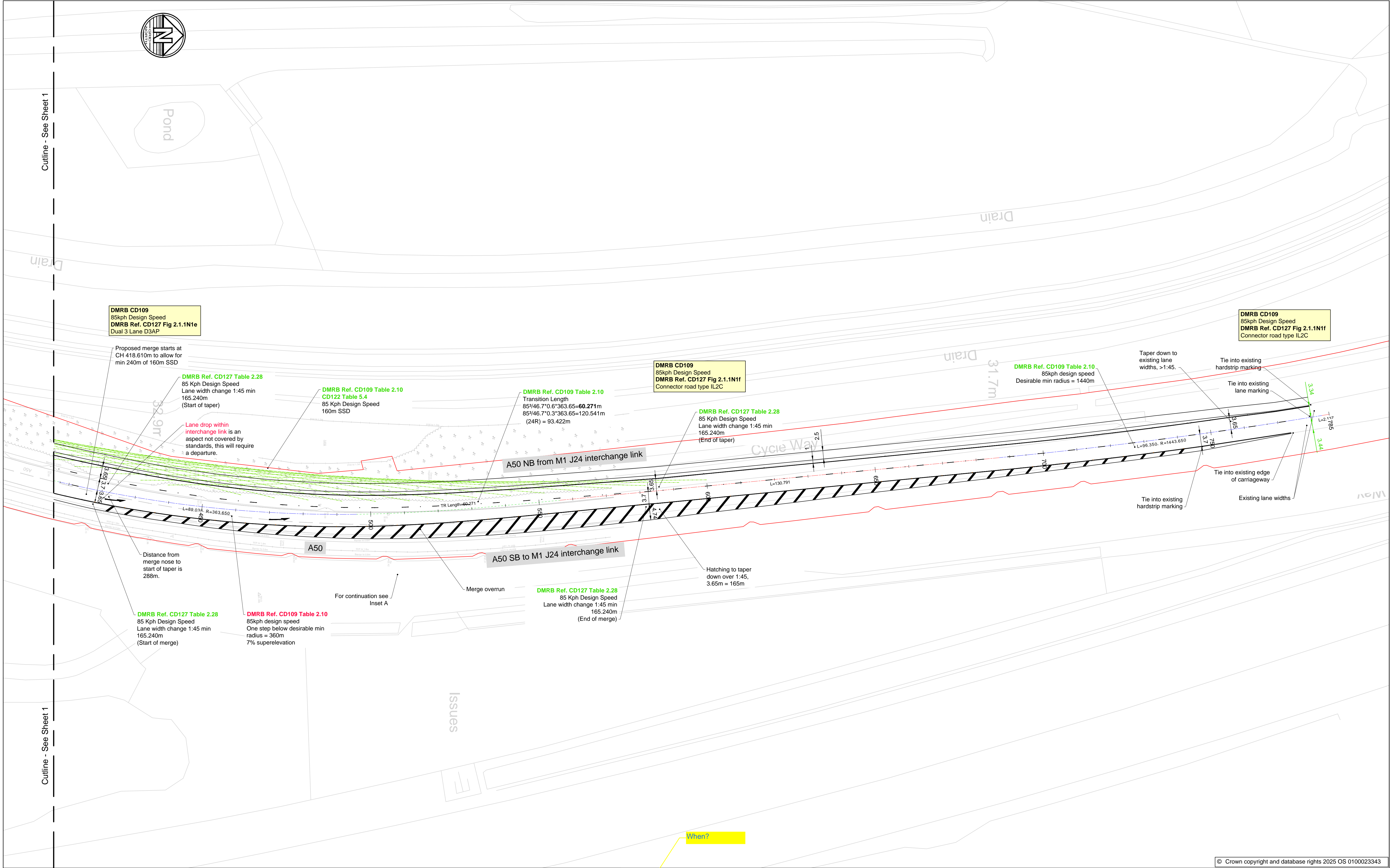
Status

**S2**

Rev

**P01**





Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.

2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.

4. Any discrepancies noted on site are to be reported to the engineer immediately.

5. Annotation shown coloured green achieves design standards

6. Annotation shown coloured amber is a relaxation from design standards

7. Annotation shown coloured red is a departure from design standards

Legend

Draft Order Limits

Alignment - Straights

Alignment - Curves

Alignment - Transitions

Carriageway area

Taper for cross section width change

ISSUES & REVISIONS

Rev	Date	Details of issue / revision	Drw	Rev
P01	ltc	Issue for information	MS	SH

BWB

A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322

☐ Leeds | 0113 233 8000

☐ London | 020 7234 9122

☒ Manchester | 0161 233 4260

☐ Nottingham | 0115 924 1100

www.bwbconsulting.com

Client

SEGRO

Project Title

East Midlands Gateway 2

Drawing Status

FOR INFORMATION

Drawing Title

A50 Westbound  
Geometry Plans  
Sheet 2 of 2

Project - Originator - Zone - Level - Type - Role - Number

EMG2-BWB-HGN-A50WB-DR-H-0102

Status

S2

Rev

P01

Drawn:

M.S

Reviewed:

S.H

BWB Ref:

220500

Date:

08.01.25

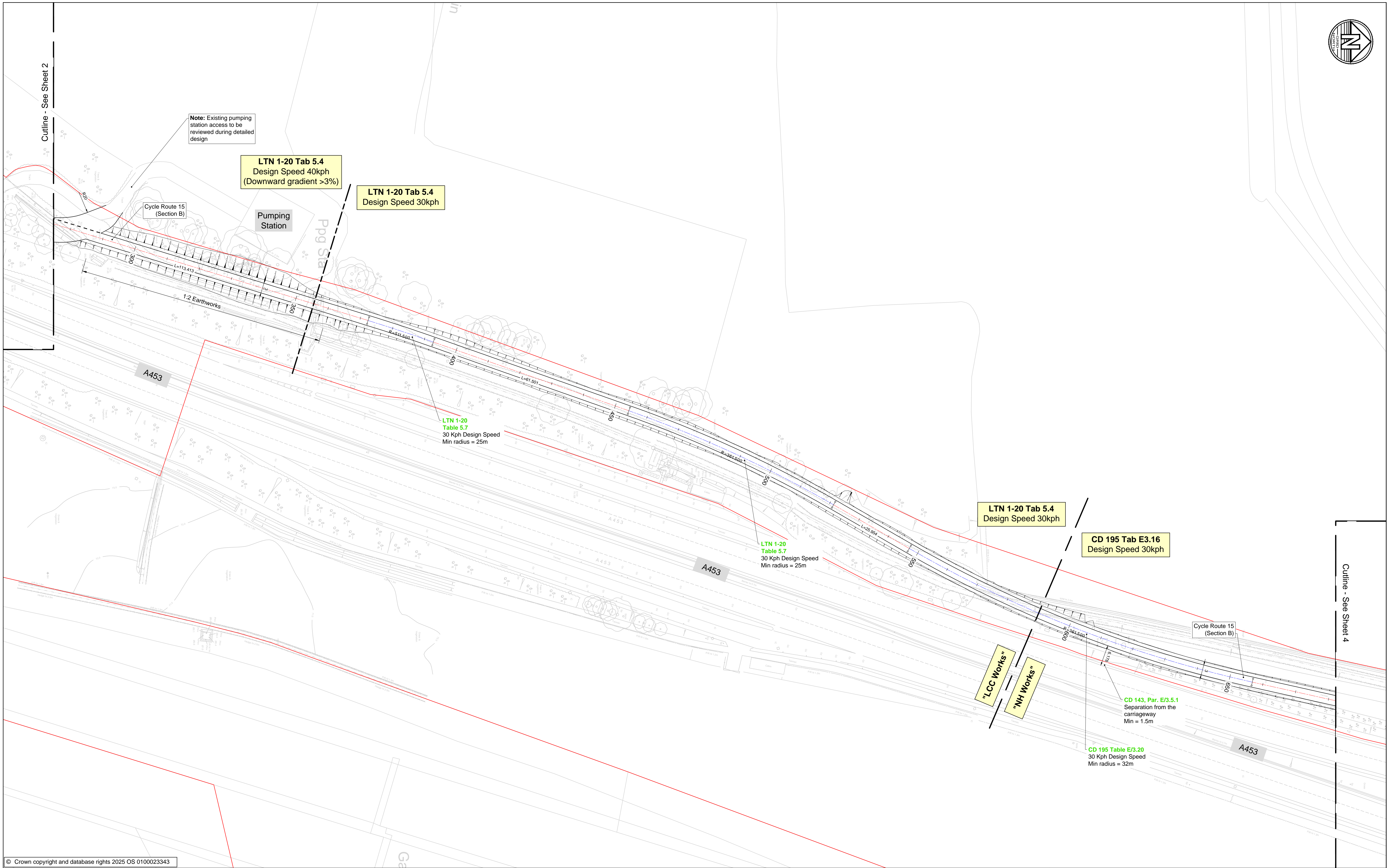
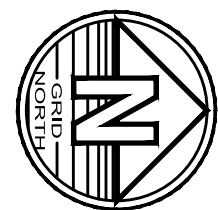
Scale @ A1:

1:500

© Crown copyright and database rights 2025 OS 0100023343

© Copyright BWB Consulting Ltd





© Crown copyright and database rights 2025 OS 0100023343

Notes	
1. Do not scale this drawing. All dimensions must be checked/verified on site. If in doubt ask.	7. Annotation shown coloured red is a departure from design standards
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.	
4. Any discrepancies noted on site are to be reported to the engineer immediately.	
5. Annotation shown coloured green achieves design standards	
6. Annotation shown coloured amber is a relaxation from design standards	

Legend	
—	Draft Order Limits
—	Alignment - Straights
—	Alignment - Curves
—	Alignment - Transitions
—	Carriageway area
—	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision		Drw	Rev
P01	04.03.25	Issue for information		MS	SH
P02	15.05.25	Minor annotation changes		MS	SH



A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
[www.bwbconsulting.com](http://www.bwbconsulting.com)

Client



Drawn:	M.S	Reviewed:	S.H
BWB Ref:	220500	Date:	04.03.25
		Scale@A1:	1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

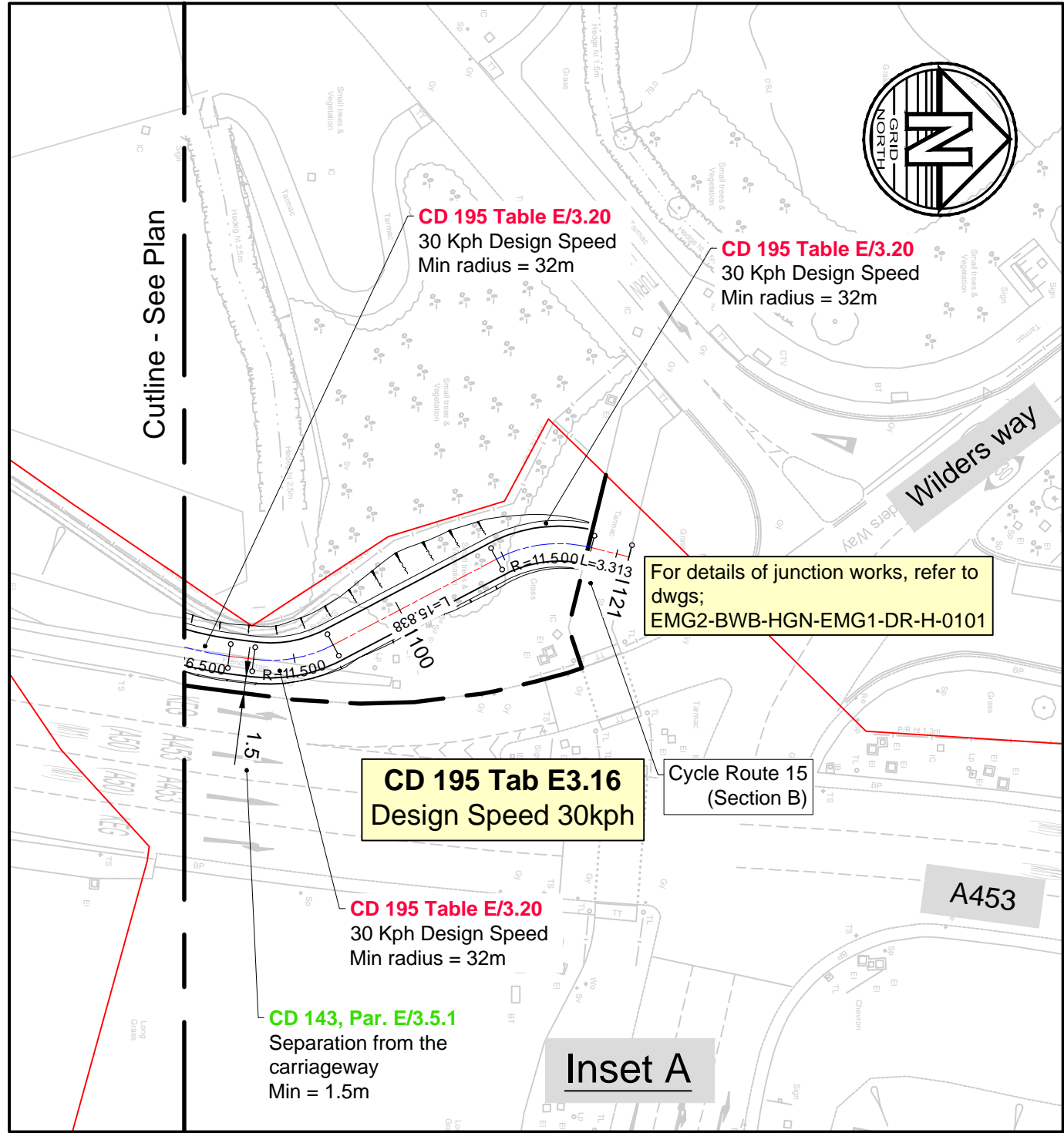
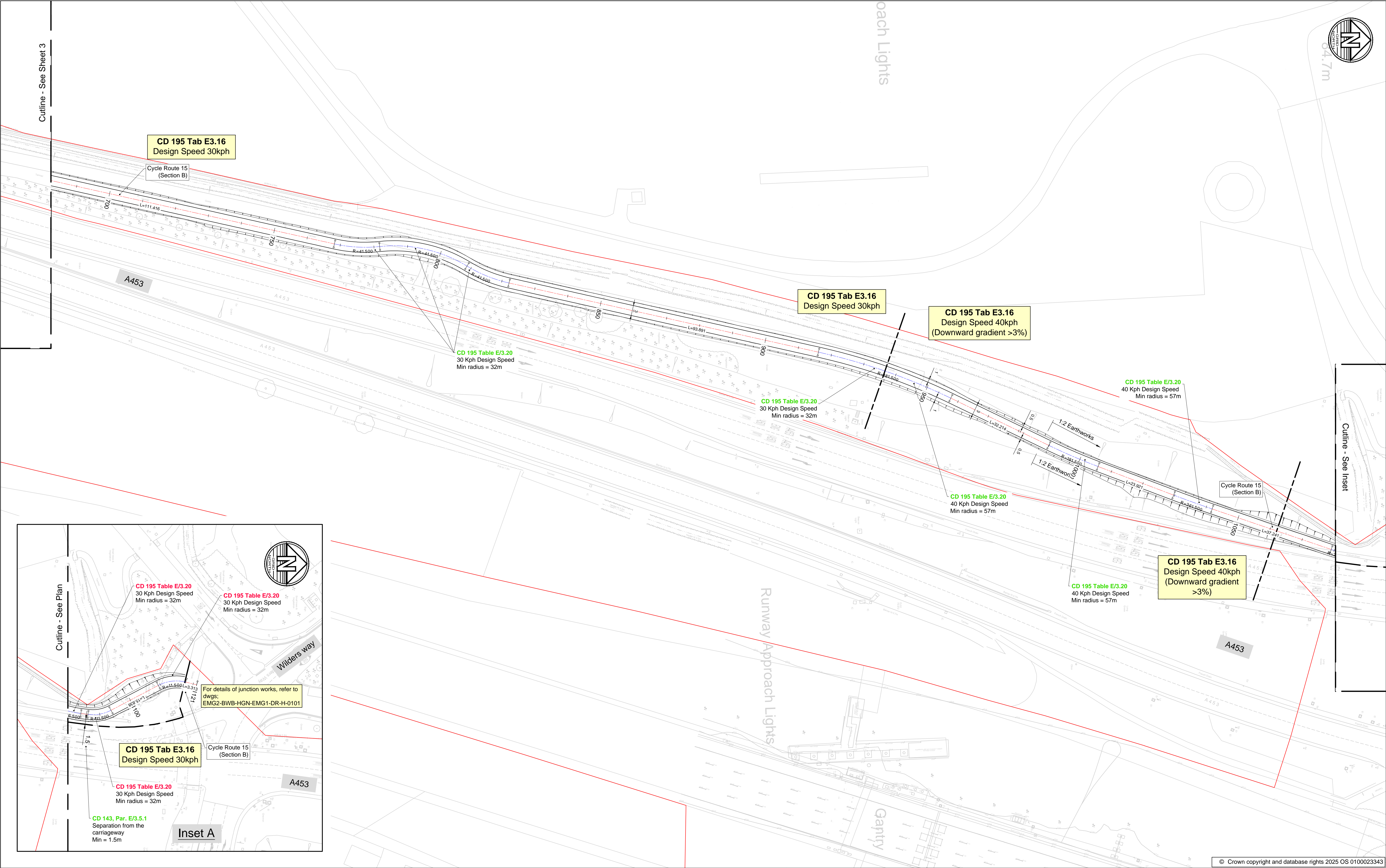
**FOR INFORMATION**

Drawing Title

**A453  
Geometry Plans  
Sheet 3 of 4**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
<b>EMG2-BWB-HGN-A453-DR-H-0103</b>	<b>S2</b>	<b>P02</b>





**Notes**

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.
- Annotation shown coloured green achieves design standards
- Annotation shown coloured amber is a relaxation from design standards
- Annotation shown coloured red is a departure from design standards

Legend	
	Draft Order Limits
	Alignment - Straights
	Alignment - Curves
	Alignment - Transitions
	Carriageway area
	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	04.03.25	Issue for information	MS	SH	
P02	15.05.25	Minor annotation changes	MS	SH	

**BWB**  
A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Drawn: M.S.      Reviewed: S.H.  
BWB Ref: 220500      Date: 04.03.25      Scale@A1: 1:500

Project Title

**East Midlands Gateway 2**

Drawing Status

**FOR INFORMATION**

Drawing Title

**A453  
Geometry Plans  
Sheet 4 of 4**

Project - Originator - Zone - Level - Type - Role - Number

**EMG2-BWB-HGN-A453-DR-H-0104**

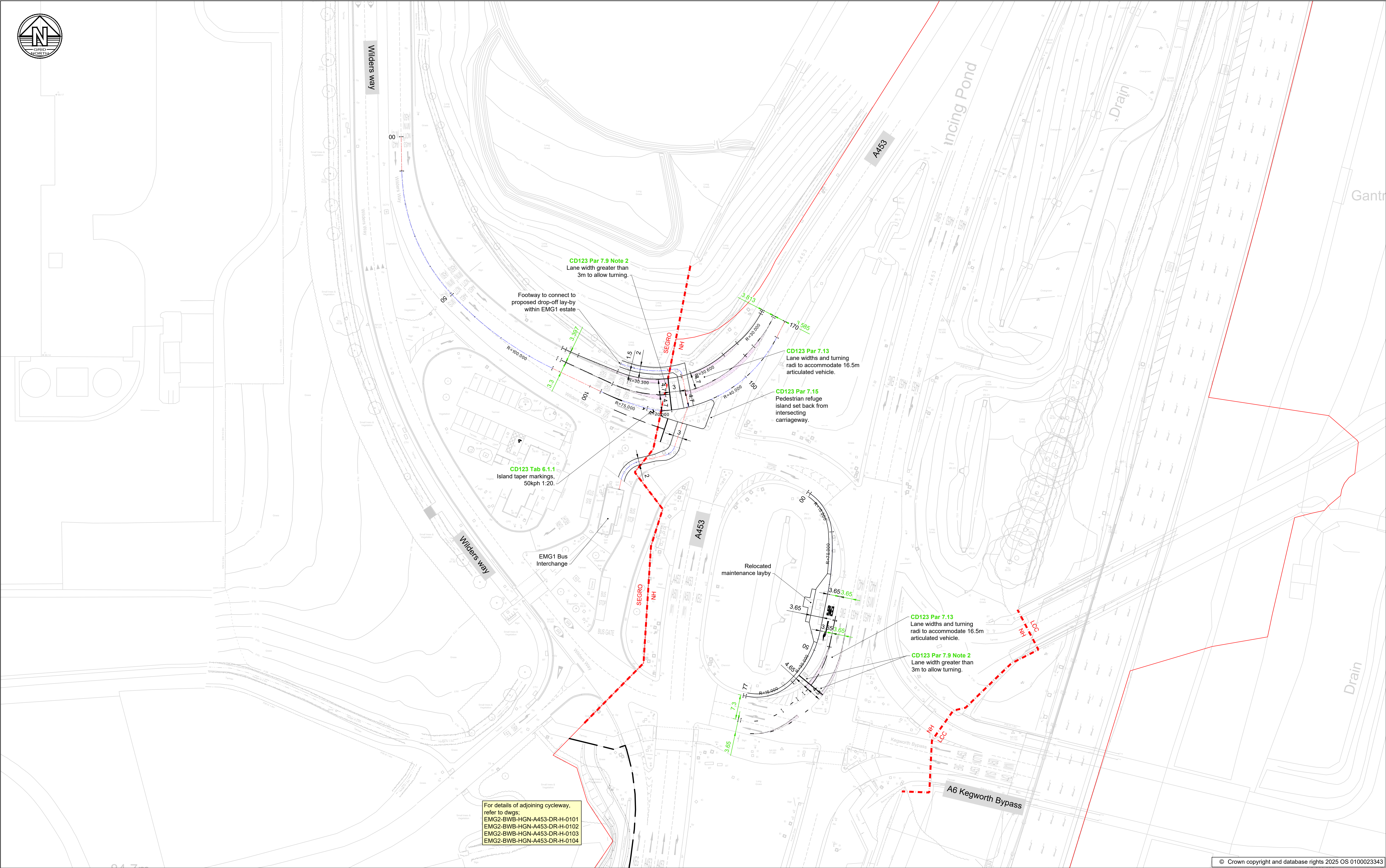
Status

**S2**

Rev

**P02**





For details of adjoining cycleway, refer to dwgs:  
EMG2-BWB-HGN-A453-DR-H-0101  
EMG2-BWB-HGN-A453-DR-H-0102  
EMG2-BWB-HGN-A453-DR-H-0103  
EMG2-BWB-HGN-A453-DR-H-0104

Notes	
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.	7. Annotation shown coloured red is a departure from design standards
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.	
3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.	
4. Any discrepancies noted on site are to be reported to the engineer immediately.	
5. Annotation shown coloured green achieves design standards	
6. Annotation shown coloured amber is a relaxation from design standards	

Legend	
	Draft Order Limits
	Alignment - Straights
	Alignment - Curves
	Alignment - Transitions
	Carriageway area
	Taper for cross section width change

ISSUES & REVISIONS					
Rev	Date	Details of issue / revision	Drw	Rev	
P01	27.02.25	Issue for information	MS	SH	



A CAF GROUP COMPANY

☐ Birmingham | 0121 233 3322  
☐ Leeds | 0113 233 8000  
☐ London | 020 7234 9122  
☒ Manchester | 0161 233 4260  
☐ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client



Drawn: M.S

Reviewed: S.H

BWB Ref: 220500

Date: 20.02.25

Scale@A1: 1:500

Project Title

East Midlands Gateway 2

Drawing Status

FOR INFORMATION

Drawing Title

Existing EMG1 Junction Geometry Plan

Project - Originator - Zone - Level - Type - Role - Number

EMG2-BWB-HGN-A453-DR-H-0101

Status

S2

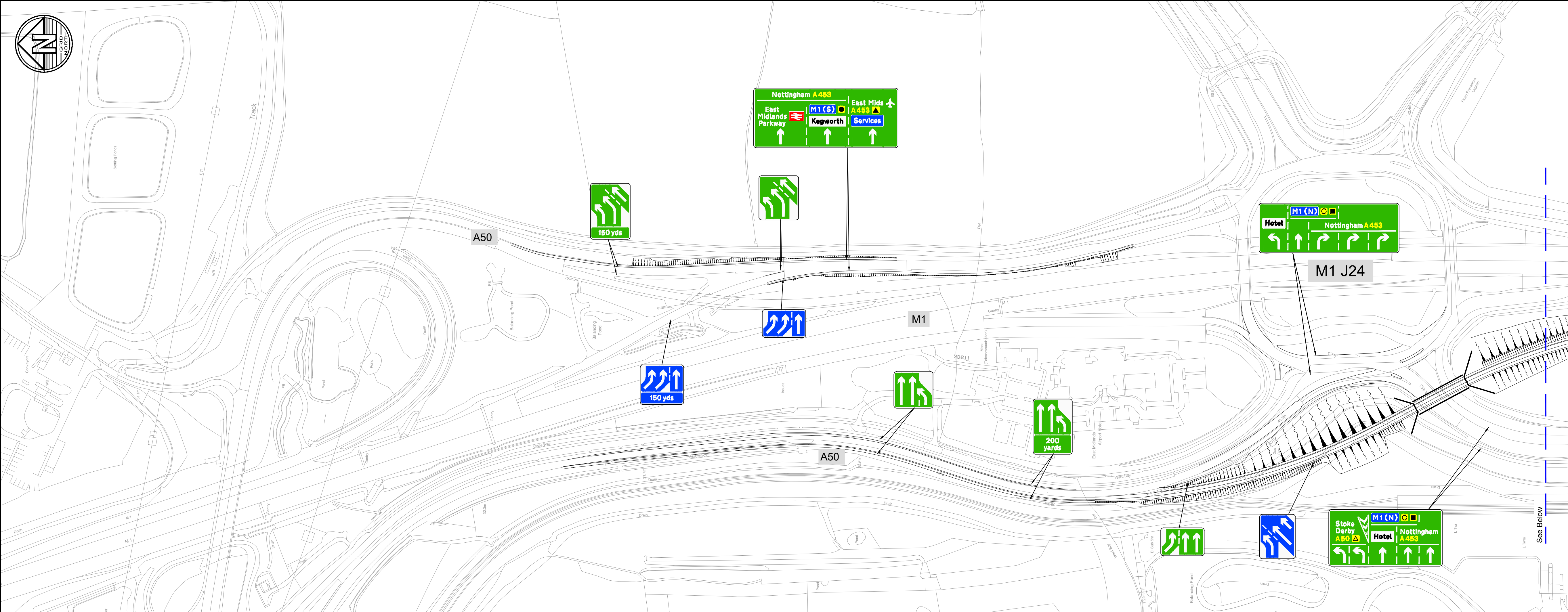
Rev

P01



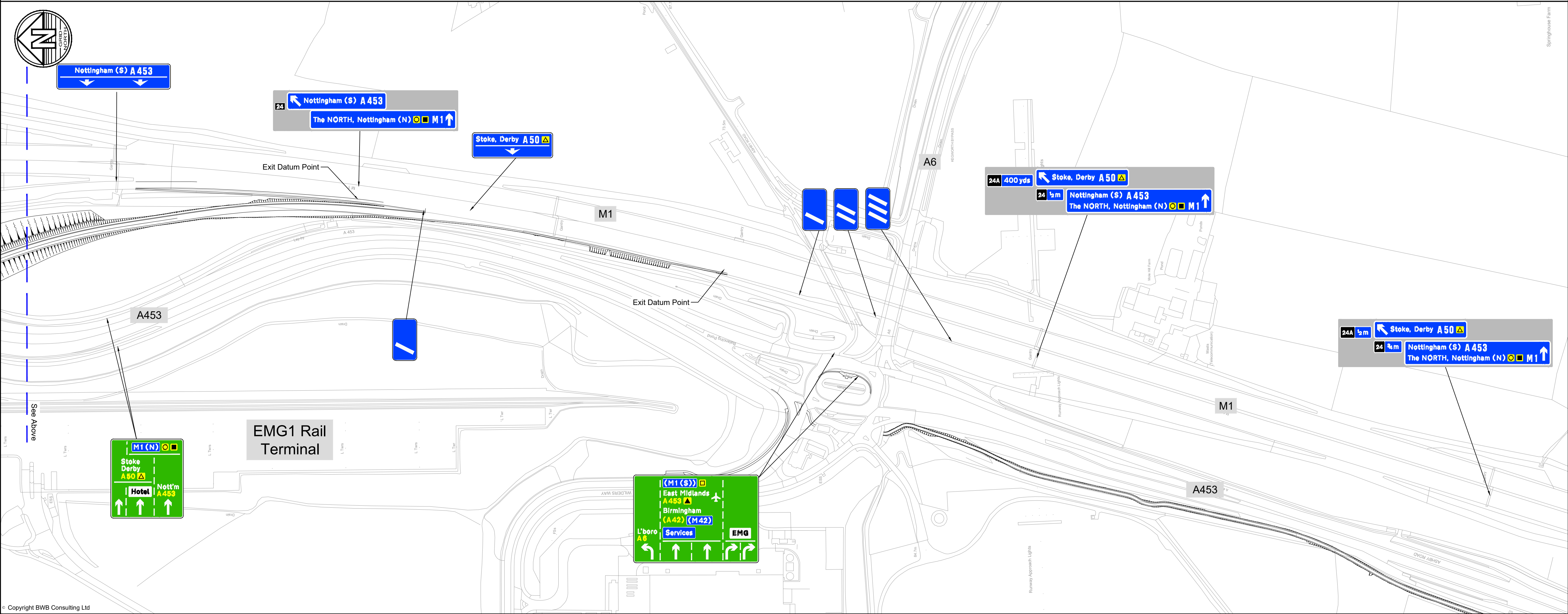
## **APPENDIX 28: Directional Signage Strategy**





- Notes**
1. Do not scale this drawing. All dimensions must be checked/ verified on site, if in doubt ask.
  2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
  3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
  4. Any discrepancies noted on site are to be reported to the engineer immediately.
  5. The purpose of this drawing is to show the strategy for directional signage. It is subject to detailed design and road safety audit.
  6. Existing retained directional signage is not shown on this drawing.

**Legend**



P02	25.06.25	Scheme updated		SRH	SRH
P01	26.03.25	Preliminary Issue		JFP	SRH
Rev	Date	Details of issue / revision		Drw	Rev

**Issues & Revisions**

**BWB**  
A CAF GROUP COMPANY

■ Birmingham | 0121 233 3322  
□ Leeds | 0113 233 8000  
□ London | 020 7407 3879  
□ Manchester | 0161 233 4260  
□ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Project Title  
**EAST MIDLANDS  
GATEWAY 2 (EMG2)**

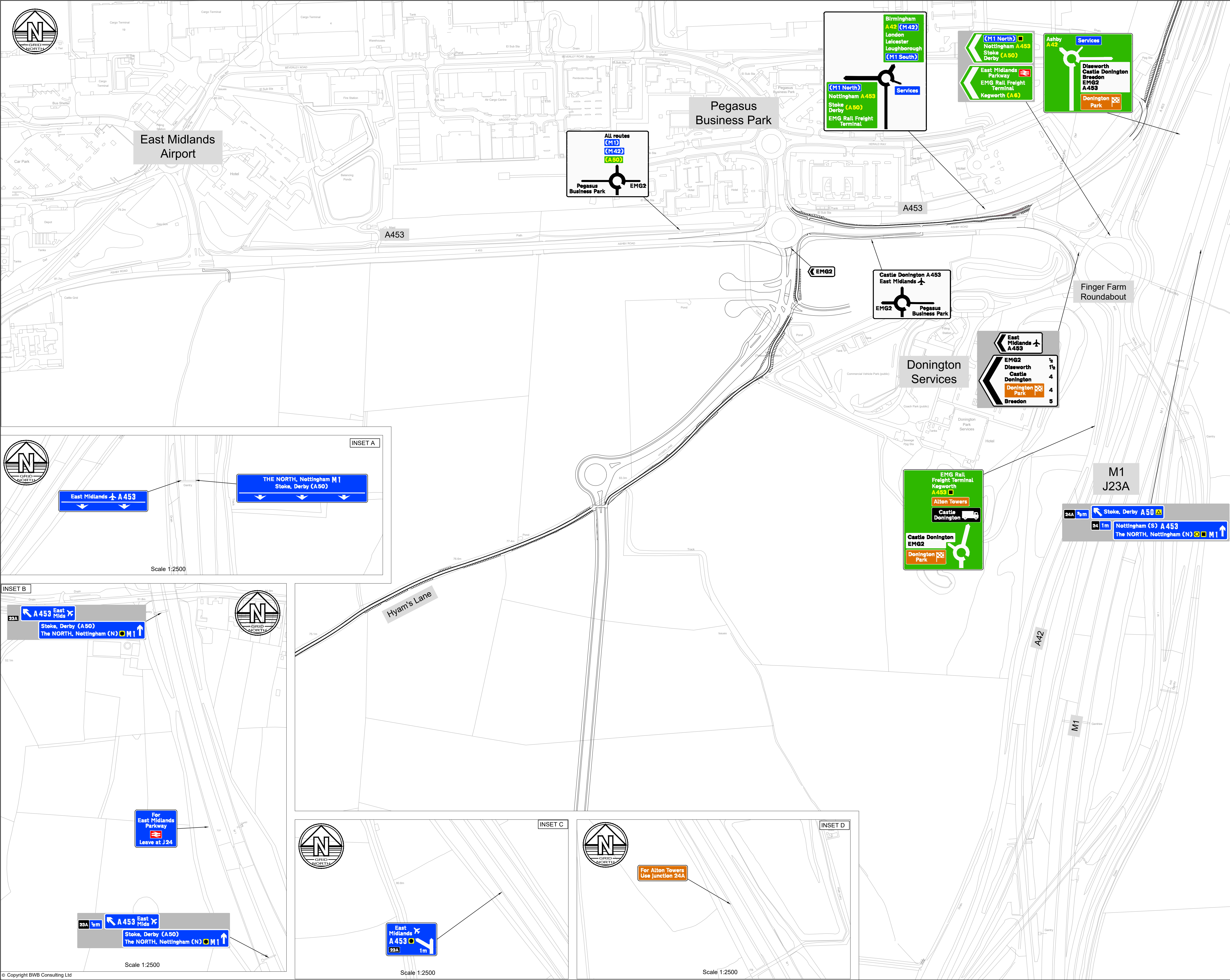
Drawing Title  
**DIRECTIONAL SIGN  
STRATEGY  
SHEET 1 OF 2**

Drawn:	J. Palmer	Reviewed:	S. Hilditch
BWB Ref:	220500	Date:	26.03.25
Scale@A1:	1:2500		

**FOR INFORMATION**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-HSN-ZZ-DR-CH-1200	S2	P02





- Notes**
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
  2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
  3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
  4. Any discrepancies noted on site are to be reported to the engineer immediately.
  5. The purpose of this drawing is to show the strategy for directional signage. It is subject to detailed design and road safety audit.
  6. Existing retained directional signage is not shown on this drawing.

**Legend**

P02	13.06.25	Background mapping update	SRH	SRH	
P01	26.03.25	Preliminary Issue	JFP	SRH	
Rev	Date	Details of issue / revision	Drw	Rev	

P02	13.06.25	Background mapping update	SRH	SRH	
P01	26.03.25	Preliminary Issue	JFP	SRH	
Rev	Date	Details of issue / revision	Drw	Rev	

**Issues & Revisions**

**BWB**  
A CAF GROUP COMPANY

■ Birmingham | 0121 233 3322  
□ Leeds | 0113 233 8000  
□ London | 020 7407 3879  
□ Manchester | 0161 233 4260  
□ Nottingham | 0115 924 1100  
www.bwbconsulting.com

Client

**SEGRO**

Project Title

**EAST MIDLANDS  
GATEWAY 2 (EMG2)**


Drawing Title

**DIRECTIONAL SIGN  
STRATEGY  
SHEET 2 OF 2**

Drawn:	J. Palmer	Reviewed:	S. Hilditch
BWB Ref:	220500	Date:	26.03.25
Scale@A1:	1:2500	Status	S2
Project - Originator - Zone - Level - Type - Role - Number	EMG2-BWB-HSN-ZZ-DR-CH-1201	Rev	P02



## **APPENDIX 29: Stage 1B Modelling sign off sheet**

<b>Document Name</b>	Stage 1B Modelling Documents		<b>Project reference</b>	220500
<b>Document reference / revision</b>	Trip Generation: Core Assessment Note (EMG2-BWB-GEN-XX-RP-TR-0012 Revision P1)  EMG1 Rail Freight Terminal (EMG2-BWB-GEN-XX-RP-CH-0011)		<b>Date</b>	12.02.25
<b>Approver 1</b>	<b>Name</b>	Jeremy Bloom		
	<b>Organisation</b>	National Highways		
	<b>Position</b>	Interim Spatial Planner		
	<b>Date</b>	18/02/2025		
	<b>Signature</b>			
	<b>Comments (if applicable)</b>	<p><b>Trip Generation: Core Assessment Note (EMG2-BWB-GEN-XX-RP-TR-0012 Revision P1)</b></p> <p>JSJV (on behalf of National Highways) have undertaken a review of the supplied note.</p> <p>The notes states that development proposals comprise 430,000sqm of industrial development across the following sites:</p> <ul style="list-style-type: none"> <li>• 400,000sqm of B2/B8 industrial development on EMG2, including 100,000sqm of B8 mezzanine floorspace; and,</li> <li>• 30,000sqm of B8 industrial development on Plot 16 of EMG1.</li> </ul> <p>National Highways does not agree that the EMG1 sample data provided shows "that the actual recorded trip rates are a lot lower" as stated in the Note at paragraph 3.2.</p> <p>The data shows variance and we note that the observed 2022 data for the 0700 – 0800 peak hour actually generates higher demand than the sample data for the 0800 – 0900 (which is being used for the current modelling assessment). We are therefore cautious in terms of how much weight we can give the observed data given the variation demonstrated within the data set.</p>		

		<p>Paragraph 3.4 notes discussions taking place regarding a reduced trip rate being applied to the mezzanine floorspace. National Highways still do not feel that there is sufficient justification to accept the assumption of a reduced rate based upon the sample provided.</p> <p>However, the trip rates presented in Table 1 and trip generation information presented in Table 2 are agreed with National Highways and are considered to accurately reflect the current development proposals.</p> <p>Should there be any proposals to change the total floorspace (430,000sqm,) National Highways will require the full quantum of development, utilising the agreed trip rates presented in Table 1 and the trip generation information in Table 2, to be accounted for in any strategic, standalone and microsimulation modelling.</p> <p>It is noted that HGV movements to EMG1 Rail Freight Terminal will be assessed as part of the Microsimulation modelling assessment. This is agreed with National Highways.</p> <p><b>EMG1 Rail Freight Terminal (EMG2-BWB-GEN-XX-RP-CH-0011)</b></p> <ul style="list-style-type: none"> <li>• JSJV (on behalf of National Highways) undertook a review of the supporting changes to the Rail Freight Interchange. The note set out the change in maximum crane height to 24m and the increased stacking of containers to 15m.</li> <li>• National Highways confirmed on 23/10/24 that they agreed that the Rail Freight Interchange changes in maximum crane height would not affect traffic on the SRN.</li> </ul>
Approver 2	Name	
	Organisation	
	Position	
	Date	
	Signature	

**TECHNICAL APPROVAL**  
East Midlands Gateway 2



	Comments (if applicable)	



**TECHNICAL APPROVAL**  
**East Midlands Gateway 2**



<b>Document Name</b>	Stage 1B Modelling Documents	<b>Project reference</b>	220500
<b>Document reference / revision</b>	Trip Generation: Core Assessment Note (EMG2-BWB-GEN-XX-RP-TR-0012 Revision P1)  EMG1 Rail Freight Terminal (EMG2-BWB-GEN-XX-RP-CH-0011)	<b>Date</b>	12.02.25
<b>Approver 1</b>	<b>Name</b>		
	<b>Organisation</b>		
	<b>Position</b>		
	<b>Date</b>		
	<b>Signature</b>		
	<b>Comments (if applicable)</b>		
<b>Approver 2</b>	<b>Name</b>		
	<b>Organisation</b>		
	<b>Position</b>		
	<b>Date</b>		
	<b>Signature</b>		
	<b>Comments (if applicable)</b>		
<b>Approver 3</b>	<b>Name</b>	Tom Boylan	
	<b>Organisation</b>	Nottinghamshire County Council	
	<b>Position</b>	Principal Officer Transport Planning	
	<b>Date</b>	06/03/2025	

**TECHNICAL APPROVAL**  
**East Midlands Gateway 2**



	Signature	TB—
	Comments (if applicable)	<p>Nottinghamshire County Council (NCC) are happy to accept the proposed trip rates as outlined within the <b>Trip Generation: Core Assessment document</b> (18/10/24). The note is based on a development comprising of 430,000sqm industrial development and NCC consider the Trip Rates as shown in Table 1 to be robust.</p> <p>NCC accept that the proposed crane height amendments for EMG2 will not impact on the road traffic generated by the rail terminal and consequently are willing to sign off formally on the <b>EMG1 Rail Freight Terminal document</b>.</p>

**APPENDIX 30: Leicestershire County Council email dated 11 December 2024**

**TECHNICAL APPROVAL**  
East Midlands Gateway 2



<b>Document Name</b>	<b>Stage 1A Modelling Documents</b>	<b>Project reference</b>	220500
<b>Document reference / revision</b>	VISSIM Scoping Note (EMG2-BWB-GEN-XX-RP-TR-0003 Revision P3)  Modelling Furnessing Methodology (EMG2-BWB-GEN-XX-RP-TR-0004 Revision P3)  VISSIM LMVR (EMG2-BWB-GEN-XX-RP-TR-0006 Revision P2)  PRTM proforma v14 (10/10/2024)  PRTM uncertainty log v7  PRTM LMVR Addendum (19/08/2024)	<b>Date</b>	10.10.2024
<b>Approver 1</b>	<b>Name</b>	Catherine Townend	
	<b>Organisation</b>	National Highways	
	<b>Position</b>	Spatial Planner	
	<b>Date</b>	04/12/2024	
	<b>Signature</b>	<i>Catherine Townend</i>	
	<b>Comments (if applicable)</b>	National Highways has undertaken a review of the referenced documents and notes the following: -  <b>VISSIM Scoping Note (EMG2-BWB-GEN-XX-RP-TR-0003 Revision P3)</b> <ul style="list-style-type: none"> <li>JSJV (on behalf of National Highways) undertook a review of the supporting VISSIM Scoping Note.</li> <li>Subject to a number of revisions to the scoping Note and Journey Time routes, as set out in email 14/03/2023, National Highways were content with the scope of the VISSIM model to analyse impacts on the SRN.</li> </ul> <b>Modelling Furnessing Methodology (EMG2-BWB-GEN-XX-RP-TR-0004 Revision P3)</b> <ul style="list-style-type: none"> <li>JSJV have undertaken a detailed review of the Furnessing Methodology note and the supporting excel spreadsheets.</li> </ul>	

**Commented [AW1]:** LCC defers to NH's review and approval.

**Commented [AW2]:** Whilst LCC note NH's comments, LCC have not reviewed this yet and therefore if this is to be included in this sign-off group for this sheet, we cannot sign the sheet off.

**TECHNICAL APPROVAL**  
East Midlands Gateway 2



		<ul style="list-style-type: none"> <li>• Corrective actions were undertaken as outlined in emailed correspondence dated 07/02/2024.</li> <li>• A second audit was undertaken which identified a number of issues with the supplied spreadsheets as outlined in email correspondence dated 27/02/2024.</li> </ul> <p>As outlined in an email dated 25/03/2024 National Highways advised: -</p> <ul style="list-style-type: none"> <li>• There is a significant element of re-routing at some junctions such as M1 J25 which sees a sizable increase in traffic flow on the A50 West to M1 North movement; and,</li> <li>• It is possible there is also some model noise from the SATURN model.</li> </ul> <p>National Highways are content with the proposed methodology subject to the continued critical review of the above matters as part of the forecasting testing.</p> <p>In addition, National Highways require the Promoter to work in consultation with us through the development of the forecasting testing on the Strategic Road Network.</p> <p><b>VISSIM LMVR (EMG2-BWB-GEN-XX-RP-TR-0006 Revision P2)</b></p> <ul style="list-style-type: none"> <li>• National Highways requested JSJV review the supporting LMVR and modelling files in May 2023.</li> <li>• JSJV outlined the findings of the first audit review and produced a supporting Tech Note [B2448400 Midlands Freeport VISSIM Base Model Final Review April 2023]. This audit identified 10 Substantive issues, 11 Comments and 3 Observations which required corrective action.</li> <li>• JSJV undertook a second audit for the supporting LMVR and revised modelling. The findings of this audit are contained in a second Tech Note [B2448400 Midlands Freeport VISSIM Base Model Final Review Sept 2023].</li> <li>• National Highways approved the use of the Base Model for analysing impacts on the SRN in September 2023.</li> </ul> <p><b>PRM proforma v14 (10/10/2024)</b></p> <ul style="list-style-type: none"> <li>• JSJV (on behalf of National Highways) advised that we were content with the 13<sup>th</sup> version off the proforma as outlined in email correspondence dated 08/10/24.</li> </ul>
--	--	---

**Commented [AW3]:** LCC defers to NH's review and approval.

**Commented [AW4]:** Matters detailed on this proforma are agreed by LCC, but not anything arising from references to further work such with regard to vision & validate, Mezzanines etc. We also note that further information with regard to construction stage modelling is to be provided and we agree that this is required.

**TECHNICAL APPROVAL**  
East Midlands Gateway 2



		<ul style="list-style-type: none"> <li>The 14<sup>th</sup> version of the PRTIM proforma is also now agreed by National Highways.</li> </ul> <p><b>PRTM uncertainty log v7</b></p> <ul style="list-style-type: none"> <li>National Highways are content with the 7<sup>th</sup> version of the uncertainty log received on 14/10/24.</li> </ul> <p><b>PRTM LMVR Addendum (19/08/2024)</b></p> <ul style="list-style-type: none"> <li>As outlined in email correspondence 18/09/2024, National Highways are content with the use of EMFM (PRTM) to analyse impacts on the SRN noting that Journey Times may need to be considered again as part of the forecasting analysis.</li> </ul> <p>It was noted that Calibration is generally very high (94.2% in AM, 92.2% in PM) across the modelled area.</p> <p>Where the model does not achieve link calibration, as shown in Figures 3.4 and 3.5, these locations are far from the development site and do not appear to be on the SRN. There is one exception to this, on the M1 between J23a and 24 in the PM peak, which has a reported GEH of 6.8 (460 vehicles modelled above observed).</p> <p>There is a risk of over-fitting the model to calibration counts which will need to be kept in mind when considering the forecasting.</p> <p><b>Local Junction Base Model review [240514 EMG2_Base Jct Model Comments and Responses_150524]</b></p> <ul style="list-style-type: none"> <li>National Highways requested JSJV review the supporting Local Junction Modelling.</li> <li>The findings of the audit are presented in a Tech Note dated 12<sup>th</sup> February 2024 [B2428400 Midlands EMG_BWB Junction Models Review 2024]. The audit identified 26 Substantive issues, 7 Comments and 23 Observations.</li> <li>Two further re-submissions were made and further audit comments captured in the Audit Tracker [240514 EMG2_Base Jct Model Comments and Responses_150524]</li> <li>A final audit was undertaken by JSJV and the base models were approved for use to analyse impacts on the SRN in June 2024. The findings of the audit are presented in a Tech Note [B2428400 Midlands EMG_BWB Junction Models Review June 2024].</li> </ul>
--	--	---

**Commented [AW5]:** Agreed by LCC.

**Commented [AW6]:** We are content with this subject to NH's comments, but only if the 2019 model is still to be used. We seek clarity over whether it is now the intention to use PRTM 2023, in which case fresh validation may be required.

**Commented [AW7]:** We note NH's comments, however LCC have not reviewed the local network models yet and therefore if this is to be included in this sign-off group for this sheet, we cannot sign the sheet off.



**TECHNICAL APPROVAL**  
East Midlands Gateway 2



		<b>Trip Generation; Core Assessment Note (EMG2-BWB-GEN-X-RP-TR-0012 Revision P1)</b> <ul style="list-style-type: none"><li>JSJV (on behalf of National Highways) undertook a review of the supporting Trip Generation Note. This note covers a series of agreements for the trip rate and quantum for the EMGP2 development modelling.</li><li>Included within this are the treatment of mezzanine floorspace as ground floorspace for the purposes of trip rate generation within the core scenario, using the higher shoulder peak, inclusive of 30,000 sqm of B8 at EMG1.</li><li>The agreed trip generation as contained within this note has formed the basis of the proforma with the 13th and 14th version, agreed (as detailed under PRTM proforma v14 (10/10/2024))</li></ul> <b>EMG1 Rail Freight Terminal (EMG2-BWB-GEN-XX-RP-CH-0011)</b> <ul style="list-style-type: none"><li>JSJV (on behalf of National Highways) undertook a review of the supporting changes to the Rail Freight Interchange. This note set out the change in maximum crane height to 24m and the increased stacking of containers to 15m.</li><li>National Highways agreed on 23/10/24 that they agreed that the Rail Freight Interchange changes in maximum crane height would not affect traffic on the SRN.</li></ul>
Approver 2	Name	
	Organisation	Leicestershire County Council
	Position	
	Date	
	Signature	
	Comments (if applicable)	
Approver 3	Name	
	Organisation	Nottinghamshire County Council

**Commented [AW8]:** The note is agreed, however we would refer back to our earlier comments that the whole trip generation methodology is based on assessments undertaken a significant time ago, including rail demand.

**Commented [AW9]:** The note is agreed, notwithstanding out comments on the trip generation note above. Whilst the rail freight trips associated with EMGP2 do not need to be added to the PRTM assessment, they will need to be taken account of as part of the VISSIM modelling.

**TECHNICAL APPROVAL**  
East Midlands Gateway 2



	Position	
	Date	
	Signature	
	Comments (if applicable)	

## **APPENDIX 31: BREAAAM Accessibility Index Calculator (proposed development)**

## BREEAM 2018 Tra01/02 Accessibility Index calculator



Using the drop down boxes make the relevant selections and press the 'Select' button

Building type

No. nodes required

Select

### NODE 1

Public transport type	Bus									
Distance to node (m)	300									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	4	2	3	1	2	4				

### NODE 2

Public transport type	Bus									
Distance to node (m)										
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour										

Accessibility Index	6.21
---------------------	------

## **APPENDIX 32: Stage 1A Modelling sign off sheet**

<b>Document Name</b>	<b>Stage 1A Modelling Documents</b>		<b>Project reference</b>
			220500
<b>Document reference / revision</b>	VISSIM Scoping Note (EMG2-BWB-GEN-XX-RP-TR-0003 Revision P3)		<b>Date</b>
	Modelling Furnessing Methodology (EMG2-BWB-GEN-XX-RP-TR-0004 Revision P3)		
	VISSIM LMVR (EMG2-BWB-GEN-XX-RP-TR-0006 Revision P2)		
	PRTM proforma v14 (10/10/2024)		
	PRTM uncertainty log v7		
	PRTM LMVR Addendum (19/08/2024)		
<b>Approver 1</b>	<b>Name</b>	Catherine Townend	
	<b>Organisation</b>	National Highways	
	<b>Position</b>	Spatial Planner	
	<b>Date</b>	04/12/2024	
	<b>Signature</b>	<i>Catherine Townend</i>	
	<b>Comments (if applicable)</b>	<p>National Highways has undertaken a review of the referenced documents and notes the following: -</p> <p><b>VISSIM Scoping Note (EMG2-BWB-GEN-XX-RP-TR-0003 Revision P3)</b></p> <ul style="list-style-type: none"> <li>• JSJV (on behalf of National Highways) undertook a review of the supporting VISSIM Scoping Note.</li> <li>• Subject to a number of revisions to the scoping Note and Journey Time routes, as set out in email 14/03/2023, National Highways were content with the scope of the VISSIM model to analyse impacts on the SRN.</li> </ul> <p><b>Modelling Furnessing Methodology (EMG2-BWB-GEN-XX-RP-TR-0004 Revision P3)</b></p> <ul style="list-style-type: none"> <li>• JSJV have undertaken a detailed review of the Furnessing Methodology note and the supporting excel spreadsheets.</li> </ul>	



		<ul style="list-style-type: none"> <li>• Corrective actions were undertaken as outlined in emailed correspondence dated 07/02/2024.</li> <li>• A second audit was undertaken which identified a number of issues with the supplied spreadsheets as outlined in email correspondence dated 27/02/2024.</li> </ul> <p>As outlined in an email dated 25/03/2024 National Highways advised: -</p> <ul style="list-style-type: none"> <li>• There is a significant element of re-routing at some junctions such as M1 J25 which sees a sizable increase in traffic flow on the A50 West to M1 North movement; and,</li> <li>• It is possible there is also some model noise from the SATURN model.</li> </ul> <p>National Highways are content with the proposed methodology subject to the continued critical review of the above matters as part of the forecasting testing.</p> <p>In addition, National Highways require the Promoter to work in consultation with us through the development of the forecasting testing on the Strategic Road Network.</p> <p><b>VISSIM LMVR (EMG2-BWB-GEN-XX-RP-TR-0006 Revision P2)</b></p> <ul style="list-style-type: none"> <li>• National Highways requested JSJV review the supporting LMVR and modelling files in May 2023.</li> <li>• JSJV outlined the findings of the first audit review and produced a supporting Tech Note [B2448400 Midlands Freeport VISSIM Base Model Final Review April 2023]. This audit identified 10 Substantive issues, 11 Comments and 3 Observations which required corrective action.</li> <li>• JSJV undertook a second audit for the supporting LMVR and revised modelling. The findings of this audit are contained in a second Tech Note [B2448400 Midlands Freeport VISSIM Base Model Final Review Sept 2023].</li> <li>• National Highways approved the use of the Base Model for analysing impacts on the SRN in September 2023.</li> </ul> <p><b>PRTM proforma v14 (10/10/2024)</b></p> <ul style="list-style-type: none"> <li>• JSJV (on behalf of National Highways) advised that we were content with the 13<sup>th</sup> version off the proforma as outlined in email correspondence dated 08/10/24.</li> </ul>
--	--	--

		<ul style="list-style-type: none"> <li>The 14<sup>th</sup> version of the PRTIM proforma is also now agreed by National Highways.</li> </ul> <p><b>PRTM uncertainty log v7</b></p> <ul style="list-style-type: none"> <li>National Highways are content with the 7<sup>th</sup> version of the uncertainty log received on 14/10/24.</li> </ul> <p><b>PRTM LMVR Addendum (19/08/2024)</b></p> <ul style="list-style-type: none"> <li>As outlined in email correspondence 18/09/2024, National Highways are content with the use of EMFM (PRTM) to analyse impacts on the SRN noting that Journey Times may need to be considered again as part of the forecasting analysis.</li> </ul> <p>It was noted that Calibration is generally very high (94.2% in AM, 92.2% in PM) across the modelled area.</p> <p>Where the model does not achieve link calibration, as shown in Figures 3.4 and 3.5, these locations are far from the development site and do not appear to be on the SRN. There is one exception to this, on the M1 between J23a and 24 in the PM peak, which has a reported GEH of 6.8 (460 vehicles modelled above observed).</p> <p>There is a risk of over-fitting the model to calibration counts which will need to be kept in mind when considering the forecasting.</p> <p><b>Local Junction Base Model review [240514 EMG2_Base Jct Model Comments and Responses_150524]</b></p> <ul style="list-style-type: none"> <li>National Highways requested JSJV review the supporting Local Junction Modelling.</li> <li>The findings of the audit are presented in a Tech Note dated 12<sup>th</sup> February 2024 [B2428400 Midlands EMG_BWB Junction Models Review 2024]. The audit identified 26 Substantive issues, 7 Comments and 23 Observations.</li> <li>Two further re-submissions were made and further audit comments captured in the Audit Tracker [240514 EMG2_Base Jct Model Comments and Responses_150524]</li> <li>A final audit was undertaken by JSJV and the base models were approved for use to analyse impacts on the SRN in June 2024. The findings of the audit are presented in a Tech Note [B2428400 Midlands EMG_BWB Junction Models Review June 2024].</li> </ul>
--	--	---

		<p><b>Trip Generation; Core Assessment Note (EMG2-BWB-GEN-X-RP-TR-0012 Revision P1)</b></p> <ul style="list-style-type: none"><li>• JSJV (on behalf of National Highways) undertook a review of the supporting Trip Generation Note. This note covers a series of agreements for the trip rate and quantum for the EMGP2 development modelling.</li><li>• Included within this are the treatment of mezzanine floorspace as ground floorspace for the purposes of trip rate generation within the core scenario, using the higher shoulder peak, inclusive of 30,000 sqm of B8 at EMG1.</li><li>• The agreed trip generation as contained within this note has formed the basis of the proforma with the 13th and 14th version, agreed (as detailed under PRTM proforma v14 (10/10/2024))</li></ul> <p><b>EMG1 Rail Freight Terminal (EMG2-BWB-GEN-XX-RP-CH-0011)</b></p> <ul style="list-style-type: none"><li>• JSJV (on behalf of National Highways) undertook a review of the supporting changes to the Rail Freight Interchange. This note set out the change in maximum crane height to 24m and the increased stacking of containers to 15m.</li><li>• National Highways agreed on 23/10/24 that they agreed that the Rail Freight Interchange changes in maximum crane height would not affect traffic on the SRN.</li></ul>
Approver 2	Name	
	Organisation	Leicestershire County Council
	Position	
	Date	
	Signature	
	Comments (if applicable)	
Approver 3	Name	Tom Boylan
	Organisation	Nottinghamshire County Council

	<b>Position</b>	Principal Officer Transport Planning
	<b>Date</b>	07/03/2025
	<b>Signature</b>	TB~
	<b>Comments (if applicable)</b>	<p><b>VISSIM Scoping Note and VISSIM LMVR</b></p> <p>NCC do not intend to review the VISSIM modelling documents in any detail and are happy to defer to National Highways (NH) and Leicestershire County Council colleagues.</p> <p><b>Modelling Furnessing Methodology Revision P3</b></p> <p>NCC are satisfied with the approach to use 'Actual' flows when trying to derive future forecast traffic flow matrices and are happy to grant technical approval for this document.</p> <p><b>PRTM Proforma v14</b></p> <p>Proforma v14 is acceptable to NCC</p> <p><b>PRTM Uncertainty Log v7</b></p> <p>NCC requested the inclusion of the A52 Gamston, Nottingham Knight and Wheatcroft junction upgrades (National Highways promoted schemes) to the Uncertainty Log.</p> <p>NCC confirmed on 8/7/2024 that the highway network tab within the Uncertainty Log (v7) now included all three junctions and as a result the Uncertainty Log (v7) is accepted by NCC.</p> <p><b>PRTM LMVR Addendum</b></p> <p>NCC note that the performance of the PM peak hour for the Nottingham Cordon now marginally fails with the latest May 2024 TAG data book (2022 – previously passed) but the Council is willing to accept this because of the overall performance of the model.</p>

**APPENDIX 33: EMG1 Vehicle Trip Rate Comparison Report (document reference  
PC6796)**

---

# REPORT

## **EMG1 Vehicle Trip Rate Comparison 2024**

SEGRO Logistics Park

Client: SEGRO

Reference: PC6796

Status: Final

Date: 7 February 2025



a company of Royal HaskoningDHV



HASKONINGDHV UK LTD.

1 Broadway  
Nottingham  
NG1 1PR  
United Kingdom  
Mobility & Infrastructure

+44 (0) 1733 33 44 55 **T**  
info@uk.rhdhv.com **E**  
itpworld.net **W**

Document title: EMG1 Vehicle Trip Rate Comparison 2024

Subtitle: SEGRO Logistics Park  
Reference: PC6796  
Status: Final  
Date: 7 February 2025  
Project name: EMG2  
Project number: PC6158  
Author(s): Dan Fox, Matt James

Drafted by: Matt James

Checked by: Dan Fox, Nicola Lodge

Date: 07/02/2025

Approved by: Stephanie Meyers

Date: 07/02/2025

Classification

Final

*Unless otherwise agreed with the Client, no part of this document may be reproduced or made public or used for any purpose other than that for which the document was produced. HaskoningDHV UK Ltd. accepts no responsibility or liability whatsoever for this document other than towards the Client.*

*Please note: this document contains personal data of employees of HaskoningDHV UK Ltd.. Before publication or any other way of disclosing, this report needs to be anonymized, unless anonymisation of this document is prohibited by legislation.*

## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose	1
1.2	Report Structure	1
<b>2</b>	<b>Background</b>	<b>2</b>
2.1	Site Overview	2
2.2	Developable Area	2
<b>3</b>	<b>Methodology</b>	<b>5</b>
<b>4</b>	<b>Vehicle Volume Comparison</b>	<b>7</b>
4.1	2024 Surveyed Vehicle Volumes by Plot	7
4.2	2024 Calculated vs Surveyed Vehicle Volumes	8
4.3	Surveyed Vehicle Volume Comparison	10
<b>5</b>	<b>Vehicle Trip Rate Comparison</b>	<b>12</b>
5.1	Mezzanine Impact	13
<b>6</b>	<b>Summary</b>	<b>17</b>

## Table of Tables

Table 2-1: EMG1 2024 plot status and GFA	3
Table 3-1: EMG1 traffic survey locations	5
Table 3-2: Vehicle classification	7
Table 4-1: EMG1 2024 survey trips (per plot)	8
Table 4-2: EMG1 total anticipated GFA and assessed vehicle trip rates	8
Table 4-3: EMG1 surveyed vehicle trips in 2022, 2023 and 2024	11
Table 5-1: EMG1 surveyed vehicle trip rates per 100sqm GFA (incl. mezzanine) in 2022, 2023 and 2024	15
Table 5-2: EMG1 surveyed vehicle trip rates per 100sqm GFA (excl. mezzanine) in 2022, 2023 and 2024	16

## Table of Figures

Figure 2-1: EMG1 Development Area Plan	4
Figure 4-1: EMG1 comparison of daily two-way vehicle volumes	9

Figure 4-2: EMG1 comparison of AM and PM peak two-way vehicle volumes	9
Figure 5-1: EMG1 daily (24hr) vehicle trip rates per 100sqm GFA for 2014 (assessed), 2022, 2023 and 2024 (surveyed) by direction.	12
Figure 5-2: EMG1 two-way vehicle trip rates per 100sqm GFA for 2014 (assessed), 2022, 2023 and 2024 (surveyed) for peak hours.	13
Figure 5-3: EMG1 daily (24hr) vehicle trip rates per 100sqm excluding and including mezzanines.	13

# 1 Introduction

## 1.1 Purpose

Integrated Transport Planning (ITP) has been commissioned by SEGRO Plc (SEGRO) to conduct a comparative assessment of vehicle trip rates at East Midlands Gateway Phase 1 (EMG1) to determine:

- If the trip rates assessed at the planning stage in the site's Transport Assessment (TA) (2014) have been realised.
- If the surveyed vehicle trip rates have changed between the years that the traffic counts were conducted.
- The impact (if any) of mezzanine levels on trip rates.

The outcome of this assessment will be used to inform discussions about the appropriate vehicle trip rates for future developments.

For reference, throughout this report:

- "Assessed vehicle trip rates" refers to trip rates derived from the TRICS trip rate database, agreed with the Local Highway Authority and used within the site TA
- "Calculated vehicle trips" refers to application of the assessed vehicle trip rates from the TA to the 2024 Gross Floor Area (GFA) of operational units to calculate vehicle trip generation.
- "Surveyed vehicle trip rates" refers to trip rates derived from traffic survey data collected at EMG1 in 2022, 2023 and 2024.

## 1.2 Report Structure

This report is organised into the following sections:

- Section 2 provides background to EMG1, including the status of each unit in 2024 and the GFA.
- Section 3 details the methodology used to obtain the 2024 data and undertake the analysis.
- Section 4 presents a comparative analysis of the surveyed vehicle trip volumes in 2022, 2023 and 2024.
- Section 5 compares the vehicle trip rates.
- Section 6 provides a summary of the findings.

## 2 Background

As highlighted in the Introduction, this section presents an assessment of the vehicle trip rates used in the EMG1 TA (2014) and the trip rates recorded by vehicle surveys at EMG1 in 2024, this will help determine if the number of vehicle movements generated at EMG1 in 2024 is comparable to those assessed in 2014. A similar trip rate comparison exercise was carried out at EMG1 in 2022 and 2023. Where appropriate, this has been referenced within the report alongside the 2024 data.

The vehicle trip rates used within the EMG1 Transport Assessment (2014) were derived from the TRICS trip rate database and agreed with the Local Highway Authority during the planning process. As construction at the EMG1 is now complete, it provides a reasonable benchmark to re-assess the trip rates to understand if those assessed at the planning stage have been realised now the site is occupied. It will also help determine if there are subtle differences in vehicle trip rates depending on the occupier, size of each unit and whether that unit has mezzanine areas.

### 2.1 Site Overview

EMG1 is a 700-acre (2.8 km<sup>2</sup>) warehousing and logistics park adjacent to East Midlands Airport. It is 13 miles south-west of Nottingham, 14 miles south-east of Derby and 20 miles north-west of Leicester. Alongside warehousing and logistics accommodation, the site also includes a 50-acre (0.2km<sup>2</sup>) Strategic Rail Freight Interchange (SRFI) and because of this was defined as a Nationally Significant Infrastructure Project with planning granted via the means of a Development Consent Order.

Outline planning permission for 557,414 sqm of development was granted in 2016 and over the subsequent eight years, reserved matters applications for individual units have been determined via Northwest Leicestershire District Council. The first tenants occupied the site in 2019 and in 2024, all plots are now operational. Table 2-1 provides an overview of the businesses located at the site and their operational status in 2024. Figure 2-1 is the site masterplan and shows the spatial positioning of each plot within the red line boundary of EMG1.

### 2.2 Developable Area

Construction of individual plots has been led by market demand and built to tenant's operational requirements and in accordance with the consented planning permission. While mezzanine floor area was not included in the outline planning application, it has been approved for some units via the reserved matters process. The use of mezzanines varies by unit and is often led by the tenant's commercial operations. For some units, mezzanines are used as additional floorspace, but for others it forms goods storage. The total GFA for all units built is 590,182 sqm compared to the 557,414 sqm originally consented for the site. The units with mezzanine installed have been set out in Table 2-1.

It has been assumed that any unit that was surveyed in 2024 was fully operational at the time the traffic surveys were carried out. Considering this, the total GFA used for the 2024 trip rate analysis when including mezzanines is 590,182 sqm and for any calculations excluding mezzanines, it is 434,501 sqm. Plot 13 has been excluded from this assessment herein as the site does not have a building and is used as container storage for the SRFI.

Table 2-1: EMG1 2024 plot status and GFA

Plot	Business	Included in assessment?			Status in 2024	2024 GFA (sqm)		
		2022	2023	2024		Floor Area	Mezz.	Total
1	Amazon	Yes	Yes	Yes	Fully Operational	48,106	83,724	131,830
2	GXO	Yes	Yes	Yes	Fully Operational	59,298	5,000	64,298
3	The Very Group	Yes	Yes	Yes	Fully Operational	50,306	32,123	82,429
4	Kuehne + Nagel	Yes	Yes	Yes	Fully Operational	18,264	-	18,264
5	Maersk	No	No	Yes	Fully Operational	63,830	13,200	77,030
6	Games Workshop	Yes	Yes	Yes	Fully Operational	16,498	-	16,498
7	DHL	Yes	Yes	Yes	Fully Operational	17,833	7,214	25,047
8	Amazon	Yes	Yes	Yes	Fully Operational	13,611	-	13,611
9	Arvato	No	Yes	Yes	Fully Operational	20,589	4,175	24,764
11	Ceva Logistics	No	Yes	Yes	Fully Operational	60,259	-	60,259
12	DHL	Yes	Yes	Yes	Fully Operational	64,563	10,245	74,808
13	Maersk	No	No	No	Container Storage	-	-	-
SRFI	Maritime	No	No	Yes	Fully Operational	1,344	-	1,344
Total GFA included in 2024 analysis, excl. Plot 13						434,501	155,681	590,182



Figure 2-1: EMG1 Development Area Plan



### 3 Methodology

To obtain accurate vehicle data for the comparative assessment, traffic surveys were undertaken for seven days from Tuesday 12<sup>th</sup> November to Monday 18<sup>th</sup> November 2024 (outside of school half term holidays in all relevant local authority areas). November represents a seasonal peak period for freight operations at EMG1 as many tenants scale up their workforce and operations ahead of Amazon Prime Day, Black Friday and Christmas. Carrying out the traffic surveys during this month means it likely captured vehicle movements at their peak for 2024.

This year traffic surveys were carried out using video footage rather than Automatic Traffic Count (ATC) surveys to increase the accuracy of the data. This change in methodology was adopted as the specialist road traffic survey suppliers advised there is higher risk of false readings or misclassification of vehicles if ATCs are used at unit entrances/exits due to the slow-moving speed of vehicles. Whilst more costly to implement, video footage has been adopted to ensure the data collected is robust. The traffic surveys were completed by Road Data Services, an independent third-party traffic survey specialist.

In total, there were 24 traffic survey locations at EMG1 to cover all vehicular access points at operational plots with fixed units. A summary of the count locations is shown in Table 3-1. The raw data obtained from each survey site has been consolidated by ITP to obtain an overall number of vehicle trips per plot. For this assessment vehicle classes have been summarised into either light vehicle (LGV) or heavy goods vehicle (HGV), as per Table 3-2.

To streamline the analysis process, a mid-week average has been calculated for data gathered from Tuesday to Thursday, during the seven-day survey period. This has been deemed appropriate to provide a typical weekday representation of vehicle movements and allows for a direct comparison with the assessments carried out in 2022 and 2023.

For each plot, three time periods have then been assessed using the survey data:












- AM Peak - 08:00 – 09:00
- PM Peak - 17:00 – 18:00
- Daily - 00:00 – 00:00 (24-hour period)

Table 3-1: EMG1 traffic survey locations

Plot	Tenant	Traffic Survey Locations	Camera Reference
Plot 1	Amazon EMA1	Employee Car Park Entrance 1 (Inbound Only)	17
		Employee Car Park Entrance 2 (Inbound/Outbound)	16
		HGV Inbound/Outbound Entrance	18
		HGV Outbound Entrance 2 (Seasonal Access)	14
Plot 2	GXO	Employee Car Park (Inbound/Outbound)	12
		HGV (Inbound)	10
		HGV (Outbound)	11
Plot 3	The Very Group	Employee Car Park (Inbound/Outbound)	7
		HGV (Inbound)	9
		HGV (Outbound)	4

Plot	Tenant	Traffic Survey Locations	Camera Reference
Plot 4	K+N	Employee Car Park (Inbound/Outbound)	2
		HGV (Inbound/Outbound)	3
Plot 5	Maersk	HGV and Employee Inbound/Outbound Entrance	1
Plot 6	Games Workshop	Employee Car Park (Inbound/Outbound)	20
		HGV Inbound/Outbound Entrance	21
Plot 7	DHL Caterpillar	HGV & Employee Inbound/Outbound Entrance	22
Plot 8	Amazon DNG2	HGV & Employee Inbound/Outbound Entrance	23
Plot 9	Arvato	HGV & Employee Inbound/Outbound Entrance	5
Plot 11	CEVA Logistics	Employee Car Park (Inbound/Outbound)	8
		HGV Car Park (Inbound/Outbound)	6
Plot 12	DHL Mars	Employee Inbound/Outbound Entrance	13
		HGV Inbound/Outbound Entrance	15
SRFI	Maritime	HGV and Employee Inbound/Outbound Entrance	24

Table 3-2: Vehicle classification

Light Vehicles					
Axles	Description	Class		Parameters	Dominant Vehicle
2	Very Short - Bicycle or Motorcycle	MC	1	d(1)<1.7m & axles=2	
2	Short - Sedan, Wagon, 4WD, Utility, Light Van	SV	2	d(1)>=1.7m, d(1)<=3.2m & axles=2	
3, 4 or 5	Short Towing - Trailer, Caravan, Boat, etc.	SVT	3	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5	
Heavy Good Vehicles					
Axles	Description	Class		Parameters	Dominant Vehicle
2	Two axle truck or Bus	TB2	4	d(1)>3.2m & axles=2	
3	Three axle truck or Bus	TB3	5	axles=3 & groups=2	
>3	Four axle truck	T4	6	axles>3 & groups=2	
3	Three axle articulated vehicle or Rigid vehicle and trailer	ART3	7	d(1)>3.2m, axles=3 & groups=3	
4	Four axle articulated vehicle or Rigid vehicle and trailer	ART4	8	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2	
5	Five axle articulated vehicle or Rigid vehicle and trailer	ART5	9	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles=5 & groups>2	
>=6	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	ART6	10	axles=6 & groups>2 or axles>6 & groups=3	
>6	B-Double or Heavy truck and trailer	BD	11	groups=4 & axles>6	
>6	Double or triple road train or Heavy truck and two (or more) trailers	DRT	12	groups>=5 & axles>6	

## 4 Vehicle Volume Comparison

### 4.1 2024 Surveyed Vehicle Volumes by Plot

Table 4-1 sets out the daily total two-way surveyed vehicle trips for each plot in 2024, taking the mid-week average (Tuesday to Thursday). This shows that Plot 1 (Amazon EMA1), Plot 3 (The Very Group), Plot 8 (Amazon DNG2) and Plot 12 (DHL Mars) generated the most vehicle movements, with each producing over 1,000 trips per day. Plot 1, Plot 3 and Plot 12 are three of the largest plots on-site in terms of GFA. In comparison, Plot 8 has the smallest GFA but generates a high number of vehicle trips due to the type of commercial operations at the unit, as a local distribution facility, rather than long-term warehouse storage.

Table 4-1: EMG1 2024 survey trips (per plot)

Plot	GFA incl. mezzanine (sqm)	Surveyed Vehicles (2024)		
		Light Vehicles	HGVs	Total Vehicles
Plot 1	131,830	1,896	506	2,402
Plot 2	64,298	450	448	898
Plot 3	82,429	656	387	1,043
Plot 4	18,264	500	250	750
Plot 5	77,030	643	284	926
Plot 6	16,498	292	71	362
Plot 7	25,047	192	42	235
Plot 8	13,611	1,813	123	1,935
Plot 9	24,764	336	67	403
Plot 10	60,259	408	257	665
Plot 12	74,808	787	653	1,440
SRFI	1,344	189	424	613
<b>Total</b>	<b>590,182</b>	<b>8,161</b>	<b>3,511</b>	<b>11,672</b>

\*As an average of vehicle trips has been calculated covering the three days of data, some total vehicle trips may not appear to add up between light vehicles and HGV due to rounding. However, vehicle trip rates are calculated from the true, non-rounded value

## 4.2 2024 Calculated vs Surveyed Vehicle Volumes

At the planning stage for EMG1, the assessed vehicle trip rates and total anticipated GFA for the development (557,414 sqm) were used to calculate the total number of two-way vehicle trips. These trip rates have been outlined in Table 4-2.

Table 4-2: EMG1 total anticipated GFA and assessed vehicle trip rates

Year	Vehicle Type	AM Peak			PM Peak			Daily		
		0800 – 0900			1700 – 1800			24hrs		
		Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
2014 assessed trip rates per 100sqm (557,414sqm)	Light	0.121	0.013	0.135	0.029	0.108	0.137	1.06	1.043	2.103
	HGV	0.019	0.023	0.041	0.020	0.024	0.044	0.459	0.475	0.934
	<b>Total</b>	<b>0.140</b>	<b>0.036</b>	<b>0.176</b>	<b>0.049</b>	<b>0.132</b>	<b>0.181</b>	<b>1.519</b>	<b>1.517</b>	<b>3.036</b>

To enable a fair vehicle volume comparison in 2024, the 2014 assessed trip rates (Table 4-2) have been applied to the total GFA delivered at EMG1 in 2024 (590,182 sqm) in Table 5-1, presented later in the report.



Figure 4-1 shows a comparison of the daily (24hr) mid-week average EMG1 2024 surveyed data against the 2014 calculated vehicle trip generation (applying the 2014 assessed trip rates to the 2024 GFA). The data shows there are 6,246 fewer daily movements (35% less) in the 2024 surveyed data.

Building on this, Figure 4-2 disaggregates the vehicle data by morning (0800-0900) and evening (1700-1800) peak periods. The 2024 surveyed data show 48% fewer vehicle trips in the morning peak and 34% fewer in the evening peak when compared to the 2024 calculated vehicle volumes.

Figure 4-1: EMG1 comparison of daily two-way vehicle volumes

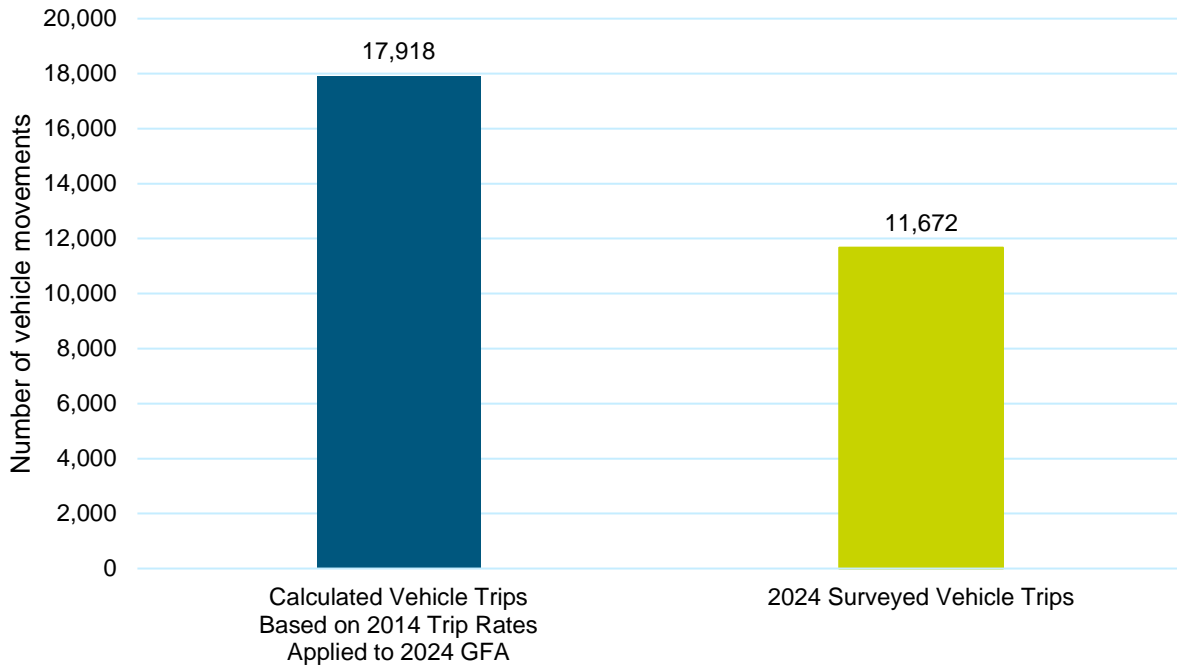
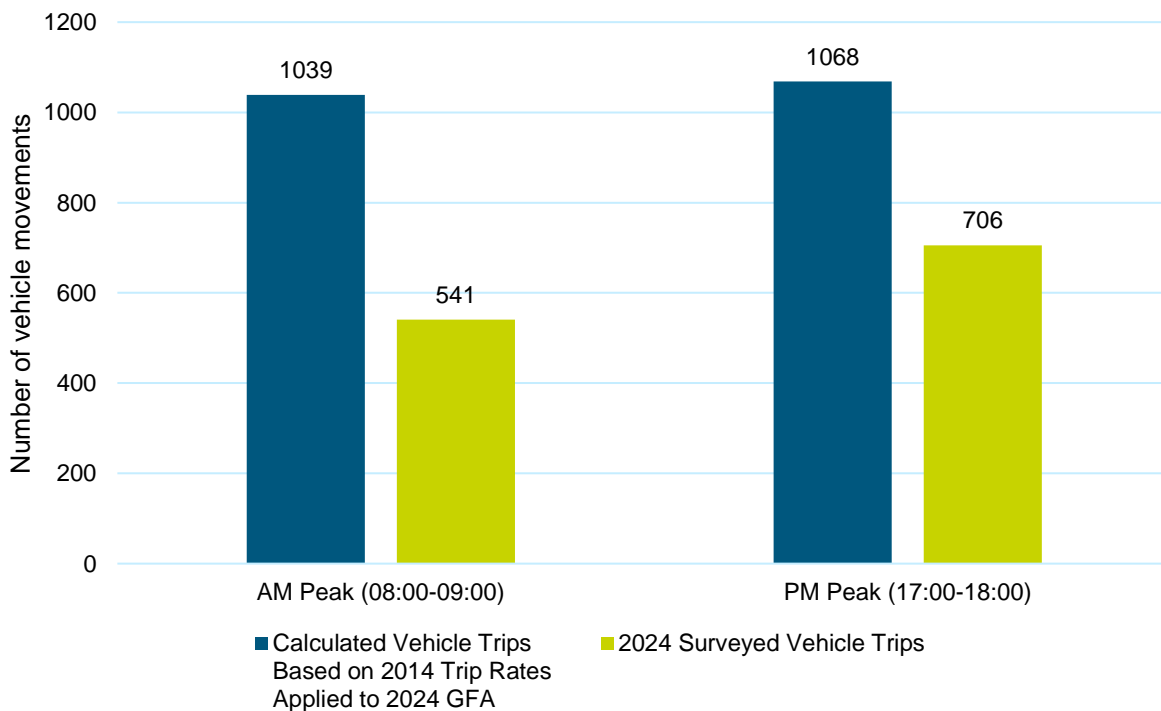


Figure 4-2: EMG1 comparison of AM and PM peak two-way vehicle volumes





### 4.3 Surveyed Vehicle Volume Comparison

When comparing the traffic survey data collected from surveyed units in 2023 and 2024, the daily vehicle volumes are greater in 2024 than in 2023. The increase in daily two-way trips is approximately 2,022 vehicles (21% increase). This is made up of an increase of 1,901 light vehicles and 121 HGVs. This is likely to reflect the reflect two businesses (Maersk and Maritime) commencing operations since the 2023 assessment, which added an additional daily 1,539 two-way trips. Aside from these two businesses there were also 483 additional two-way trips recorded in 2024 compared to 2023.

Table 4-3 provides a detailed breakdown of the 2022 and 2023 surveyed trips, the 2024 calculated trips and the 2024 surveyed trips in the morning peak (0800-0900), evening peak (1700-1800) and 24hr period. The data has also been disaggregated by vehicle type and by direction.

Table 4-3: EMG1 surveyed vehicle trips in 2022, 2023 and 2024

Year	Vehicle Type	AM Peak (0800 – 0900)			PM Peak (1700 – 1800)			Daily (24hrs)		
		Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
2022 surveyed trips	Light	286	89	375	189	217	406	3,977	4,066	8,042
	HGV	34	21	56	21	31	52	619	698	1,317
	<b>Total</b>	<b>320</b>	<b>110</b>	<b>431</b>	<b>211</b>	<b>247</b>	<b>458</b>	<b>4,596</b>	<b>4,763</b>	<b>9,359</b>
2023 surveyed trips	Light	269	104	373	146	226	372	3,064	3,196	6,260
	HGV	85	83	168	67	81	148	1,564	1,826	3,390
	<b>Total</b>	<b>354</b>	<b>187</b>	<b>541</b>	<b>214</b>	<b>307</b>	<b>521</b>	<b>4,628</b>	<b>5,022</b>	<b>9,650</b>
2024 calculated trips (including mezzanine) <sup>1</sup>	Light	714	77	797	171	637	809	6,256	6,156	12,412
	HGV	112	136	242	118	142	260	2,709	2,803	5,512
	<b>Total</b>	<b>826</b>	<b>212</b>	<b>1,039</b>	<b>289</b>	<b>779</b>	<b>1,068</b>	<b>8,965</b>	<b>8,953</b>	<b>17,918</b>
2024 calculated trips (excluding mezzanine) <sup>2</sup>	Light	526	56	587	126	469	595	4,606	4,532	9,138
	HGV	83	100	178	87	104	191	1,994	2,064	4,058
	<b>Total</b>	<b>608</b>	<b>156</b>	<b>765</b>	<b>213</b>	<b>574</b>	<b>786</b>	<b>6,600</b>	<b>6,591</b>	<b>13,191</b>
2024 surveyed trips	Light	327	51	378	205	351	556	4,075	4,086	8,161
	HGV	91	72	163	74	75	149	1,755	1,756	3,511
	<b>Total</b>	<b>418</b>	<b>123</b>	<b>541</b>	<b>279</b>	<b>426</b>	<b>706</b>	<b>5,830</b>	<b>5,842</b>	<b>11,672</b>
Difference between 2024 calculated (including mezzanine) and surveyed trips	Light	-387	-26	-419	34	-286	-252	-2,181	-2,070	-4,250
	HGV	-21	-63	-79	-44	-67	-110	-954	-1,047	-2,001
	<b>Total</b>	<b>-409</b>	<b>-89</b>	<b>-498</b>	<b>-10</b>	<b>-353</b>	<b>-363</b>	<b>-3,135</b>	<b>-3,111</b>	<b>-6,246</b>
Difference between 2024 calculated (excluding mezzanine) and surveyed trips	Light	-199	-5	-209	79	-118	-39	-530	-446	-976
	HGV	8	-28	-15	-13	-29	-42	-240	-308	-547
	<b>Total</b>	<b>-191</b>	<b>-33</b>	<b>-224</b>	<b>66</b>	<b>-147</b>	<b>-81</b>	<b>-770</b>	<b>-749</b>	<b>-1,519</b>
Difference between 2022 and 2024 surveyed trips	Light	41	-38	3	16	134	150	98	20	119
	HGV	57	51	107	53	44	97	1,136	1,058	2,194
	<b>Total</b>	<b>98</b>	<b>13</b>	<b>110</b>	<b>68</b>	<b>179</b>	<b>248</b>	<b>1,234</b>	<b>1,079</b>	<b>2,313</b>
Difference between 2023 and 2024 surveyed trips	Light	58	-53	5	59	125	184	1,011	890	1,901
	HGV	6	-11	-5	7	-6	1	191	-70	121
	<b>Total</b>	<b>64</b>	<b>-64</b>	<b>0</b>	<b>65</b>	<b>119</b>	<b>185</b>	<b>1,202</b>	<b>820</b>	<b>2,022</b>

<sup>1</sup> Applies the 2014 assessed vehicle trip rate to the 2024 GFA (including mezzanine) to provide a forecast of the number of trips.

<sup>2</sup> Applies the 2014 assessed vehicle trip rate to the 2024 GFA (excluding mezzanine) to provide a forecast of the number of trips.

## 5 Vehicle Trip Rate Comparison

At the planning stage of EMG1, vehicle trip rates were agreed with the Local Highway Authority based on the type of development proposed for the site, primarily Use Class B8. These assessed vehicle trip rates were used in the EMG1 TA (2014) and are referenced in Table 5-1.

The surveyed vehicle volumes collected through the traffic surveys in 2024 have been applied to the GFAs for the surveyed plots in 2024 to calculate a trip rate per 100sqm of GFA. A similar calculation was carried out in 2022 and 2023 using ATC data and GFAs of occupied plots at that point.

Figure 5-1 compares the daily vehicle trip rate per 100sqm as assessed in the EMG1 TA (2014) alongside the surveyed vehicle trip rates based on the ATC data in 2022 and 2023, and the traffic survey data in 2024. This shows that while daily vehicle trip rates are slightly higher in 2024 than 2023, they are lower than 2022 and those assessed in 2014.

Figure 5-1: EMG1 daily (24hr) vehicle trip rates per 100sqm GFA for 2014 (assessed), 2022, 2023 and 2024 (surveyed) by direction.

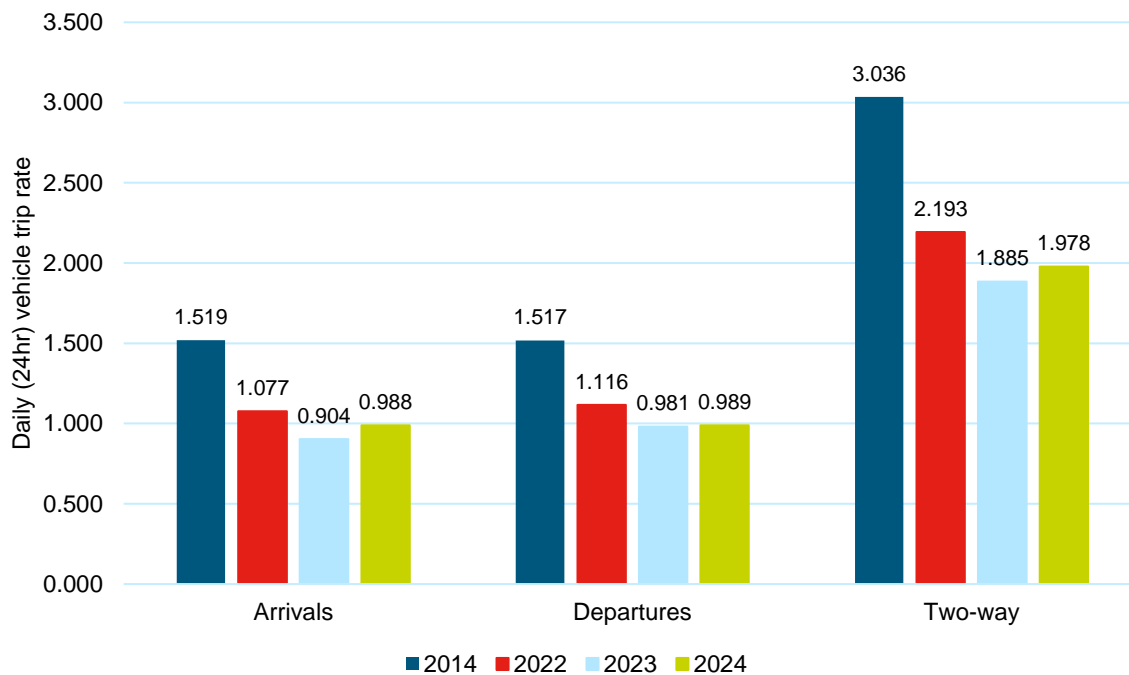
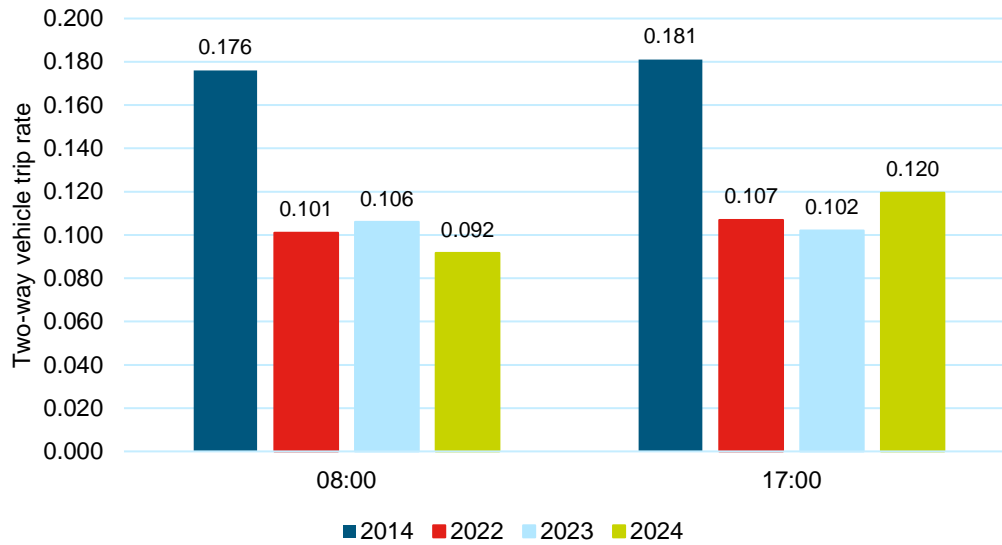


Figure 5-2 builds on this and compares the two-way vehicle trip rate in the morning and evening peak periods. This demonstrates that two-way vehicle trip rates are lower in the AM peak in 2024 than in all the previous years (assessed and surveyed), but the trip rates are greater in the PM peak period in 2024 than 2022 and 2023. This indicates that trip rates in the PM peak period have increased slightly compared to previous survey years, but do not exceed the vehicle trip rates assessed in 2014.

Figure 5-2: EMG1 two-way vehicle trip rates per 100sqm GFA for 2014 (assessed), 2022, 2023 and 2024 (surveyed) for peak hours.



## 5.1 Mezzanine Impact

The assessed vehicle trip rates (2014) and the surveyed vehicle trip rates in 2022, 2023 and 2024 are based on the GFA which, for applicable units, also accounts for mezzanines.

Figure 5-3 outlines the daily (24hr) vehicle trip rates per 100sqm based on the 2014 assessed trip rates from the EMG1 TA and the 2024 surveyed trip rates excluding and including mezzanines. This shows that the daily surveyed trip rates in 2024 are lower than those assessed in 2014 regardless of mezzanines.

Figure 5-3: EMG1 daily (24hr) vehicle trip rates per 100sqm excluding and including mezzanines.

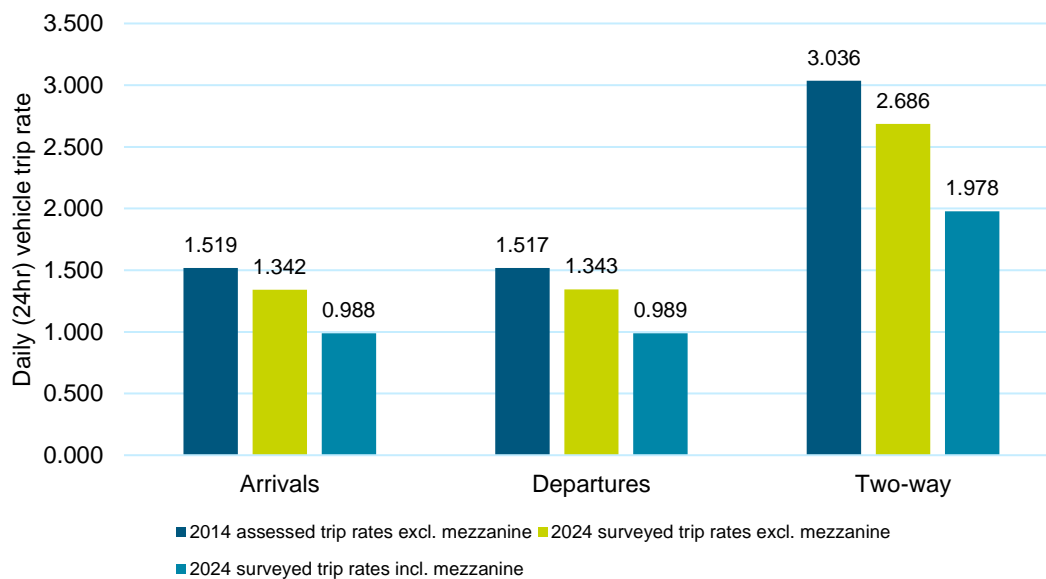


Table 5-1 builds on this and provides a detailed breakdown of the trip rates including mezzanines by peak hour and direction. As detailed in the preceding section, 2024 two-way vehicle trip rates, when accounting for mezzanines, are lower than the 2014 vehicle trip rates for all the analysed time periods.

At the planning stage of EMG1, there was no allocation for mezzanines in the GFA and the vehicle trip rates considered plan floor area only. To provide a more comparable trip rate assessment to 2014, 2024 vehicle trip rates have also been calculated based on the floor area of operational units excluding mezzanines. Figure 5-3 shows that, when excluding mezzanines, the daily vehicle trip rates for 2024 are lower than 2014. Table 5-2 provides a detailed breakdown of vehicle trip rates excluding mezzanines by peak hour and direction as well as daily totals. This shows that the 2024 vehicle trip rates are lower than those assessed in 2014, for all scenarios except for arrivals in the evening peak hour and arrival and two-way between 7:00 and 8:00.