

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 9

9.118 National Highways Statement on Construction Phase Traffic
Monitoring

Planning Act 2008

Rule 8(1)(k)

Infrastructure Planning (Examination Procedure) Rules
2010

February 2022

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning (Examination Procedure)
Rules 2010**

**A428 Black Cat to Caxton Gibbet
improvements
Development Consent Order 202[]**

**9.118 National Highways Position Statement on Construction Phase
Traffic Monitoring**

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1 Introduction

- 1.1.1 This Position Statement (the “Statement”) has been produced by National Highways (the Applicant) in response to **[REP06-074]** submitted by the Local Highways Authorities (LHAs) of Bedford Borough Council, Central Bedfordshire Council and Cambridgeshire County Council.
- 1.1.2 The Applicant’s response submitted at Deadline 8 **[REP8-010]** (response to submission REP6-074a) reads:
- ‘For the reasons outlined within the Monitor and Manage Technical Note, submitted at Deadline 6 **[REP6-041]**, the Applicant does not consider the inclusion of this proposed Requirement justified or at all appropriate. Please see the Applicant’s response to Written Question 3.11.2.1(g) in the Applicant’s Responses to the Examining Authority’s Third Round of Written Questions **[REP8-014]** for a further, more detailed response on this proposed requirement.’*
- 1.1.3 Noting the LHA’s concern for potential increases in HGV and overall traffic volumes during the construction phase, the Applicant has reviewed the proposed monitoring locations stated within **[REP06-074]** at Paragraph 1 and the results of this analysis are presented at Appendix A.
- 1.1.4 Originally submitted at Deadline 9 **[REP9-036]** this Statement has been updated to reflect comments received from Cambridgeshire and Central Bedfordshire Councils and further engagement with all LHA’s.
- 1.1.5 Initially, it was intended to issue a Joint Position Statement. However, following discussions, it has been agreed that each party will submit their own Position Statement. The list of sites for baseline monitoring set out below was shared with the Local Highway Authorities on 14 February 2022.

2 Position Statement

Applicant's Position

- 2.1.1 The locations listed within **[REP06-074]** were not precisely identified and consisted largely of named villages. In most cases, these did not include specific junctions or locations for monitoring. The list was not supported by any evidence or sensitivity information, and includes a number of locations where, based upon the forecasts from the strategic model, traffic flows are either anticipated to reduce during the construction phase of the Scheme, or are predicted to remain broadly the same.
- 2.1.2 Without prejudice to the Applicant's position that the LHAs have not provided any compelling evidence which demonstrates that construction monitoring is necessary, the Applicant has used selected links available within the Strategic model to consider the worst-case scenario within these village locations during the construction phase. The Applicant has then extracted traffic volumes without the Scheme (the Do Minimum (DM)) and for Construction Phase 3 (the most onerous phase of the construction programme for self-diverting traffic) listed all vehicle and HGV results separately to consider the concerns raised.
- 2.1.3 The original version of this Statement was submitted at Deadline 9 by the Applicant and set out the Applicant's proposed approach to baseline monitoring for the construction phase of the Scheme. This document is referenced as follows:
- a. 9.118 National Highways Position Statement on Construction Phase Monitoring **[REP9-036]**.
- 2.1.4 The original version of this Statement was based on the principle that National Highways would offer to collect baseline traffic flow data to facilitate the monitoring of construction traffic impacts of the Scheme where the model indicated an increase in forecast traffic flows above a certain level. This included some, but not all, of the locations identified by the Local Highway Authorities in document **[REP6-074]** (Deadline 6 Submission – Monitor and Manage Draft Requirement). The sites selected by the Applicant were identified on the basis that the Strategic Model forecast an increase in traffic flows of either:
- a. An increase in 12-hour weekday two-way all-vehicle flows of more than 1,000.
 - b. An increase in 12-hour weekday Heavy Goods Vehicle (HGV) flows of more than 30%, subject to a minimum increase of 12 HGVs per day.
- 2.1.5 Following further discussions with the Local Highway Authorities on this matter, National Highways agreed to re-assess the site selection on the following basis:
- a. An increase in 12-hour weekday two-way all-vehicle flows of more than 30%.
 - b. An increase in 12-hour weekday Heavy Goods Vehicle (HGV) flows of more than 30%, subject to a minimum increase of 12 HGVs per day.
- 2.1.6 In addition, sites identified by the Local Highway Authorities which were forecast to receive increases of more than 10% were also identified.

- 2.1.7 The analysis based on the above methodology is set out in Appendix A to this Statement.
- 2.1.8 These thresholds are based on Rules 1 and 2 in the document 'Guidelines for the Environmental Assessment of Road Traffic'. These are:
- a. Rule 1: 'include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)'.
 - b. Rule 2: 'include any other specifically sensitive areas where traffic flows have increased by 10% or more'.
- 2.1.9 It is of note that, in **[REP9-041]**, in their response to the original proposals, Central Bedfordshire Council stated that: "*the areas identified within REP6-074 were on the basis that the locations were considered to be traffic sensitive by the authorities. As such, should the Examining Authority consider that a threshold-based criteria for baseline monitoring is appropriate, CBC consider that links within the identified parishes within CBC experiencing increases of 10% or more should be included (on the basis that an ES assessment would be required for this level of increase)*".
- 2.1.10 On the basis of this assessment, the Applicant has identified locations on the LRN for construction baseline monitoring. As this is founded on an evidence base, it is considered to be reasonable and proportionate as compared to the extensive and unspecific locations proposed by the LHAs. In the circumstances of this specific Scheme, the Applicant would therefore be prepared to undertake baseline monitoring for the construction phase, as follows:
- 2.1.11 Locations which meet the criterion of a greater than 30% increase in all vehicle or HGV traffic, or which the Applicant accepts are sensitive locations in the terms defined in the Guidance:

Bedford Borough

- a. Little Barford: Barford Road.
- b. Staploe and Duloe: Shakers Way/Duloe Road (one site).

Cambridgeshire

- a. Abbotsley: High Street.
- b. Bourn: Toft Road (B1046).
- c. Cambourne: School Lane.
- d. Caxton: Gransden Road (*).
- e. Conington: Elsworth Road.
- f. Elsworth: Boxworth Road.
- g. Eltisley: Potton End.
- h. Gamlingay: Church End/Church Street.
- i. Great Gransden: Caxton Road (*).

- j. Highfields Caldecote: Main Street.
- k. Knapwell: High Street.
- l. Little Gransden: Main Road.
- m. Madingley: High Street.
- n. St Neots: Town Bridge (**).
- o. Toseland: High Street.
- p. Waresley: Gransden Road.
- q. Yelling: High Street.

(*) – these locations are on the same highway link and would therefore be covered by one monitoring site.

(**) – this location does not meet the numerical criterion but the Applicant has agreed to undertake baseline monitoring because it is highly probable that this location will be assessed as part of measuring scheme benefits. **Central Bedfordshire**

- a. Blunham: Barford Road.
- b. Potton: Blackbird Street.
- c. Everton: Everton Road.

In addition, consideration will be given to assessing the following locations, based on evidence sought from the Local Highway Authorities as to the sensitivity of the locations concerned:

Bedford Borough

- a. Great Barford: Great Barford Bridge.
- b. Renhold: Top End/Green End/Water End (one site).

Central Bedfordshire

- a. Wrestlingworth: Tadlow Road.

- 2.1.12 A plan showing these locations is contained at Appendix B of this Statement. The Applicant considers the proposed locations not only address those points where the evidence from the model suggests perceptible differences may occur, but would allow conclusions to be drawn from the count locations to identify impacts at locations between monitoring points.
- 2.1.13 The Applicant proposes that baseline monitoring will occur for a minimum period of two weeks and the results will distinguish between HGVs and other vehicles.
- 2.1.14 The Applicant's proposed baseline monitoring for the construction phase has been secured in an update to the Outline Construction Traffic Management Plan (OCTMP) submitted at Deadline 10 [TR010044/EXAM/7.4v5].

- 2.1.15 It should be remembered that the traffic flow increases predicted in these locations are short-term increases predicted to occur during the construction phase of the Scheme and are not predicted to have permanent impacts. They relate to traffic which is anticipated to self-divert onto local roads running parallel with the Scheme whilst construction works are under way and also to the Heavy Goods Vehicle (HGV) traffic generated by the construction of the Scheme itself.
- 2.1.16 Whilst the Applicant has no control over which routes members of the general public use to complete their journeys whilst the Scheme is under construction, the OCTMP submitted at Deadline 9 **TR010044/EXAM/7.4v5** contains details of measures proposed to be deployed which are aimed at encouraging traffic to remain on the Strategic Road Network. The strategic traffic model assumes that individual drivers have knowledge of traffic conditions across the whole network and will follow the routes which are most beneficial to themselves. It does not account for the potential for drivers to follow signposted official diversionary routes. For these reasons, the Applicant considers that the construction phase traffic impacts reported are robust and likely to overstate the potential impact on local villages along routes which run parallel to the Scheme.
- 2.1.17 It is also the case that the majority of locations listed above are anticipated to benefit from substantial traffic flow reductions once the Scheme opens to traffic. Traffic which is predicted to self-divert on to these routes in the Do Minimum is expected to come back on to either the new dual carriageway or the existing A428 once the Scheme opens to traffic, resulting in a net benefit to these communities in the longer term.
- 2.1.18 The Applicant considers the monitoring of traffic flow is part of the LHAs routine maintenance responsibility and whilst supporting them in this by providing the baseline line counts and model outputs described above, the Applicant proposes that the LHAs share their monitoring data undertaken during the construction phase and that this is jointly reviewed by comparing datasets at Traffic Management forums.
- 2.1.19 As secured in the OCTMP [**TR010044/EXAM/7.4v5**], the Applicant will discuss the findings and agree the need for any necessary intervention as a result of those findings, within the Traffic Management forums.
- 2.1.20 Baseline data will be collected prior to construction start and outputs will distinguish between HGVs and lighter vehicles.
- 2.1.21 No further construction phase traffic monitoring, beyond that identified in 2.1.11 is proposed by the Applicant.
- 2.1.22 The Applicant does not consider it appropriate to specify what, if any, mitigation measures may be necessary at this stage, and when they might become necessary. This will be determined by the results of construction phase traffic monitoring, will be specific to the circumstances presented and will need to take into account any potential implications on traffic flows of delivering those mitigation measures. Resulting actions are to be agreed at Traffic Management forums.

Appendix A - Analysis of traffic flow changes between 2025 DM and Construction Phase 3

Area	Village	Link Selected	2025 DM All Traffic	2025 DM HGVs	Construction Phase 3 Traffic (all vehicles)	Construction Phase 3 Traffic (HGVs)	Flow Difference (absolute) (all vehicles)	Flow Difference (%) (all vehicles)	All Vehicle Criterion (>30% = red, >10% = amber)	Flow Difference (absolute) (HGVs)	Flow Difference (%) (HGVs)	HGV Rating (>30% = red, >10% = amber)
Bedford Borough	Roxton	Bedford Road	3665	-	3344	69	-321	-9%		-	-	
	Great Barford	Great Barford Bridge	2587	6	3237	9	651	25%		3	50%	
	Willington	Bedford Road	15715	833	16659	876	944	6%		43	5%	
	Little Barford	Barford Road	7476	61	7593	138	117	2%		77	126%	Yes
	Chawston	Chawston Lane	210	-	12	0	-199	-95%		-	-	
	Colesden	Colesden Road	646	26	448	20	-198	-31%		-6	-23%	
	Wilden	Renhold Road	1322	53	1438	50	116	9%		-3	-6%	
	Renhold	Top End/ Green End/ Water End	4980	160	5117	191	137	3%		31	19%	
	Ravensden	Sunderland Hill	2237	45	2263	33	26	1%		-12	-27%	
	Staploe and Duloe	Shakers Way/ Duloe Road	543	6	793	6	249	46%	Yes	0	0%	
Cambridgeshire	Abbotsley	High Street	1837	57	2353	85	516	28%		28	49%	Yes
	Bourn	Toft Road (B1046)	3419	111	4974	140	1555	45%	Yes	29	26%	
	Broadway, Bourn Airfield	Broadway	3290	123	4267	150	977	30%		27	22%	
	Cambourne	School Lane	7455	169	9746	180	2291	31%	Yes	11	7%	
	Caxton	Gransden Road	2958	83	5094	128	2137	72%	Yes	45	54%	Yes
	Conington	Elsworth Road	2348	109	3175	109	827	35%	Yes	0	0%	
	Coton	Cambridge Road	5612	110	5157	104	-455	-8%		-6	-5%	
	Elsworth	Boxworth Road	2573	70	3169	70	596	23%	Yes	0	0%	

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	Eltisley	Potton End	265	0	329	0	64	24%	Yes	0	0%	
	Eynesbury Hardwicke	St Neots Road (B1046)	1934	-	2420	83	486	25%		-	-	
	Gamlingay	Church End/ Church Street	2180	97	2912	106	732	34%	Yes	9	9%	
	Great Gransden	Caxton Road	3011	83	5143	128	2132	71%	Yes	45	54%	Yes
	Highfields Caldecote	Main Street	1495	13	2396	13	902	60%	Yes	0	0%	
	Knapwell	High Street	1715	0	2432	0	717	42%	Yes	0	0%	
	Little Gransden	Main Road	317	5	374	6	57	18%	Yes	1	20%	
	Madingley	High Street	3911	60	4367	75	456	12%	Yes	15	25%	
	St Neots	Town Bridge	12739	122	13520	123	782	6%	Yes (*)	1	1%	
	Toseland	High Street	4052	39	5673	57	1622	40%	Yes	18	46%	Yes
	Waresley	Gransden Road	3193	48	4118	60	925	29%	Yes	12	25%	
Yelling	High Street	4459	70	5863	85	1404	31%	Yes	15	21%		
Central Bedfordshire	Moggerhanger	Bedford Road	12244	770	13157	824	913	7%		54	7%	
	Blunham	Barford Road	3989	0	4792	0	803	20%	Yes	0	0%	
	Sandy	Bedford Road	10675	596	11298	633	623	6%		37	6%	
		St Neots Road	7165	152	7458	152	292	4%		0	0%	
		High Street	13092	640	13437	688	345	3%		48	8%	
	Potton	Blackbird Street	7834	437	8633	496	800	10%	Yes	59	14%	
	Wrestlingworth	Tadlow Road	6759	317	7410	357	652	10%		40	13%	

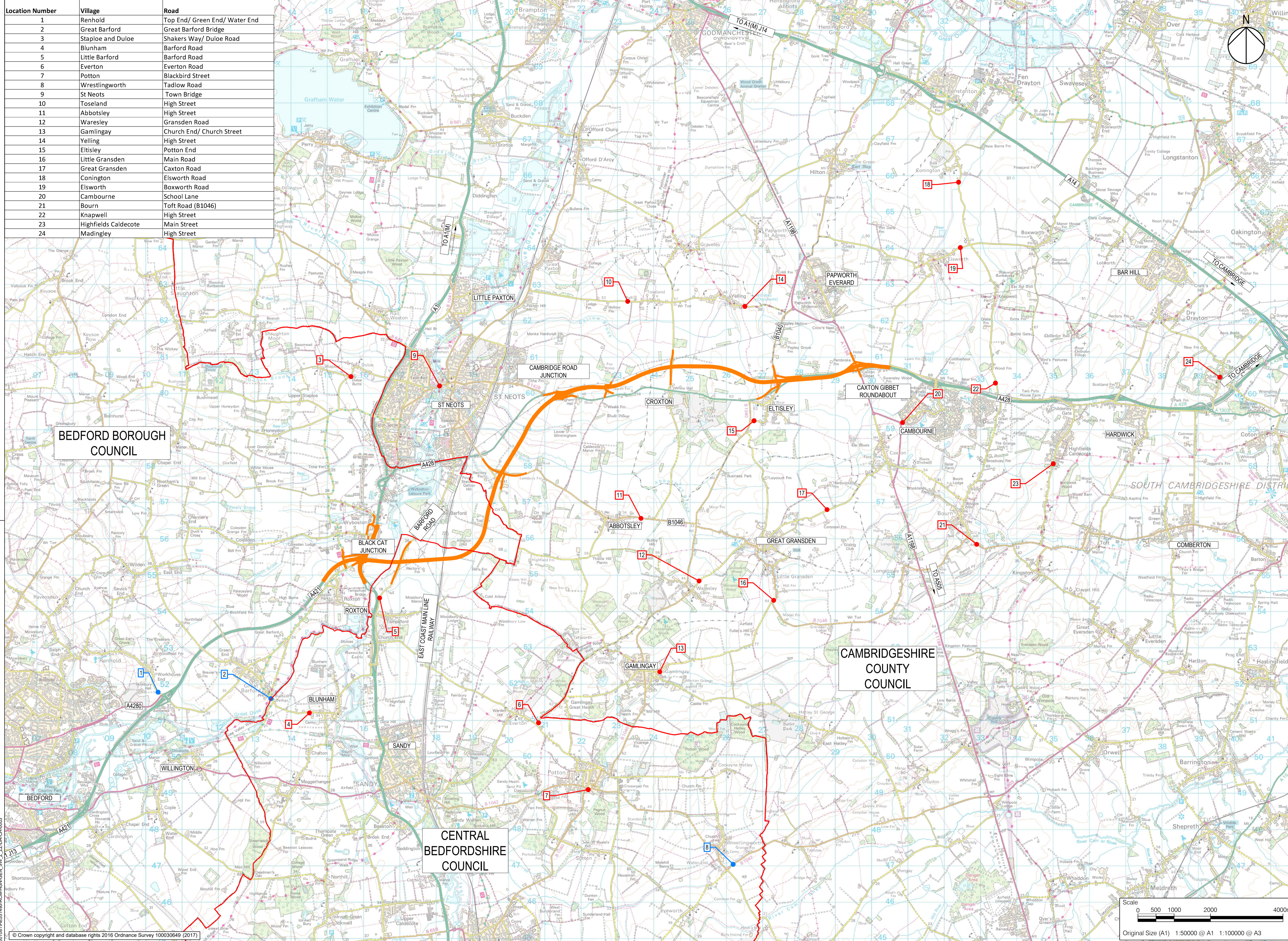
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	Everton	Everton Road	3212	92	3920	108	708	22%	Yes	16	17%	
	Biggleswade	i. Hill Lane E	7147	388	7408	407	261	4%		19	5%	
		ii. Hill Lane W	8809	397	9339	392	531	6%		-5	-1%	
	A1	North of A603 Junction NB	18209	1433	17204	1422	-1005	-6%		-11	-1%	
		North of A603 Junction SB	13021	1370	12477	1369	-544	-4%		-1	0%	

(*) – this location does not meet the numerical criterion but the Applicant has agreed to undertake baseline monitoring because it is highly probable that this location will be assessed as part of measuring scheme benefits.

Appendix B - Plan showing proposed monitoring locations

Location Number	Village	Road
1	Renhold	Top End/ Green End/ Water End
2	Great Barford	Great Barford Bridge
3	Staploe and Duloe	Shakers Way/ Duloe Road
4	Blunham	Barford Road
5	Little Barford	Barford Road
6	Everton	Everton Road
7	Potton	Blackbird Street
8	Wrestlingworth	Tadlow Road
9	St Neots	Town Bridge
10	Toseland	High Street
11	Abbotsley	High Street
12	Waresley	Gransden Road
13	Gamlingay	Church End/ Church Street
14	Yelling	High Street
15	Eltisley	Potton End
16	Little Gransden	Main Road
17	Great Gransden	Caxton Road
18	Conington	Eisworth Road
19	Elsworth	Boxworth Road
20	Cambourne	School Lane
21	Bourn	Toft Road (B1046)
22	Knapwell	High Street
23	Highfields Caldecote	Main Street
24	Madingley	High Street



NOTES

- DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
- ALL DIMENSIONS, CHAINAGES, LEVELS, AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE

KEY

- TRAFFIC MONITORING LOCATION
- SENSITIVE SITE TO BE ASSESSED
- COUNTY BOUNDARY
- PROPOSED DEVELOPMENT

DCO EXAMINATION

Client: National Highways
 Working on behalf of national highways

Development Consent Order Number: TR010044

Project Title: A428 BLACK CAT TO CAXTON GIBBET IMPROVEMENTS

Drawing Title: CONSTRUCTION PHASE TRAFFIC MONITORING LOCATIONS

Scale: 0 500 1000 2000 4000m
 Original Size (A1) 1:50000 @ A1 1:100000 @ A3

Designed	Drawn	Checked	Approved	Date
KBP	KBP	JW	PS	14/02/22

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 Subality: D9
 Scale @ A1: Zone
 General

Drawing Number: HE551495 -ACM -HGN-GEN_SW_Z_ZZ
 I Originator: I Volume: P02
 I Type: I Role: I Number: DR-CH-0003

Revision	By	Date	Suffix
Final for DCO Deadline 10	KBP	14/02/22	P02
Revision Details	PS		
	Check		

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 User: KBP