

A417 Missing Link

Preliminary Environmental Information Report

Chapter 3 Assessment of Alternatives

28 September 2020

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3 Assessment of alternatives

3.1 Introduction

- 3.1.1 This chapter of the PEI report presents a summary of the alternative options which have been considered and the justification for the proposed scheme. Developing alternative modes of transport to solve the identified capacity problem on the existing A417 Missing Link has been considered.
- 3.1.2 This chapter fulfils a condition of the EIA Regulations, which state, in section 5 (18.d), *'a description of the reasonable alternatives studied by the developer [must be provided], which are relevant to the scheme and its specific characteristics, and [give] an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment'*.

3.2 Scheme history

- 3.2.1 The scheme has been under consideration for over 20 years. Though 90% of the length of the A417/A419 – M4/M5 link had seen dual-carriageway improvements by 1998, this section, near Birdlip in Gloucestershire, had not been included. A study by the Highways Agency (now Highways England) between 2001 and 2003 concluded that an on-line dualling option would be appropriate for this section but development on the project, named the 'Modified Brown Route', stalled when it was not included in the National Roads Programme.
- 3.2.2 In December 2014, it was announced that the A417 Missing Link would be 1 of 15 new schemes to be included for development in the Department for Transport's £15.2 billion Road Investment Strategy (RIS1) as part of improvements to the strategic road network in England for delivery in the next Road Investment Strategy period. RIS2 was published in March 2020 which sets out the road investment strategy for between April 2020 to March 2025.

3.3 Assessment methodology

- 3.3.1 The process of options identification and route selection which led to the proposed scheme is summarised below. The process followed the following stages:
- option identification, initial sifting and appraisal;
 - options appraisal and sifting to identify options to take forward for further appraisal;
 - the selection of two preferred routes, which were taken to non-statutory public consultation in February and March 2018; and
 - the selection of a preferred route which was announced by the Secretary of State in March 2019 and which forms the basis of the proposed scheme.

3.4 Reasonable alternatives studied

This section highlights the reasonable alternatives studied and summarises the process that has led to the development of the preferred route (Table 3-1) and includes the main reasons for selection of chosen options and the rejection of the

alternatives, taking into account the effects of the development on the environment¹.

Table 3-1 Description of reasonable alternatives studied

Options identification stage	Details
Option identification, initial sifting and appraisal	<p>A review of 30 route options was undertaken which included a mixture of surface and tunnel route options within five corridors. Due to the differing topography of the area, which requires different types of solutions, the various route options were characterised into different 'escarpment zones' in relation to where they crossed the escarpment, as shown in Figure 3.1 Escarpment. This enabled the review and comparison of smaller groups of routes categorised by escarpment zone. These 30 route options are shown in Figure 3.2 Initial 30 options.</p> <p>A multi-criteria assessment using the Client Scheme Requirements and the Early Assessment and Sifting Tool (EAST) from WebTAG was carried out. The EAST tool was modified (EAST+) for the A417 to provide a ranking between options and include additional criteria to represent the scheme specific objectives developed collaboratively with stakeholders to reflect a landscape-led approach to the proposed scheme development. For further details on how the tool was modified, see section 6.3 of the Technical Appraisal Report¹.</p> <p>From the initial sift of the 30 options, there were multiple high scoping options within single corridors. To ensure the sifting process was inclusive and robust, the best performing options from each corridor, under the above scoring system, were taken forward for further assessment, which included options 3 (tunnel), 21(tunnel), 24 (tunnel), 29 (tunnel) and 30 (surface).</p> <p>The tunnel options were going to provide poor value for money, with a high cost exceeding the cost range for the proposed scheme. In comparison, the surface route (option 30), provided positive value for money and was within the cost range. To ensure that a second affordable route was progressed, the next best performing surface route (Option 12) was taken forward for full assessment and appraisal.</p> <p>The Scheme Assessment Report (SAR) provides an overview of the sifting process, associated assessment and options selection stage conclusions. For full details refer to the Technical Appraisal Report.</p>
Options appraisal and sifting to identify options to take forward for further appraisal	<p>The SAR states how six options – 3 (tunnel), 12 (surface), 21 (tunnel), 24 (tunnel), 29 (tunnel) and 30 (surface) were fully assessed and appraised following guidance set out in WebTAG to inform the choice of options to be taken to public consultation. These options are shown in Figure 3.3, 6 Options taken forward for full assessment.</p> <p>The assessment and appraisal at options selection stage are summarised below:</p> <ul style="list-style-type: none"> • <u>Economic appraisal</u> Para 4.7.6 of the Scheme Assessment Report states “<i>The tunnel options (options 3, 21, 24 and 29) all had high benefit values, however they were also shown to give poor value for money for the taxpayer. The most significant factor causing this was the high estimated costs of the tunnel options, all of which were estimated to cost significantly more than the upper limit of the cost range of £500 million. Options 12 and 30, the surface routes, had lower benefits but significantly lower costs. Option 30 was the only route to offer positive value for money, meaning the returns were estimated to be greater than the cost.</i>” • <u>Environmental assessment</u>

¹ Table 3.1 is based on the Scheme Assessment Report. Highways England (2019), A417 The Missing Link: Scheme Assessment Report, Available at https://highwaysengland.citizenspace.com/he/a417-missing-link/results/a417_missing_link_scheme_assessment_report.pdf

Options identification stage	Details
	<p>Para 4.7.11 - 4.7.13 of the SAR state “Across the areas assessed, Option 21 was found to generally outperform the other options due to the length of the route within a tunnel, and the route avoiding sensitive areas. All options were identified to have net benefits in noise reduction compared to the existing route, however in all other areas the options showed disbenefits.</p> <p>Of the tunnelled solutions, Options 24 and 29 were found to perform less well across all measures than Options 3 and 21. Between the two surface options, there was little difference in the appraisal results. Option 30 was identified to outperform Option 12 in noise reduction, however it was found to have lower air quality disbenefits.”</p> <ul style="list-style-type: none"> • <u>Social Assessment</u> Para 4.7.15 of the SAR states “The routes largely performed at a similar level within the social appraisal area. The key differentiator between the routes in this area was the reduced journey time for commuters. Relative to the current route, the six options were found to deliver significant benefits in terms of net present value. The tunnel options were identified as delivering greater benefits than the surface routes; out of the two surface routes, Option 30 delivered greater benefits than Option 12.” <p>The tunnel options were shown to give poor value for money for the taxpayer due to their estimated cost which was significantly more than the upper limit of the cost range of £500 million. Consequently, despite their high monetised and intangible benefits, these routes could not be recommended for further development. The two highest scoring surface options were taken forward.</p>
Recommended route options for consultation	<p>The following options were taken forward for further appraisal and were presented at consultation:</p> <ul style="list-style-type: none"> • <u>Option 12</u>: a surface route with a mixture of widening of the existing road and construction of new sections of road, broadly following the route of the existing road whilst bypassing Nettleton Bottom. A map of Option 12 can be seen in Figure 3.4. • <u>Option 30</u>: a surface route characterised with the existing road on Crickley Hill widened. The road then takes a new route to the east, re-joining the existing A417 near Cowley roundabout. The existing road between Air Balloon roundabout and Cowley roundabout would be returned to the ownership of Gloucester County Council. A map of Option 30 can be seen in Figure 3.5. <p>These are described in section 6.3 and section 6.4 of the Scheme Assessment Report². Appraisal Summary Tables (AST) were produced for each of the two options (Appendix 3.1).</p>
Identification of the preferred route	<p>The environmental assessment of the options presented for consultation led to a preferred option. The reasoning for the preferred option is set out in the Scheme Assessment Report which was published in March 2019 and provides a full description and assessment of the alternative options, including the public consultation and the recommendations of Option 30 as the preferred route.</p> <p>Option 30 has greater support from the public, as shown by the results of the non-statutory public consultation³. Almost 2,000 responses were received. Of these 72% of all respondents were supportive of Option 30, as set out in section 4.3 of the Report on Public Consultation (March 2019)⁴. From an engineering perspective it provides a safer and higher quality road for all road users and road workers.</p>

3.5 Justification for chosen option

3.5.1 The environmental assessment undertaken for the options presented at option selection led to a preferred option. The reasoning for the preferred option is set

out in the Scheme Assessment Report, which was published in March 2019 and provides a full description and assessment of the alternative options, including the public consultation and the recommendations of Option 30 as the preferred route.

- 3.5.2 Full details of the options identification and selection process, along with the development of the preferred route can be found in the Scheme Assessment Report available at:

https://highwaysengland.citizenspace.com/he/a417-missing-link/results/a417_missing_link_scheme_assessment_report.pdf

- 3.5.3 The preferred route for the A417 Missing Link scheme was announced on the 14 March 2019 as a modified version of the route presented at non-statutory consultation. Further details can be found in the Preferred Route Announcement⁵ (PRA).

3.6 Consideration of the A436 link road following PRA

A436 alternative

- 3.6.1 Three alternative routes for the A436 link road were presented at the PRA in March 2019. The three alternatives, which are shown in Figure 1.1 of the Alternatives Technical Note (Appendix 3.2), are as follows:
- Alternative 1: bridge over A417;
 - Alternative 2: parallel to the A417; and
 - Alternative 3: via South Hill.
- 3.6.2 An assessment of the alternative A436 link road routes was carried out and presented in the Preliminary Environmental Information (PEI) report published at the statutory consultation held between September and November 2019. The assessment is presented in an Alternatives Technical Note (Appendix 3.2).
- 3.6.3 The PEI report was circulated at the start of the statutory consultation to prescribed stakeholders, which included local councils, environmental bodies and other organisations. The report was also made available to the public during the statutory consultation. At statutory consultation, a specific question on the consultation Feedback Questionnaire asked, “*Do you have any comments on our proposal for Alternative 2 as the preferred A436 link road?*”.
- 3.6.4 Alternative 2 was presented as the preferred link to the A436 link road at the 2019 statutory consultation. Alternative 2 has formed the basis of the A436 link road in the scheme considered by this PEI report.
- 3.6.5 Alternative 2 has a number of advantages as a result of running alongside the A417 mainline, particularly regarding the environmental opportunities it presents. It also poses the lesser risk of non-compliance with the relevant tests set out in NPSNN, particularly as it would cause significantly less disruption to the local environment, landscape and ecology during construction.

3.7 Statutory consultation: 27 September 2019 – 8 November 2019

- 3.7.1 The preferred route announced on the 14 March 2019 formed the basis for the scheme presented at the statutory consultation between 27 September 2019 and 8 November 2019.

3.7.2 The 2019 statutory consultation sought views on the scheme design; the selection of Alternative 2 for the A436 link road; the contents of the Preliminary Environmental Information report, including proposed environmental mitigation; and, the construction of the scheme.

3.8 Amendments to the scheme since 2019 statutory consultation

3.8.1 Following the 2019 statutory consultation, work was undertaken to analyse and consider the feedback to inform further design and development work on some elements of the proposed scheme. This identified that there were opportunities to improve the scheme design and its deliverability through further design refinement. Engagement with affected landowners and ongoing environmental assessment has also informed the amendments made.

3.8.2 Collaboration between the environmental disciplines and scheme engineers has been an integral part of this design development process. This has sought to avoid and reduce environmental impacts of the design, whilst taking into account responses received during the 2019 statutory consultation.

Key design changes since 2019 statutory consultation

3.8.3 There are five main amendments made to the proposed scheme design since the 2019 statutory consultation:

Gradient of Crickley Hill increased from 7% to 8%

3.8.4 This change to the proposed scheme has amended the gradient of the mainline as it climbs the escarpment near Crickley Hill from a 7% gradient to an 8% gradient.

3.8.5 The scheme design presented at 2019 statutory consultation sought to reduce the gradient of the A417 from its existing 10% gradient to a 7% gradient. However, there were concerns raised in consultation feedback over the impact of the 7% design, due to the scale of the cutting that would be required through the Crickley Hill escarpment (approximately 20-25m depth). In particular, concerns were raised over its potential adverse impacts to groundwater, its visual impact, and traffic and carbon impacts associated with excavated material arising during construction.

3.8.6 It was identified that refining the scheme design to an 8% gradient on Crickley Hill would address some of the concerns raised during consultation, including:

- Removing 1,200 metres of retaining walls
- Reduces the volume of surplus earthworks by nearly one million cubic metres
- Reduces impacts on woodland
- Reduces the depth of the cutting from approx. 25 metres to approx. 15 metres – in turn reducing the visual intrusion on the landscape and effects on groundwater
- Reduces construction period, meaning less disruption to the local economy and nearby communities

3.8.7 Furthermore, the 8% gradient would still provide the benefits to traffic flow and road safety that the previously proposed 7% gradient design offered.

Removal of the green bridge at Crickley Hill

- 3.8.8 The concept of the green bridge originated from a need to provide a footbridge to mitigate the severance of the Cotswold Way National Trail, in which an opportunity was identified to enhance the footbridge to create ecological corridors and connect the Crickley Hill and Barrow Wake Sites of Special Scientific Interest (SSSI). However, a number of concerns were raised at statutory consultation regarding the impact of the structure on the SSSI. Further survey data also established that the construction footprint of the structure would require the cutting down of veteran trees.

Provision of two new crossings

- 3.8.9 Two new crossings have been developed. A new crossing near Emma's Grove for walkers, cyclists and horse riders including disabled users, which would accommodate the Cotswold Way National Trail.
- 3.8.10 In addition to this, a new multi-purpose crossing in the region of 25m wide is to be incorporated near Shab Hill, to provide essential mitigation for bats and for landscape integration. It will also further benefit from accommodating the Gloucestershire Way and provide an improved visitor experience.

B4070 route alignment to Birdlip via Barrow Wake

- 3.8.11 At the 2019 statutory consultation, feedback was received relating to the potential opportunity to improve facilities, parking and access at Barrow Wake where there are existing issues with anti-social behaviour. Concern was also raised over the safety of the proposed design of the B4070 for users of the repurposed A417 (referred to hereafter as 'Air Balloon Way').
- 3.8.12 In response to this the route of the proposed B4070 link road between Shab Hill junction and Birdlip has been refined via the entrance of Barrow Wake, using the existing highway and underbridge. A roundabout is incorporated, this provides improved speed controls to traffic, removes the need for a crossing on the Air Balloon Way and would introduce natural surveillance to the Barrow Wake car park to help manage anti-social behaviour.

Cowley junction – removal of access to Cowley village

- 3.8.13 During 2019 statutory consultation, concerns were raised over the safety and potential for rat running in relation to the proposed link from Cowley junction to Cowley village. In response to this, the junction design has been refined and access from Cowley junction to the village removed. Access is retained for residents, walkers, cyclists and horse riders including disabled users.

Walking, cycling and horse-riding connectivity between Dog Lane and Cold Slad lane

- 3.8.14 In response to 2019 statutory consultation feedback, a walking, cycling and horse riding connection has been provided between Dog Lane and Cold Slad to provide east-west connectivity.

Full list of amendments to the proposed scheme design since 2019 statutory consultation

3.8.15 Table 3-2 provides a list of the notable changes and refinements made to the scheme design since the 2019 statutory consultation, as well as the reason for the change. Figure 3.6 identifies the location of each of the changes. A full description of the scheme is detailed in PEI report Chapter 2 The Scheme.

Table 3-2 Amendments to the proposed scheme since 2019 statutory consultation

No. (see Figure 3.6)	Design change	Description	Reason
Highways			
1	B4070 alignment	Reroute the B4070 to Birdlip via the entrance of Barrow Wake to re-use existing underbridge.	Improved design and avoids new infrastructure in the landscape.
2	Cowley Lane stopping up to traffic	Restrict vehicular access from Cowley junction to Cowley Lane. Access to residential properties will be retained.	Consultation and landowner feedback.
3	Move western Shab Hill roundabout	Move roundabout away from Shab Hill barn.	Landowner consultation feedback.
4	Eastern Shab Hill roundabout redesign for traffic projections	Detailed traffic modelling was undertaken and the assessment identified queues. The roundabout design was changed to accommodate the traffic.	Consultation design did not allow for detailed traffic modelling. Traffic modelling results required design change.
5	Ullenwood junction and alignment	Redesigned to allow for projected traffic flows and improved safety.	Improved design, safety and traffic modelling.
6	Rushwood Kennels alignment change	Realignment to move road away from the properties and provide room for noise bunding and planting screening.	Landowner consultation feedback.
7	Passing place on access road to Rushwood Kennels and Cuckoopen	Passing place to allow vehicles to pass HGVs.	Landowner feedback
8	Parking space for Air Balloon Cottages	Roadside bay added.	Landowner consultation feedback.
9	Road layout improvements around Shab Hill junction	Southbound merge changes to include parallel lane instead of direct merge	Road safety audit feedback.
10	Vertical alignment change at Cowley Lane overbridge	Change of vertical alignment to reduce height.	Improved design and minimises impact on the landscape.
N/A	Amendments to carriageway widths	Side road width alterations to align with Gloucestershire County Council requests.	Consultation feedback.
11	Unclassified road south west of Shab Hill junction	New section of unclassified road to address severance of existing unclassified road.	Consultation feedback.

No. (see Figure 3.6)	Design change	Description	Reason
12	Parking for Air Balloon Way	Parking provision for accessing the Air Balloon Way byway west of Golden Heart Inn	Consultation and Technical Working Group feedback.
13	Cowley overbridge verges	Cowley overbridge verges improved to accommodate planting of a continuous native species-rich hedgerow.	Design refinement.
14	Stockwell overbridge lane verges	Stockwell overbridge verges improved to accommodate planting of two continuous native species-rich hedgerows.	Design refinement.
15	Grove Farm underpass	To provide additional vehicular crossing of the A417 and access to land and properties. Provides a new right of way.	Design refinement and consultation feedback
16	Removal of mainline access to Grove Farm	Removal of previously proposed access to Grove Farm to improve safety and accommodate mainline alignment changes, with alternative access provided by Grove Farm underpass	Design refinement and consultation feedback
17	Mainline vertical alignment change	Mainline alignment changed from 7% gradient to 8% gradient on Crickley Hill. This change: <ul style="list-style-type: none"> • Reduces cutting required • Eliminates structures and retaining walls • Reduces cost • Creates an earthworks balance and eliminates off-site disposal of waste • Improves buildability and reduced construction time 	Design refinement and consultation feedback
18	Mainline horizontal alignment change	Mainline horizontal alignment modified in the vicinity of Cold Slad Lane on Crickley Hill. This change: <ul style="list-style-type: none"> • Improves buildability and reduced construction time • Improves traffic management and improves safety during construction • Eliminates retaining walls • Reduces cost • Improves earthworks balance 	Design refinement and consultation feedback
19	A436 alignment	Vertical and horizontal alignment amended to reduce footprint and facilitate the Gloucestershire Way Crossing.	Design refinement and consultation feedback
20	Gloucestershire Way Crossing	A multi-purpose crossing in the region of 25m wide to provide essential mitigation for bats and for landscape integration. It will also further benefit from accommodating the Gloucestershire	Design refinement and consultation feedback

No. (see Figure 3.6)	Design change	Description	Reason
		Way and provide an improved visitor experience.	
21	Cotswold Way Crossing	A new crossing near Emma's Grove for walkers, cyclists and horse riders including disabled users, which would accommodate the Cotswold Way National Trail.	Design refinement and consultation feedback
22	Cold Slad alignment amendment	The horizontal and vertical alignment at Cold Slad has been amended to reduce impact on Crickley Hill ridge and incorporate passing places	Design refinement and consultation feedback
23	Access to Crickley Hill Country Park	Access to Crickley Hill Country Park formalised.	Design refinement
N/A	Provision of field accesses	Provision of additional accesses to fields.	Landowner consultation
24	Access to track on northwest side of Cowley Lane	Provision of access to track on northwest side of Cowley Lane.	Design refinement
N/A	Accesses added to all drainage basins	Provision of access track to drainage basins to facilitate maintenance.	Design refinement
Drainage			
N/A	Drainage basin amendments	Various drainage basins changes resulting in additional, relocated and/or reshaped basins.	Design refinement due to changes in drainage, landscape integration and reduction in earthworks
25	Drainage cascade	Drainage cascade added in vicinity of Grove Farm underpass	Design refinement
Structures			
26	Stockwell Farm overbridge skew change	Make structure more perpendicular. Improved design and reduced span.	Design refinement
27	Minor Cowley Lane realignment	Make structure more perpendicular. Improved design and reduced span.	Design refinement
28	Minor vertical alignment change to Cowley Lane	Lower the structure in the landscape. Improved design and minimise impact on the landscape	Design refinement
29	Bat underpass at Crickley Hill	Bat flight path mitigation required east of bike park across Crickley Hill.	Bat survey results
30	Shab Hill underbridge span	Span of Shab Hill underbridge reduced.	Design refinement
31	Removal of green bridge	Green bridge removed at Crickley Hill.	Landowner and stakeholder consultation feedback Ecological survey results

No. (see Figure 3.6)	Design change	Description	Reason
PROW			
32	Rights of way through Fly-Up consolidated	Remove proposed bridleway through property and realigned rights of way along new access.	Landowner and stakeholder consultation feedback.
33	East-West connection created north of A417 with connection between Cold Slad and Dog Lane	Provide proposed east-west walking, cycling and horse-riding connection.	Consultation feedback.
34	Restricted byway created along Cowley Lane	To address stopping up to traffic with redesigned junction.	Consultation feedback.
35	Walking, cycling and horse riding access Barrow Wake to A417	Refine alignment of public right of way access between the detrunked A417 and Barrow Wake car park along edge of SSSI boundary.	Design refinement.
36	Revised Gloucestershire Way diversion	Realignment of footpath diversion between Gloucestershire Way Crossing and the Cotswold Way Crossing to improve pedestrian experience.	Consultation and design refinement
Common Land			
37	Common Land strategy	Re-provide Common Land along Air Balloon Way.	Consultation and design refinement
Landscape			
N/A	Refinement of planting mitigation, scheme-wide	Refinement of planting mitigation and bunding at targeted locations.	Design refinement due to Environmental Impact Assessment, visual screening and landowner consultation feedback.
38	Landscape bunding at Crickley Hill	Introduction of new landscape bunding at Crickley Hill between Fly-up and Grove Farm for screening.	Design refinement
39	Bund design changes south of Shab Hill	Redesign of bunds south of Shab Hill.	Improved design and minimise impact on the landscape.
40	Inclusion of car park spaces at the Golden Heart Inn	10 parking spaces proposed in freed up detrunked area. Provision for detrunked WCH route.	Feedback from stakeholders
41	Barrow Wake improvements	Planting removed on south side of car park.	Improved design and minimise impact on the landscape.
42	Planting adjusted to revised Crickley Hill Farm access track	Additional planting to extend visual screening along edge of A417.	Design refinement due to Environmental Impact Assessment and landscape integration.
43	Bat roost barn	One bat barn is to be built.	Design change reacting to changes in drainage,

No. (see Figure 3.6)	Design change	Description	Reason
			resulting in loss of outbuilding containing bat roost.
44	Additional planting on escarpment sides	Additional visual screening to escarpment to help screen and integrate the higher road alignment.	Design refinement due to Environmental Impact Assessment.
45	Existing vegetation to escarpment now retained	Reduced cutting depth reduces footprint, allowing less woodland to be lost.	Improved design and minimise impact on the landscape.
46	Existing calcareous grassland field now retained adjacent to Crickley Ridge	Reduced footprint from removal of green bridge from escarpment.	Feedback from stakeholders
47	Existing trees to Air Balloon pub now retained	Adjusted design now allows for two trees to be retained.	Design refinement due to Environmental Impact Assessment.
48	Scrub layer surrounds Emma's Grove.	New buffer added to Emma's Grove edge to protect.	Design refinement due to Environmental Impact Assessment.
49	Additional false cutting on south side of Shab Hill.	False cutting on north-west bound side extended to continue to Shab Hill.	Design refinement due to Environmental Impact Assessment for noise and landscape.
50	False cutting to north east side of Shab Hill at Coldwell Bottom	False cutting at head of valley to break visual connection of road from valley.	Design refinement due to Environmental Impact Assessment for noise and landscape to improve tranquillity.
N/A	Planting adjusted around drainage basins	Planting adjusted to integrate drainage basins into landscape.	Integrate drainage basins into landscape. Design refinement due to Environmental Impact Assessment.
51	Additional planting to Cowley Lane	Planting added to realignment of Cowley Lane to maintain a hedgerow and tree-lined track.	Design change reacting to changes in highways and PROW.
Geotechnical			
52	Relax cut slopes south of Shab Hill	Geotechnical design requirement to avoid hard engineering measures.	Improved design to avoid hard engineering solution in landscape

Endnotes and References

- ¹ Highways England (2018), Technical Appraisal Report, https://highwaysengland.citizenspace.com/he/a417-missing-link/supporting_documents/A417%20Technical%20Appraisal%20Report.pdf
- ² Highways England (2019), A417 The Missing Link: Scheme Assessment Report, Available at https://highwaysengland.citizenspace.com/he/a417-missing-link/results/a417_missing_link_scheme_assessment_report.pdf
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