

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 9

**9.15 Applicant response to actions arising from Issue Specific
Hearing 1 on 18 August 2021**

Planning Act 2008

Rule 8(1)(k)

Infrastructure Planning (Examination Procedure) Rules
2010

August 2021

Infrastructure Planning

Planning Act 2008

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

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

**9.15 Applicant response to actions arising from
Issue Specific Hearing 1**

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1 Applicant Response to actions arising from Issue Specific Hearing 1

- 1.1.1 Following the Issue Specific Hearing 1 (ISH1) which was held on Wednesday 18 August 2021 the ExA published a list of actions arising from the ISH1 on 24 August 2021 which required a response or update at Deadline 1.
- 1.1.2 Of the actions identified a small number were identified for the Applicant whilst others were directed to other interested parties.
- 1.1.3 The following table sets out only those actions directed to the Applicant and the Applicant's corresponding response. In some instances, as noted within the table, further discussions will take place with relevant parties after Deadline 1 and the Applicant will update the ExA at subsequent deadlines as appropriate.

Table 1-1 Applicant responses to actions arising from Issue Specific Hearing 1

Action No.	Action	Party	Response at Deadline 1
3	Further justification for de-trunking of the existing A428, including the application of any strategic criteria relating to the function of the strategic road network, to support the case.	Applicant	A detailed response to Action 3 is provided at Appendix A.
4	Summary narrative of the criteria considered in the assessment of alternatives for the Black Cat junction and alignment of the A1 in the immediate and wider area, with particularly reference to historic environment, flood risk and floodplain compensation, land take, effects on other residential and commercial uses, the restoration of the quarry, and on the gas main to the south of the existing roundabout.	Applicant	A detailed response to Action 4 is provided at Appendix B.
6	Technical note, including 23 August meeting notes, to update next steps agreed with Natural England (NE) on surveys and tracking of bats from the Special Area of Conservation (SAC), and functional relationship between the bat roosts in the SAC and the roosts in surrounding areas.	Applicant in agreement with NE	A Technical Note (Eversden and Wimpole Woods SAC Technical Note) [TR010044/EXAM/9.13] has been prepared and is submitted at Deadline 1. This Technical Note includes a copy of the minutes taken from the workshop held between the Applicant and NE on 23 August 2021. The Technical Note has

Action No.	Action	Party	Response at Deadline 1
			been shared with Natural England in the run up to Deadline 1.
7	Joint position statement between Local Authorities (LA), NE and Applicant, on matters relating to Habitats Regulations Assessment and mitigation.	Applicant in agreement with NE and LAs	A Joint Position Statement on Habitats Regulation Assessment and mitigation matters [TR010044/EXAM/9.14] has been prepared and has been submitted at Deadline 1. The version submitted at Deadline 1 has been shared with NE and the LA and where necessary the document has been amended to incorporate comments/feedback received.
9	Provide example(s) where the provision of 'adjacent land' in other made DCOs had been enacted on land described as 'adjacent to' order limits.	Applicant	Please refer to the answer to Q1.7.3.3 in the Applicant's Response to the Examining Authority's First Round of Written Questions [TR01044/EXAM/9.2] .
10	Propose suitable wording for definition of pre-commencement and details of a pre-commencement plan that could be included in the First Iteration Environmental Management Plan (EMP).	Applicant	Please refer to the answer to Q1.7.2.1 in the Applicant's Response to the Examining Authority's First Round of Written Questions [TR01044/EXAM/9.2] .

Appendix A: Response to Action Point 3

Hearing Action Points

Action 3

- 1.1.1 Further justification for de-trunking of the existing A428, including the application of any strategic criteria relating to the function of the strategic road network, to support the case.

Response

- 1.1.2 The principal purpose of the Strategic Road Network (SRN) is to enable safe, reliable, predictable, rapid, often long distance, journeys of both people (whether as drivers or passengers) and goods in England between:
- a. Main centres of population.
 - b. Major ports, airports and rail terminals.
 - c. Geographically peripheral regions of England.
 - d. Chief cross-border routes to Scotland and Wales.
- 1.1.3 Section 2 of the Infrastructure Act 2015 provides for the appointment of strategic highways companies. It states that the appointment of a strategic highways company must specify an area consisting of the whole or any part of England in respect of which the company is appointed (section 2(1)(a)) and highways in that area for which the company is to be the highway authority, which can be specified by name or description (section 2(1)(b) and section 2(2)). Section 2(3) states that highways specified under section 2(1)(b) must be highways for which the Secretary of State or another strategic highways company is the highway authority immediately before the appointment has effect.
- 1.1.4 Highways England was appointed as a strategic highways company under the Appointment of a Strategic Highways Company Order 2015 (SI 2015/376). In article 2(3) this confirms that "The company is appointed as the highway authority for all highways within that area for which the Secretary of State for Transport was the highway authority immediately before this Order came into force, except for [list of exceptions]".
- 1.1.5 In practice, the SRN comprises motorways and main 'A' roads. As demand patterns change, and where new infrastructure is constructed, the geographic extent of the SRN is re-considered, so that roads best managed at a local level to meet a communities' needs are dealt with by local highway authorities. Under section 10(2) of the Highways Act 1980, the Secretary of State for Transport has a general duty to keep the SRN under review and, if satisfied that it is expedient to do so, may direct that a highway (or proposed highway) becomes or ceases to be a trunk road from a specified date. Section 265 of the Highways Act 1980 also deals with the transfer of property and liabilities upon a highway becoming or ceasing to be a truck road.

- 1.1.6 On completion of the Scheme the existing A428 will no longer be used by strategic traffic and will therefore not be required for or form part of the SRN. Highways England will, therefore, no longer be required to operate and maintain this road. There is no specific threshold in terms of traffic volumes along a route that is used to determine whether a particular road forms part of the SRN. The Scheme, however, would deliver reductions in traffic flows along the existing A428 to be de-trunked. In particular, a significant reduction in traffic flows is expected on the section between the proposed Cambridge Road and Caxton Gibbet junctions on completion of the Scheme.
- 1.1.7 The Applicant has discussed and agreed in principle with the affected local highway authorities that they will take on responsibility for the de-trunked sections of road subject to agreement of a handover process and condition of the assets to be handed over. This is reflected in Article 14 (Classification of roads etc.) of the dDCO [APP-025] that states that on a date to be determined by the Applicant, the roads described in Part 8 (roads to be de-trunked) of Schedule 2 of the dDCO are to cease to be trunk roads.
- 1.1.8 The affected local highway authorities have agreed that the existing A428 should be reclassified as:
- a. The A1428 between the existing Great North Road roundabout and the existing Cambridge Road roundabout.
 - b. The B1428 between (and including) the existing Cambridge Road roundabout and the proposed Caxton Gibbet junction northern roundabout.
- 1.1.9 The Applicant considers that the powers to de-trunk are better placed within the dDCO [APP-025] so that all parties are aware of what elements are to be de-trunked. This is consistent with the approach adopted on many other similar Highways England road projects where existing roads are required to be de-trunked. This includes part of the A14 that was de-trunked and became the A1307 on completion of the A14 Cambridge to Huntingdon Scheme, and the A5 through Dunstable that was de-trunked to become the A5183 on completion of the A5 Dunstable Northern Bypass.

Appendix B: Response to Action Point 4

Hearing Action Points

Action 4

- 1.1.1 Summary narrative of the criteria considered in the assessment of alternatives for the Black Cat junction and alignment of the A1 in the immediate and wider area, with particularly reference to historic environment, flood risk and floodplain compensation, land take, effects on other residential and commercial uses, the restoration of the quarry, and on the gas main to the south of the existing roundabout.

Response

- 1.1.2 The route options assessment determined three preferred routes that were taken to non-statutory consultation, and all three options include connecting the existing road network at the western end of the Scheme at the location of the existing Black Cat junction.
- 1.1.3 The design requirements for a new junction at Black Cat are detailed in Section 3 of the Black Cat Junction Design Options [APP-247]. A fundamental objective of the Scheme is to deliver free flow links for the A1 (in the north-south direction) and the new dual carriageway (in the east-west direction) through the Black Cat junction. This requirement along with the environmental constraints in the area meant that it was not possible to move the location of the proposed Black Cat junction significantly to the north or south of the existing junction location. In addition, this would have significantly increased the extent of works and land take required to deliver the Scheme.
- 1.1.4 As the design and assessment of the Scheme was based on completion of restoration works for the quarry, relocating the Black Cat junction to the east was also considered, and the operation of the quarry was not viewed as a constraint in this regard. Moving the Black Cat junction to the east would result in the following key changes to the junction design:
- a. Realignment of the A1 mainline carriageway from the point north of South Brook through to a point south of Rockham ditch. This would be required in order to achieve acceptable highway geometry and incorporate the required slip road connections. Similar to a change in north-south alignment, this would have significantly increased the extent of the works and land take required;
 - b. Additional crossings of South Brook and Rockham Ditch resulting from the realigned A1 and associated works;
 - c. Relocation of the circulatory carriageway of the junction further to the east within the quarry site;
 - d. An increase in the height of the vertical alignment of the new dual carriageway through the quarry site and across the River Great Ouse to

achieve required clearances across the junction, with associated landscape and visual impacts;

- e. A requirement to locate a significant proportion of the east facing slip roads and merges on the Scheme viaduct over the River Great Ouse, which would have considerably increased the complexity and size of the viaduct structure;
- f. A significant increase in the overall footprint of the proposed junction and related earthworks within the flood plain.

1.1.5 The result, and potential impacts, of these design changes are described below.

- a. The design would significantly increase the adverse impacts on flood risk due to the additional crossings of and associated works required within the flood plains of South Brook, the River Great Ouse and Rockham Ditch.
- b. The additional impacts on existing flood plains and flood risk would require additional flood compensation to be provided. By moving the junction to the east, the area of land available for flood compensation is reduced and would likely require the majority of the quarry site, outside of the existing flood plain, to deliver the required mitigation. This would preclude the development opportunities that Bedford Borough Council has identified in their Relevant Representation [RR-008a].
- c. The full extent of permanent land acquisition required to deliver this modified junction arrangement would be significantly increased. It is highly likely that this would have resulted in strong objection from the directly affected landowner(s) given that a design with a more efficient use of land, as proposed by the Scheme, can be achieved.
- d. For the River Great Ouse, South Brook and Rockham Ditch watercourses additional and increased flood compensation would be required upstream of these additional crossings.
- e. Moving the junction to the east would directly impact on existing residential properties and businesses to the north and south of the proposed junction. The property known as Greenacres to the south and the commercial premises to the north of the junction would require demolition because of the need to realign the A1 mainline carriageway. No 9 and no 8 Great North Road are also at significant risk of being required or impacted to such an extent that occupation is unviable.
- f. The realignment of the A1 to the north would result in additional permanent land acquisition from the properties along Great North Road and removal of a significant length of the established trees that provide important screening to these properties from the A1 mainline carriageway.
- g. The realignment of the A1 mainline carriageway to the south would require an additional crossing of the existing NGT high pressure gas main that crosses the existing A1 to the north of Kelpie Marina. This high-pressure gas main is understood to be a main arterial gas supply service and therefore a major constraint. This crossing of the main would require at

least additional protection to and possible diversion of the main. The increased scope of work associated with any protection or diversion of the existing gas main would have health and safety risks, result in significantly increased costs, and would result in additional environmental impacts.

- h. The width and complexity of the viaduct crossing of the River Great Ouse would be increased significantly due to the east facing slip roads merging on and across the structure. This would result in significant technical difficulties, design inefficiencies, increased carbon footprint, increased maintenance liabilities and significant additional costs.
- i. Relocating the Black Cat junction to the east would increase the associated impacts of ground water on the scheme design. This is likely to impact on the vertical alignment of the A1 mainline carriageway resulting in the need to raise the alignment of the whole junction, increasing the landscape and visual impact of the Scheme on the surrounding area.

- 1.1.6 As a result, and notwithstanding the acknowledged potential impacts on Brook Cottages, relocating the Black Cat junction to the east further into the quarry site was discounted and development and assessment of the proposed junction progressed based on locating it at the existing junction location.
- 1.1.7 Between the non-statutory consultation and Preferred Route Announcement (PRA) a further review of the Black Cat junction option design was undertaken. The details of this are included in the Black Cat Junction Design Options report [APP-247]. Three junction options were presented at the non-statutory consultation and it was stated that Option A “may affect the setting of the listed building to the north of the Black Cat roundabout” and Options B and C “may result in the removal of the Grade II listed building to the north of Black Cat roundabout”.
- 1.1.8 Following the non-statutory consultation, all three options were further reviewed, and this confirmed that all three would result in the need to demolish Brook Cottages. This was primarily due to the design of the free flow link from the A421 westbound carriageway through to the A1 northbound carriageway that is required to cater for the high traffic flows making this movement.
- 1.1.9 Prior to making the PRA, a variant of Option C, referred to as Option C+, was developed which specifically sought to avoid demolition of Brook Cottages but, as described in the Black Cat Junction Design Options report [APP-247], the layout resulted in a highly complex junction arrangement with significant technical and safety issues.
- 1.1.10 In summary, Option C +:
 - a. Would result in an unacceptable impact on safety due to likelihood of queuing on the A1 northbound on-slip. This was due to the design of the Type A Taper Merge arrangement being insufficient to cope with predicted traffic flows. This was the only merge arrangement that could be accommodated in order to meet the objective of retaining Brook Cottages. As such, Option C+ did not meet the Scheme objectives relating to ‘Connectivity’ and ‘Safety’.

- b. Was significantly more expensive than Option C due to additional land being required, complex utility diversions, complex structures and additional traffic management.
- c. Increased the scale of engineering works that resulted in a junction layout which would be difficult to understand for road users and could lead to an increased risk of incidents/collisions.
- d. Had poor operational resilience if the A1 northbound were to become blocked due to an incident or flooding, and therefore did not meet the Scheme objective relating to 'Resilience'.

- 1.1.11 Based on the above it was concluded that Option C+ was not a safe design solution and it would not meet technical requirements or the objectives of the Scheme. Therefore, further design work was undertaken to develop an alternative, known as Refined Option C, which formed the basis of the Scheme the subject of this application for development consent.
- 1.1.12 The key design objectives for the Refined Option C were unchanged, and the design was comparable to the arrangement presented at the non-statutory consultation in 2017. Most importantly, Refined Option C allows for the safe movement of strategic and local traffic. As a result of these considerations, it was decided that Refined Option C would form part of the PRA, made in February 2019.
- 1.1.13 As Refined Option C acknowledged that there was no alternative to the demolition of Brook Cottages it was then possible to provide the A1 northbound on-slip on the north side of the junction circulatory carriageway to connect onto the A421/A1 free flow link and then merge with the A1 northbound carriageway. Following this, it was also possible to provide a more conventional junction arrangement with the A1 northbound off-slip tying into the south side of the junction circulatory carriageway. As a result of this, Bedford Road could be linked into the south west corner of the junction circulatory carriageway which negates the need for a complex diversion of this road. Lastly, the A421/A1 free flow link could be constructed at-grade and there is no need for the additional structure to carry the Roxton Road link over the A421/A1 free flow link.
- 1.1.14 This Refined Option C allows for the safe movement of strategic and local traffic and meets the Scheme objectives. It is considered to be safe, operationally resilient, satisfies the key design requirements and offers a more familiar layout for road users which reduces the risk of incidents/collisions.
- 1.1.15 During the Issue Specific Hearing on 18 August 2021 (ISH1), the Examining Authority also sought clarification on whether consideration had been given to a realignment of the A1 from a point south of the River Great Ouse to remove the Tempsford Bends. At present, there are two viaduct structures which carry the A1 across the River Great Ouse. The structure to the north carries the A1 southbound carriageway. The structure to the south carries the A1 northbound carriageway and is a Scheduled Monument. Therefore, this viaduct to the south would need to be retained, notwithstanding any realignment of the A1.

- 1.1.16 In order to avoid the need to build an additional viaduct over the River Great Ouse, the extent to which the Black Cat junction can be relocated to the east is limited. The horizontal radius of the A1 carriageway must meet minimum acceptable radii along the curve of the centreline from the north of the existing viaduct structure to the re-located junction. The horizontal shift from the existing centreline is limited to a movement of approximately 130m to the east. If the Black Cat junction was sited further to the east this would require the demolition of the existing A1 viaduct structure to the north and the construction of a new larger viaduct over the River Great Ouse carrying both the northbound and southbound carriageways. Therefore, dependent on the extent of the movement to the east, removing the Tempsford Bends would result in:
- a. an additional or wider viaduct over the River Great Ouse; and
 - b. realignment of the A1 south of the river on approach to the additional or wider viaduct structure.
- 1.1.17 This would result in the impacts identified above (as a result of the movement to the east) as well as additional land-take, and in the event that an additional viaduct over the River Great Ouse was required, a direct impact on the existing Kelpie Marina. This has the potential to lead to the displacement of approximately 100 people with a protected characteristic.
- 1.1.18 In summary, the existing Black Cat junction is located in a highly constrained area and required a highly technical and complex design solution. A number of factors, including environmental, technical and cost implications, were considered in identifying the location in which to site the Black Cat junction. Whilst acknowledging the potential impacts on Brook Cottages, locating the Black Cat junction further to the east was discounted for a number of reasons, as explained above. The Applicant considers that the Scheme offers a safe and reliable solution which meets the Scheme objectives, minimises land take and reduces overall environmental impacts as far as possible.