Land at Downlands Farm, Uckfield

Rebuttal Highways & Transport Evidence on behalf of Gleeson Land and John Alison Land & Research Ltd

of

Philip Anthony Bell BEng(Hons) MCIT MILT MCIHT

REBUTTAL

PINS Reference: APP/C1435/W/23/3321978
LPA Reference: WD/2022/1637/MEA

motion

Contents

1.0 Introduction 1
2.0 Rebuttal to Local Highway Authority Evidence 2
3.0 Rebuttal to Downlands Action Group Evidence 7

Appendices

PAB-R1 Extract from the Introduction to the Design Manual for Roads & Bridges (GG 101)

PAB-R2 Correspondence with Mr New regarding Rocks Road speed survey

PAB-R3 Forward visibility at Rocks Road priority working

PAB-R4 Extracts from The Traffic Signs Manual

PAB-R5 Plan of cycle routes along major roads

1.0 Introduction

Qualifications and Experience

1.1 I hold a First Class Bachelor of Engineering Degree in Civil Engineering and a Royal Society for the Prevention of Accidents (RoSPA) accreditation in advanced road safety engineering. I am a chartered member of the Chartered Institution of Highways and Transportation and a member of the Institute of Logistics and Transport. I have over 30 years' experience in the field of transportation planning, traffic engineering and highway safety.

1.2 I have extensive experience of highways and transport planning within the residential sector and currently act for many of the major land promoters and housebuilders operating in south-east England. In addition, I have extensive experience of major development proposals within the retail, leisure and commercial sectors.

1.3 My experience includes a period in the Development Studies Department of Wootton Jeffreys Consultants. Subsequently, I worked for Mayer Brown for over 14 years. I was jointly responsible for setting up Motion Consultants Limited in August 2004.

1.4 Motion specialises in advising developers and professionals in the development field on all matters concerning transportation, highways, traffic and road safety and our clients comprise a wide variety of private and public-sector organisations.

Scope of Rebuttal Evidence

1.5 This Rebuttal Proof of Evidence is prepared in response to GTA Civils & Transport's Proof of Evidence prepared by Roger New on behalf of East Sussex County Council (ESCC), as local highway authority, dated 23rd September 2023. The response to the local highway authority evidence is set out in section 2.

1.6 The Rebuttal also seeks to respond to highway/transport points relating to 'infrastructure' raised in a Proof of Evidence prepared by Mr Francis Wallace on behalf of Downlands Action Group (DAG), dated 23rd September 2023. The response to the DAG evidence is set out in section 3.

1.7 This document is not intended to respond to every point raised by Mr New and Mr Wallace, but instead focus on those points I consider will assist the Inspector at this stage insofar as it relates to matters that I consider to be incorrect or misleading, or where further commentary or supporting information is considered to be appropriate. I reserve the right to comment on those points not addressed in this Rebuttal during the Inquiry.

2.0 Rebuttal to Local Highway Authority Evidence

Summary of Mr New's Evidence

2.1 Having reviewed Mr's New's evidence, I consider his concerns fundamentally relate to four issues, which can be summarised as:

- Safety of the A22 site access, specifically the interaction with an existing layby;
- Safety of the crossing on Rocks Road adjacent to the Snatts Road junction;
- Safety of the proposed build-outs/one-way working on Rocks Road and Church Street; and
- The attractiveness and sustainability of the proposed active travel routes between the site and town centre.

2.2 Matters relating to the safety of the A22 site access are considered in paragraph 7.2 to 7.4 of my main Proof of Evidence.

2.3 The safety of the Fir Tree Grove crossing is considered in paragraphs 7.37 and 7.38 of my main Proof of Evidence.

2.4 Section 7 of my main Proof of Evidence addresses the attractiveness and sustainability of the proposed active travel routes.

Rebuttal Points to Mr New's Evidence

2.5 There are number of further points raised in Mr New's evidence that I consider require a response, which I summarise as:

- Site access design and guidance.
- Speed survey on Rocks Road.
- Forward visibility at priority working.
- Availability of Car Parking in Uckfield.
- Maintenance burden of A22 foot/cycleway.
- Snatts Road Route width.
- Cycleway along major road.

2.6 These points are addressed in the remainder of this section.

Site access design and guidance

2.7 Paragraphs 2.3 to 2.8 of Mr New's evidence relate to the A22 access and concerns in respect of proximity of the proposed A22 site access to the existing layby. This point is considered in paragraph 7.3 of my evidence.

2.8 Mr New's evidence makes reference to the Design Manual for Roads and Bridges and in particular CD123 (**CD8/11**) and CD169 (**CD8/15**).

2.9 The Introduction to document GG 101 'Introduction to the Design Manual for Roads and Bridges' (**Appendix PAB-R1**) states:

"The Design Manual for Roads and Bridges (DMRB) is a suite of documents which contains requirements and advice relating to works on ***motorway and all-purpose trunk roads*** *for which one of the Overseeing Organisations is highway or road authority."* (my emphasis)

2.10 It is noted that the DMRB sets out the mandatory standards for motorway and trunk road design and is therefore not mandatory on a road such as the A22, which is not a trunk road. Paragraph 2.1.1 of GG 101 relates to application of the DMRB and states:

"Where the road is to be reduced in status, e.g. de-trunked or where the works are to be carried out on roads that are not part of the trunk road network and the use of the DMRB could result in significant over-specification, alternative documents such as the Manual for Streets [Ref 3.I] or Designing Streets 2010 [Ref 2.I] may be used with the approval of the Overseeing Organisation."

2.11 The section of the DMRB referred to by Mr New in his evidence, namely 'CD 169 – The design of lay-bys, maintenance hardstandings, rest areas, service areas and observation platforms' (**CD8/15**), further indicates in the introduction that the document gives requirements and advice relating to all-purpose trunk roads and motorways.

2.12 There are a number of publications from ESCC covering various aspects of highway design (e.g. relating to residential development, highway construction, industrial roads and traffic signals). It is noted in the ESCC 'Highway Construction Specification for Developer' that reference to Manual for Streets and DMRB is made for further guidance on highway design, as well as ESCC's 'Design Guidance for Developer's (currently being prepared). In the absence of specific guidance applicable to non-trunk roads, reference to the DMRB may be useful, although not mandatory.

2.13 Notwithstanding this, the existing lay-bys on this section of the A22 do not comply with the DMRB in any event, particularly in relation to spacing, widths, diverge nose geometry, marker posts and provision of raised footways.

Speed survey on Rocks Road

2.14 Paragraph 2.18 of Mr New's evidence states:

"A speed survey carried out by the Appellant indicated that the 85%ile approach speed of vehicles from the west was just over 30mph even though the national derestricted (60mph) speed limit applies on that part of Rocks Road. This does not accord with our informal on-site observations, which suggest a materially higher 85%ile speed, and ESCC will be carrying out a further speed survey to validate the submitted survey. I will update the Inspector on this at the Inquiry."

2.15 Within the Transport Statement of Common Ground (***CD1/9***) with ESCC, it is agreed under 'Fir Tree Grove Route' that:

"Observed 85th percentile vehicle speeds on Rocks Road to the north of the Snatts Road junction are 31.4mph southbound and 30.3mph northbound, and are therefore well below the posted speed limit of 60mph."

2.16 I have been in liaison with Mr New since exchange of Proofs of Evidence in relation to this matter. It is understood from an email received from Mr New on the 4th of October 2023, that he no longer intends to commission a resurvey of Rocks Road. The relevant correspondence is included as **Appendix PAB-R2**.

Forward visibility at priority working

2.17 Paragraph 2.24 of Mr New's evidence states:

"…the Appellant also proposes a section of alternate one-way working on Rocks Road and another on Church Street. ESCC considers that both would be unsafe for motorists due to the traffic volumes; the lack of adequate forward visibility, and risks of driver confusion."

2.18 It is unclear what Mr New's concern regarding forward visibility relates to. It could mean forward visibility from drivers travelling south-west bound along Rocks Road towards the town to the give-way line of the feature. Or it could mean forward visibility or drivers at the give-way line to oncoming traffic travelling north-east bound, away from the town.

2.19 Focussing first on the proposed one-way working on Rocks Road, two drawings have been prepared to consider these scenarios and are included at **Appendix PAB-R3** to this Rebuttal.

2.20 Drawing 2001061-143 illustrates forward visibility to the give-way line for vehicles travelling south-west bound. This indicates a splay of 60 metres is achievable having regard to guidance in the Traffic Signs Manual (see extract at **Appendix PAB-R4** to this Rebuttal) 1.8.2, which states that 60 metres clear visibility is needed toward signage where 85th percentile speeds are between 21 and 40 miles per hour (mph). The Traffic Signs Manual (**Appendix PAB-R4**) 4.8.1 states in relation to the 'give way to oncoming vehicles' sign, "*It should be used only when vehicles at each end of the priority section are clearly visible to each other and speeds are not high*". Drawing 2001061-143 also indicates the maximum achievable forward visibility of 111 metres.

2.21 Drawing 2001061-144 illustrates the maximum achievable forward visibility from the give way line towards traffic travelling north-east bound, as 172 metres. This available visibility would be appropriate for traffic speeds over 55mph based on the principles set out in the Manual for Streets (**CD8/1**), and are therefore more than adequate for this location where speeds are well below 40mph.

2.22 In respect of the proposed Church Street priority working arrangement, this was proposed in order to assist in delivering local improvements in line with recommendations of the Uckfield LCWIP, as stated in paragraph 2.13 of the 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**). However, as set out in paragraph 7.51 of my main Proof of Evidence, this feature is not relied upon in planning terms and can be omitted from the scheme if necessary.

Availability of car parking in Uckfield

2.23 Paragraph 3.17 of Mr New's evidence states:

"A significant challenge for any development in Uckfield in 'making' a site sustainable is the availability of ample free parking in the town centre, both at private operated car parks (e.g. Tesco's) and at public car parks operated by Wealden District Council which does not charge for parking."

2.24 In considering this point, it is important to understand any restrictions that are in place at car parks in the town. It is acknowledged that there are two small Council car parks off Regency Close, which provide free parking with a maximum stay of 10 hours (together circa 40 bays). There is a further Council run car park at Luxford Field (providing circa 300 bays) around half of which have a maximum 3 hour stay, with the remainder including a maximum stay of 10 hours. The Tesco car park allows a maximum duration of 2 hours and the Waitrose allows a maximum stay of 1.5 hours. The car park serving the railway station includes a charge of £4.50 per day on weekdays and £3 per day at weekends and is well used.

2.25 In relation to Mr New's reference to the Tesco car park, it is acknowledged that this would be likely to be used by future residents of the site to undertake bulk food shopping, as would be the case at any large supermarket anywhere in the UK. However, this is a private car park with a maximum permitted duration of stay of 2 hours. As such, it is not available to future residents working in the town or commuting by train.

Maintenance burden of A22 foot/cycleway & Future hypothetical widening

2.26 Paragraph 3.26 of Mr New's evidence states:

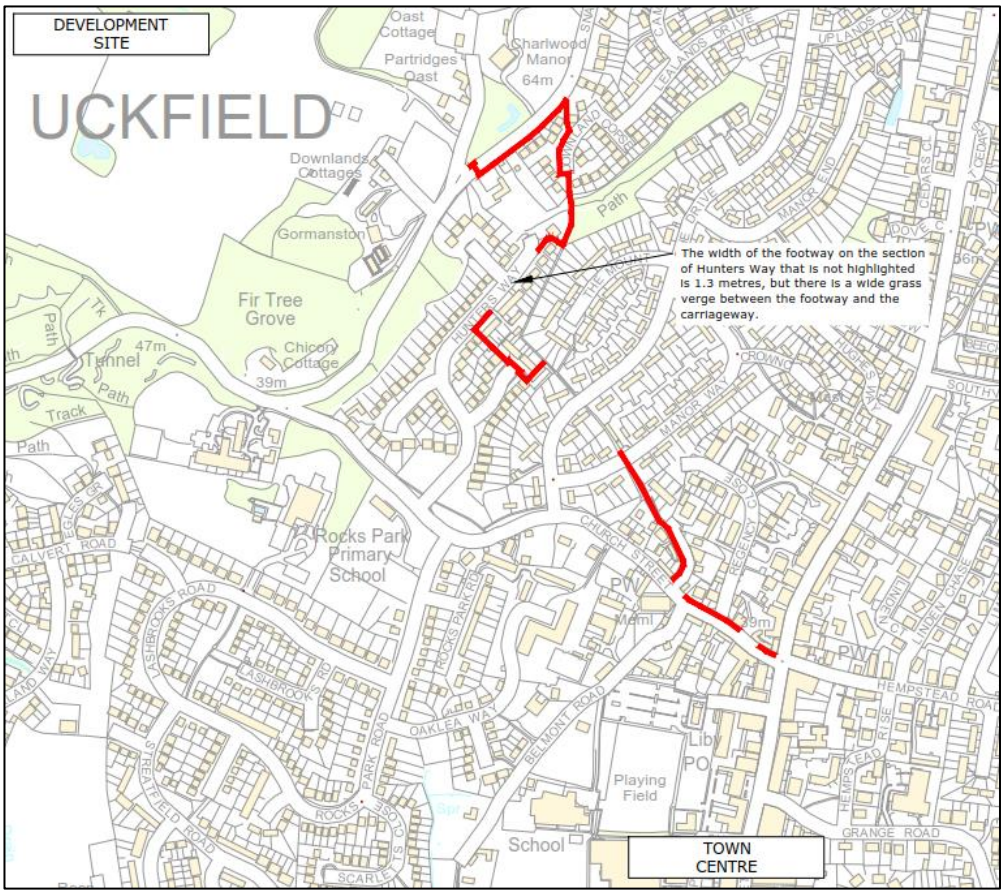
"Since the submission of ESCC's Statement of Case [CD1/7], further internal consideration of the proposal has given rise to additional concerns:

- *It would impose on the highway authority a future maintenance burden for a facility for which it sees no useful function.*

2.27 Mr New's evidence goes onto to indicate that the point relating to a future maintenance burden could be resolved thorough payment of a commuted sum. However, I consider reference to the A22 Route as providing *'no useful function'* to be unfounded. Paragraphs 7.14 to 7.16 of my evidence provide a comparison of journey times for cyclists using the A22 and Fir Tree Grove routes, which indicate that while I accept the A22 route is less direct than the Fir Tree Grove route, I do not consider that it would result in increased journey times. The A22 route also serves Bellbrook Industrial Estate and the Meads Medical Centre.

Snatts Road Route width

2.28 In paragraph 3.32, Mr New claims that the Snatts Road Route "*is narrow (generally about 1-1.5m)*". I consider this statement to be inaccurate as much of the route is wider than 1.5 metres. On the plan below I have identified in red the sections of the route that are at least 1.5 metres wide. As indicated on the plan, while there is a section of footway on Hunters Way that is 1.3 metres wide, this is adjacent to a very lightly trafficked residential street and separated from the carriageway by a wide grass verge. In relation to the section of alleyway crossing The Drive and Manor Way, which I accept is generally between 1 and 1,5 metres in width, drawing 2001061-104 (included in Appendix E of the 'Response to ESCC Highway Comments' dated 21st December 2022, **CD2/102**), includes a reference to general improvements that could be implemented along the route, including to "*widen footpaths and clear overgrown vegetation (within the existing public highway land, where constraints permit)*".



Review of width of Snatts Road route (red indicates sections greater than 1.5 metres wide)

Cycleway along major road

2.29 Paragraph 3.23 of Mr New's evidence states:

"The A22 Route is far from direct for most potential users, and is not likely to be considered safe, comfortable or attractive, particularly in inclement weather or times of reduced lighting, in light of the high volume of fast moving traffic on the bypass."

2.30 It is not uncommon for foot/cycleways to adjoin roads with high volumes or fast moving traffic. In this regard, the plans included in **Appendix PAB-R5** illustrates two example in East Sussex, within 10 miles of Uckfield, where sections of the National Cycle Network (NCN route 90) and shared pedestrian/cycle routes adjoin the A27 to the east of Lewes and east of Falmer. The sections in question run adjacent to a major trunk road, and are generally subject to the national speed limit (60 to 70 mph) with 2 to 4 lanes. Notably, large sections are unlit.

2.31 In addition, there are other routes in the south east of England where shared foot/cycleways are provided along principal roads, including, but not limited to:

- On the A23 south of Muddleswood, West Sussex a shared pedestrian/cycle route runs alongside an unlit dual carriageway (2 lanes each direction), subject to the national speed limit of 70mph.
- The A3 near Burpham/Burnt Common, Surrey and sections towards Liphook, Hampshire include shared foot/cycleways adjacent to 4 to 6 unlit lanes of carriageway, subject to the national speed limit of 70mph.
- M4 bridge over the Thames near Bray, Berkshire includes an unlit shared foot/cycleway, although this is separated from traffic by guardrails.

3.0 Rebuttal to Downlands Action Group Evidence

Summary of Mr Wallace's Evidence

3.1 Downlands Action Group (DAG) has submitted evidence to the Inquiry, although does not have Rule 6 status. The evidence prepared by Mr Wallace considers four main points. This Rebuttal responds to a number of items raised under the third heading 'The infrastructure to support another major development is not in place'.

3.2 Paragraphs 11 to 14 of Mr Wallace's evidence deal with matters related to transport and highways and are the focus of this section of my Rebuttal. The main points raised in Mr Wallace's evidence addressed in this section can be summarised as:

- Additional traffic in the town and on the A22 and impact on congestion.
- Additional traffic on Snatts Road and impact on highway safety.
- Character of Rocks Road.
- Reliance on the private car, distance to the town centre, existing bus services and proposed A22 footpath.

3.3 I deal with each of these points in turn in the remainder of this section.

Rebuttal Points to Mr Wallace's Evidence

Additional traffic in the town and on the A22 and impact on congestion

3.4 Paragraph 11 of Mr Wallace's evidence states:

"Uckfield is a small town, having a population of well under 20,000, and it has only one main road through the town centre. The only alternative route to that road is the A22 bypass. The town centre is heavily congested with traffic, particularly in peak periods. Any road works or accidents, either in the town centre or on the A22 bypass, quickly produce traffic gridlock. A development of the size proposed is bound to add significantly to the quantity of traffic in the town and on the A22."

3.5 Sections 6 and 7 of the Transport Assessment (**CD2/28**) include an assessment of additional vehicle movements and impact on the local highway network. Section 5 of Motion's 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**) provides a further consideration on the highway impact on the town centre and an update to the assessment completed in the submitted Transport Assessment. Paragraphs 7.71 to 7.73 of my Proof of Evidence deal with 'impact on town centre junctions' and confirms that,

"*The agreed position as set out in the Transport Statement of Common Ground (**CD1/9**) is that the Appellants will fund the installation and maintenance of an enhanced control system at the town centre junctions. Subject to a Section 106 obligation to pay the contribution, ESCC considered that reason for refusal 7 can be withdrawn*." (paragraph 7.73 of my main Proof of Evidence)

Additional traffic on Snatts Road and impact on highway safety

3.6 Paragraph 12 of Mr Wallace's evidence states:

"Snatts road is a narrow country lane, without street lights or pavements for much of its length. It joins London Road at its eastern end at a dangerous crossroads with limited visibility. At its western end, it joins Rocks Road at an even more dangerous junction, situated very close to a sharp bend in Rocks Road. Snatts Road is already heavily used as a short cut to the town centre, or as a route to avoid the town centre, by a large volume of traffic. Many vehicles park on the side of the road near its eastern end and near the houses to the west of the junction with Claremont Rise. This makes it more hazardous for traffic to negotiate this narrow lane. The proposed development would be bound to add to the quantity of traffic using the road. That would entail a significant increase in traffic hazards and detriment to the residential amenities of those who live in Snatts Road and the neighbouring streets. Provision of a SANG on the development would add considerably to this impact, as it would inevitably attract car-borne visitors wishing to walk or exercise their dogs on the SANG. These problems can already be seen at the SANG which has been provided as part of the large development at Ridgewood, to the south and west of the town. That SANG has a small car park which is frequently full, leading to traffic congestion and hazardous parking on the narrow road leading to the car park."

3.7 The appeal proposals include provision of new footways on Snatts Road to connect to existing routes. No vehicular access is proposed to Snatts Road to serve the residential development. The only vehicular access to Snatts Road is to one of the proposed SANG car parks. Paragraphs 7.8 to 7.13 of the 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**) includes information on potential vehicle movements on Snatts Road associated with the proposed SANG based on survey data recorded at Horsted Green park SANG. An additional car park for the SANG is proposed within the development.

3.8 A review of road safety is provided within the Transport Assessment (**CD2/27**), which does not identify any particular road safety issues. Traffic flow and speed data for Snatts Road is included in the 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**) and the Transport Statement of Common Ground (**CD1/9**) with ESCC agrees that:

"Daily two-way traffic flows at the Rocks Road end of Snatts Road are in the order of 1,300 vehicles and are therefore low."

3.9 The second ESCC consultation response dated 23rd March 2023 (**CD1/1**) states:

"The proposed car park accessed from Snatts Road is indicated with 19 spaces and cycle spaces which should not result in overspill to a concerning level on Snatts Road."

3.10 It is therefore evident that consideration has been given to the increase in vehicle movements on Snatts Road and road safety and that ESCC as the local highway authority are satisfied in this regard.

Character of Rocks Road

3.11 Paragraph 13 of Mr Wallace's evidence states:

"Rocks Road is a minor country road, without street lighting or pavements west of the junction with Snatts Road."

3.12 This statement is correct in respect of existing provision. Traffic flow and speed data for Rocks Road is included in the 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**). The Transport Statement of Common Ground (**CD1/9**) with ESCC agrees that:

"Observed 85th percentile vehicle speeds on Rocks Road to the north of the Snatts Road junction are 31.4mph southbound and 30.3mph northbound, and are therefore well below the posted speed limit of 60mph."

3.13 The appeal proposals include provision of a new section of footway along Rocks Road between the site and the existing network to the east (towards the town), as described in paragraph 7.39 of my evidence, which is intended to be lit. This will include a new priority feature to the east of the Snatts Road junction. The proposals seek to enhance provision for walking and cycling between the site and the town centre.

Reliance on the private car, distance to the town centre, existing bus services and proposed A22 footpath

3.14 Paragraph 14 of Mr Wallace's evidence states:

"The proposed development envisages pedestrian and cycling access via Rocks Road and Snatts Road to the town centre. Whilst these forms of transport may be used by some people, primarily for leisure purposes, it is clear that the majority of journeys to and from the site will be by private car. The fact that the vehicular access will be via a new roundabout on the A22 bypass underlines this fact. The site is much too far from the town centre to be accessed by any other means, for most journeys. I take issue with the Appellant's assertion that the site is within 1.1 km of the town centre. Most if not all of it is considerably further away than that. The eastern end of Snatts Road, by comparison, is one mile from the town centre, and at least a 20 minute walk for those who do not use cars for the journey. The northern parts of the site are nearer to 2-3 miles from the town centre, particularly if the distances using the road network are used in the calculation. There is no bus route along the A22 bypass between Uckfield and Maresfield. The bypass has no footpaths and the only street lighting is at the roundabouts. Pedestrians do not walk along the bypass, for the simple reason that it is a heavily used main road with no safe walking routes, and because it is so far from Uckfield town centre and other settlements such as Maresfield. Provision of a footpath alongside the bypass, which the proposed development envisages, would not alter the danger and distances involved. A footpath might be used by a few people, but would not alter the heavy dependence on private cars which a housing estate on Downlands Farm would inevitably have."

3.15 The location of the vehicular access on the western boundary of the site (in the opposite direction to the town centre), seeks to support the sustainable transport strategy in influencing whether people choose to drive rather than walk/cycle, particularly where active travel routes are more direct than routes by car. Section 6 of the 'Response to ESCC Highway Comments' dated 21st December 2022 (**CD2/102**) considers connectivity to local amenities and a comparison of walk/cycle distances to those by road/car. Paragraph 6.18 states:

"… the journey length to all the core amenities (although noting journey distance to Bellbrook Industrial Estate and the medical centre are similar), are greater by road/car than the walking/cycling routes…".

3.16 The road routes are also convoluted, which would impact journey time, in turn influencing travel choice. The availability of car parking at destinations will also influence travel choice. For example, car parking at peak times around schools is likely to be in high demand. The Transport Statement of Common Ground (**CD1/9**) with ESCC includes plans of agreed walking distances between the site and town centre, railway station, Bellbrook Industrial Estate, Uckfield College and Rocks Park Primary School. Paragraph 7.14 of my evidence considers distance and journey times of the A22 and Fir Tree Grove Routes by cyclists.

3.17 The appeal proposals include provision of a new shared pedestrian/cycle route along the A22 (paragraph 7.11 of my Main Proof of Evidence). It is not envisaged that large numbers of pedestrians would use the A22 route, although they may do for recreational purposes or to access Bellbrook Industrial Estate and the medical centre.

3.18 Paragraphs 3.12 and 3.13 of my evidence describe the proposals to divert bus service 31 into the development and along the A22, which is further agreed within the Transport Statement of Common Ground (**CD1/9**).

3.19 Paragraph 105 of the National Planning Policy Framework (NPPF) seeks to ensure that significant development is focused on locations which are of can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. Based on my evidence, it is considered that the proposals will contribute towards reducing dependence on the private car by offering a genuine choice of transport modes in accordance with policy outlined in the NPPF.

Appendix PAB-R1

Extract from the Introduction to the Design Manual for Roads & Bridges (GG 101)

Design Manual for Roads and Bridges

General Principles & Scheme Governance
General Information

GG 101
Introduction to the Design Manual for Roads and Bridges

(formerly GG 101 revision 0)

Version 0.1.0

Summary
This document provides information on the use of the Design Manual for Roads and Bridges.

Application by Overseeing Organisations
Any specific requirements for Overseeing Organisations alternative or supplementary to those given in this document are given in National Application Annexes to this document.

Feedback and Enquiries
Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated National Highways team. The email address for all enquiries and feedback is: Standards_Enquiries@highwaysengland.co.uk

This is a controlled document.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Contents

Release notes **2**

Foreword **3**
Publishing information . . . 3
Contractual and legal considerations . . . 3

Introduction **4**
Background . . . 4
Assumptions made in the preparation of the DMRB . . . 4
Competence . . . 4
Link with regulation and legislation . . . 4
Link with the MCHW . . . 4
Verbal forms . . . 4
Mutual recognition . . . 4

Abbreviations **6**

Terms and definitions **7**

1. Scope **8**
Aspects covered . . . 8
Implementation . . . 8
Health and safety . . . 9
Equality, diversity and inclusion . . . 9

2. Application of the DMRB **10**
National Application Annexes of the Overseeing Organisations . . . 10
Departures from requirements . . . 10
Scope . . . 10
Interactions with local roads . . . 11
Departure applications for aspect not covered by requirements . . . 11
Non-compliance with requirements . . . 11
Relaxations . . . 11
Deviation from recommendations . . . 11
Justification . . . 11
Safety risk assessment . . . 11

3. Informative references **13**

Appendix A. Document structure and referencing **14**
A1 DMRB structure and coding system . . . 14

Appendix B. Clause numbering system in DMRB documents **18**

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 101	0.**1**.0	September 2021	Core document, England NAA, Northern Ireland NAA	Incremental change to requirements

The document has been amended to clarify the scope of the DMRB to include: works and assets not on the network, clarify the verb forms used within the DMRB, add a requirement for the oversight by the Design Panel or Devolved Administration equivalent, and add a requirement for a justification of any decision to not use recommended or good practice. National Application Annexes have been created for England and Northern Ireland. References to Highways England changed to National Highways.

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 101 (2019)	0	June 2018		

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Foreword

Publishing information

This document is published by National Highways.

This document supersedes GG 101 revision 0, which is withdrawn.

Contractual and legal considerations

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Introduction

Background

The Design Manual for Roads and Bridges (DMRB) is a suite of documents which contains requirements and advice relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations is highway or road authority.

The DMRB embodies the collective experience of the Overseeing Organisations, their agents, supply chain members and industry bodies. It provides requirements and advice resulting from research, practical experience of constructing and operating motorway and all-purpose trunk roads, and from delivering compliance to legislative requirements.

Assumptions made in the preparation of the DMRB

Competence

The DMRB has been prepared for use by competent practitioners, typically qualified professionals able to work independently in relevant fields, who are expected to apply their own skill and judgement when making decisions involving the information that the DMRB contains.

Link with regulation and legislation

DMRB documents are not statutory or regulatory documents or training manuals; neither do they cover every point in exhaustive detail.

In general, the DMRB does not duplicate National, UK and European legislative requirements. Anyone engaged in works on or relating to the Overseeing Organisations' motorway and all-purpose trunk roads is assumed to understand and comply with the relevant legislation.

Link with the MCHW

The requirements and advice given in DMRB documents are provided on the basis that the works are constructed in accordance with the Manual of Contract Documents for Highway Works (MCHW).

Verbal forms

The verb 'must' indicates a statutory or legislative requirement.

Note: Requirements with this verb form cannot be varied.

The verb 'shall' indicates a requirement of the Overseeing Organisation.

Note: Requirements with this verb form can be only be varied though the use of departures or in limited situations as relaxations.

The verb 'should' indicates advice expressed as a recommendation.

Note: Recommendations with this verb form are good practice and can be varied without recourse to the departures process, but require justification and a safety risk assessment where the recommendation is not followed.

The verb 'may' indicates advice expressed as a permissible approach.

Note: Permissible approaches with this verb form can be varied in accordance with internal review processes without recourse to the Overseeing Organisation.

The verb 'can' or verbs expressed in the present tense other than 'must', 'shall', 'should' and 'may' are used to introduce notes, which provide a short clarification of a concept or statement of fact.

Appendix A provides information about the document referencing used within DMRB documents. Appendix B provides information about the clause numbering system used within DMRB documents.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Mutual recognition

Where there is a requirement in the DMRB for compliance with any part of a British Standard or other technical specification, that requirement may be met by compliance with:

1) a standard or code of practice of a national standards body or equivalent body of any EEA state or Turkey;

2) any international standard recognised for use as a standard or code of practice by any EEA state or Turkey;

3) a technical specification recognised for use as a standard by a public authority of any EEA state or Turkey; or

4) a European Technical Assessment issued in accordance with the procedure set out in regulation (EU) No. 305/2011;

provided that the relevant standard enables an equivalent level of performance and safety to be achieved to that provided for by the stated British Standard or technical specification.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Abbreviations

Abbreviations

Abbreviation	Definition
DMRB	Design Manual for Roads and Bridges
EEA	European Economic Area
MCHW	Manual of Contract Documents for Highway Works
NAA	National Application Annex

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Terms and definitions

Terms

Term	Definition
British Standards	Any standard published by the British Standards Institution including adopted European or other international standards.
Bulk departure	Departure where the same non-standard method or material is proposed for use at more than one location in certain clearly defined circumstances.
Departure	Variation or waiving of a requirement carried out in accordance with the Overseeing Organisation's procedures.
Motorway and all-purpose trunk roads	Collective term to indicate those parts of the UK highway and road network for which one of the Overseeing Organisations is highway or road authority.
Overseeing Organisation	The following organisations (or their successors): 1. National Highways; 2. Transport Scotland; 3. The Welsh Government; 4. Department for Infrastructure (Northern Ireland). NOTE 1: Where any document within the DMRB refers to any of the above organisations, this can be taken to mean the named organisation or its successors. NOTE 2: Where a local highway/road authority decides to use the DMRB in whole or part for development of its own highway/road network, the Overseeing Organisation is defined in accordance with their own procedures. NOTE 3: This can also be another organisation that assumes the roles, responsibilities and duties of the Overseeing Organisation through delegation by the Overseeing Organisation.
Roads	The term "roads" is used in Northern Ireland and Scotland as an alternative term for "highways".

All standard terms and definitions are in accordance with BS 6100 [Ref 1.I] Building and civil engineering - vocabulary. Where the term is not provided in BS 6100 [Ref 1.I], it is defined in the document-specific terms and definitions section of the specific document.

All International System of Units, their derivatives and their notation are in accordance with BS EN ISO 80000-1 [Ref 4.I].

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

1. Scope

Aspects covered

1.1 The requirements in this document shall be used in conjunction with all appropriate DMRB documents.

NOTE The requirements in this document cover the following aspects:

1) defining the scope of the DMRB;

2) provision of general requirements for all DMRB documents;

3) provision of requirements relating to the application of the DMRB.

1.2 The requirements of this document shall be used for:

1) the appraisal, design, construction, maintenance and operation, inspection and assessment, demolition and disposal of motorway and all-purpose trunk roads for which the Overseeing Organisations is highway or road authority;
2) all assets located on Overseeing Organisation land, within the highway boundary;
3) all assets located on Overseeing Organisation land, not within the highway boundary; and,
4) where appropriate, assets on land leased by the Overseeing Organisation for which the Overseeing Organisation is responsible.

NOTE 1 Overseeing Organisation land can be near to the motorway or all-purpose trunk road network, for example, land containing a maintenance vehicle access roads (which are not public highway), service and rest areas, or drainage balancing ponds remote from the highway.

NOTE 2 Overseeing Organisation assets remote from the motorway or all-purpose trunk road network, can include depots, warehouse buildings, or office buildings.

1.2.1 Requirements may be applied to other roads with the approval of the specific highway or local authority acting as the Overseeing Organisation.

1.2.2 Where these requirements are applied to other roads, the specific highway or local road authority acting as the Overseeing Organisation should decide on the extent to which the requirements are appropriate in any given situation.

Implementation

1.3 Individual documents shall be implemented in accordance with any implementation requirements in a particular DMRB document.

NOTE Failure to implement a document that addresses statutory or legislative obligations can place the Overseeing Organisation at risk of legal action or consequence.

1.4 Where there are no specific implementation requirements in a particular DMRB document, the document shall be implemented immediately after publication except:

1) where the contract has reached a stage that, in the opinion of the Overseeing Organisation, use of a new or revised document would result in significant additional expense or delay; or,
2) where an existing contract has terms which apply specifically to the implementation of new requirements.

1.5 Where the contract has reached a stage that, in the opinion of the Overseeing Organisation, use of a new or revised document would result in significant additional expense or delay, the decision whether to use a new or revised document shall be recorded in accordance with the Overseeing Organisation's procedure.

1.6 Where the role of Overseeing Organisation has been delegated, the delegated authority shall assume the risks, responsibilities and duties of the Overseeing Organisation to the extent defined by the contract and permitted under National, UK and EU Legislation.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

NOTE *Delegated authorities can include contractual vehicles such as DBFO (Design, Build, Finance and Operate) and NRTS (National Roads Telecommunications Services) contracts.*

Health and safety

1.7 Where undertaking any activity that does or can have an impact on safety, either directly or indirectly, for any affected populations, risk assessment and management shall be carried out in accordance with legislation and the procedures set out by the Overseeing Organisations.

Equality, diversity and inclusion

1.8 Where undertaking any activity that can have an impact, either directly or indirectly, on people with protected characteristics, an equality impact assessment (EqIA) screening shall be carried out to determine the applicability of a full EqIA.

1.9 Where the EqIA screening indicates that a full EqIA is needed, an EqIA shall be carried out.

1.10 Where EqIA indicates that people with protected characteristics can be disadvantaged or put at additional risk, solutions to mitigate that impact shall be proposed.

1.10.1 Consultation and engagement with affected people and groups should be carried out to identify solutions or mitigation.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

2. Application of the DMRB

2.1 All works, including inspections on motorway and all-purpose trunk roads, on land owned, leased or managed by the Overseeing Organisation shall be undertaken in accordance with DMRB requirements appropriate to the intended use of the asset or road.

NOTE *The requirements appropriate to the new use or status of an asset or road are applied where there is a change in use or status. For example, the change in use or status can be improving a road to remove lower mandatory speed limits, or the upgrading of an all-purpose trunk road to motorway.*

2.1.1 Where the road is to be reduced in status, e.g. de-trunked or where the works are to be carried out on roads that are not part of the trunk road network and the use of the DMRB could result in significant over-specification, alternative documents such as the Manual for Streets [Ref 3.I] or Designing Streets 2010 [Ref 2.I] may be used with the approval of the Overseeing Organisation.

National Application Annexes of the Overseeing Organisations

2.2 National Application Annexes (NAA) shall be used where they exist.

NOTE 1 *NAAs allow Overseeing Organisations to complement, supplement or replace the requirements and advice contained in the main DMRB document.*

NOTE 2 *Other highway authorities or local authorities can develop their own application annexes to complement, supplement or replace the requirements and advice contained in the main DMRB document.*

Departures from requirements

Scope

2.3 Statutory and legislative requirements must always be followed.

NOTE *Departures are not applicable to statutory and legislative requirements.*

2.4 Where requirements of the Overseeing Organisation are not met, a departure application shall be submitted in accordance with the procedures required by the relevant Overseeing Organisation and approved:

1) before the design is finalised; and,
2) prior to their incorporation into the works.

2.4.1 Where requirements of the Overseeing Organisation are not met, departures should be submitted where:

1) it can be justified that a requirement is inappropriate in a particular situation;
2) the application of a requirement would have unintended adverse consequences;
3) innovative methods or materials are to be proposed;
4) a requirement not in the DMRB, NAA or MCHW is adopted as more appropriate in a particular situation; or,
5) an aspect not covered by requirements is identified.

NOTE *Departure applications are approved on a location-specific basis and relate to the particular circumstances identified in each submission; however, an approved departure can be quoted to support a new and similar submission.*

2.4.2 Bulk departure applications should be submitted in preference to a number of individual departures, where the individual departures share common methods or materials.

2.5 Each departure application shall be approved in accordance with the Overseeing Organisation's procedures before the design is finalised and prior to its incorporation into the works.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

NOTE *An approved departure is deemed to meet the Overseeing Organisation's requirements for that element of the works, provided that any mitigation measures proposed or conditional to that approval are also incorporated into the design and works.*

Interactions with local roads

2.6 Where works that will subsequently be adopted by a local highway/road authority are to be carried out by an Overseeing Organisation, any departure applications shall be submitted in accordance with the Overseeing Organisation's requirements for departures.

Departure applications for aspect not covered by requirements

2.7 Where an aspect of the works is not covered by existing requirements, a departure application for an aspect not covered by requirements shall be submitted.

2.7.1 Where an aspect of the works is not covered by existing requirements, the principles of current and relevant guidance should be followed.

Non-compliance with requirements

2.8 Where it is discovered that works have been undertaken that are not in accordance with the requirements of the DMRB or the requirements of a departure, the party responsible for undertaking such works shall amend the works to rectify the non-compliance.

Relaxations

2.9 Relaxations shall only be applied where they are explicitly permitted in a DMRB, NAA or MCHW document and in accordance with the instructions in that document.

2.10 Adoption of a relaxation and its reasoning shall be recorded by the design organisation.

2.11 A departure application shall be submitted for any proposed variation beyond the limits permitted by a relaxation.

Deviation from recommendations

Justification

2.12 A justification shall be developed to support any decision where a recommendation (verb form - should) contained in the DMRB and related NAAs is not followed.

2.13 Justifications to support all design decisions shall be recorded by the design organisation as part of the project record.

2.13.1 The justification should include a comparison of costs / time / resources of the proposed solution to the recommended approach.

2.13.2 Where the decision is made for non-commercial or non-programme (i.e. sustainability, environmental, historical, cultural or aesthetic) reasons, the reasons and their justification should be included.

2.13.3 The justification for deviating from a recommendation may be produced for a single project or alternatively for multiple projects on a scheme, where relevant.

2.13.4 Where the justification for deviating from a recommendation is covered within documents already required by other standards/processes, a reference to the relevant, alternative source may be included in lieu of a detailed description.

NOTE *Examples of other relevant formal procedures are the technical approval process and environmental assessments.*

2.14 Any deviation from a recommendation along with the supporting justification shall be available to the Overseeing Organisation as required.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Safety risk assessment

2.15 The justification for deviating from a recommendation shall include a safety risk assessment undertaken in accordance with legislation.

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

3. Informative references

The following documents are informative references for this document and provide supporting information.

Ref 1.I	BSI. BS 6100, 'Building and civil engineering vocabulary [All Parts]'
Ref 2.I	Scottish Government (2010). Designing Streets 2010, 'Designing Streets'
Ref 3.I	Thomas Telford Publishing for Department for Transport. Manual for Streets, 'Manual for Streets'
Ref 4.I	BSI. BS EN ISO 80000-1, 'Quantities and units. General'

Downloaded from https://www.standardsforhighways.co.uk on 12-Oct-2023, GG 101 Version 0.1.0, published: 29-Sep-2021

Appendix PAB-R2

Correspondence with Mr New regarding Rocks Road speed survey

Fiona Thorp

From: Roger New [redacted]
Sent: 04 October 2023 09:18
To: Phil Bell
Cc: Fiona Thorp; Kal Kamboh
Subject: FW: Downlands Farm, Uckfield - Survey of Traffic Speeds on Rocks Road [Filed 04 Oct 2023 09:44]

Categories: Filed by Mail Manager

Phil
Thanks for your patience. ESCC's internal Traffic Data team no longer carry out traffic counts using tubes, for Health & Safety reasons and to avoid any potential for damage to the carriageway surface being the catalyst for pothole formation. For the latter reason, ESCC require any 3rd party data collection company to seek a licence from ESCC before any installation is undertaken. In the circumstances, and in view of your wish that the survey procedure be exactly as the previous one (i.e. using tubes at the same location), I no longer intend to commission a resurvey.

Roger

From: Roger New
Sent: Friday, September 29, 2023 9:49 AM
To: 'Phil Bell' [redacted]
Cc: Fiona Thorp [redacted]; Kal Kamboh [redacted]
Subject: RE: Downlands Farm, Uckfield - Survey of Traffic Speeds on Rocks Road

Phil
Thanks for your email and the info within.
I'm on leave today so I will respond further on Monday.
Have a good weekend.
Roger

From: Phil Bell [redacted]
Sent: Thursday, September 28, 2023 10:30 AM
To: Roger New [redacted]
Cc: Fiona Thorp [redacted]
Subject: Downlands Farm, Uckfield - Survey of Traffic Speeds on Rocks Road

Hi Roger,

It was good to speak just now. I note that the speed survey referred to in paragraph 2.18 of your proof has not yet been instructed and that you are happy to replicate the speed survey we carried out in October 2022 in order to verify the results. I attach the results of that speed survey, which was based on an automatic traffic counter attached to the sign shown in the image below (also see photograph on final tab of survey results). I'm sure that you will agree that this location represents a worst case in terms of eastbound speeds as drivers would slow down after this point due to the bend in the road to the east, where our pedestrian visibility splay ends. Naturally, we would have obtained speed data slightly further east if possible, but there is no street furniture on which to attach the equipment.



In order to assist the Inquiry, I would be grateful if you could confirm that you are happy with the approach outlined above.

I look forward to hearing from you.

Regards,

Phil.

Phil Bell | Managing Director

motion **|** 84 North Street, Guildford, GU1 4AU
t [redacted] | m [redacted] | e [redacted] | w www.motion.co.uk
LinkedIn | Twitter

The information in this email is confidential and is intended solely for the addressee(s). Access to this email by anyone else is unauthorised. If you are not an intended recipient, you must not read, use or disseminate the information contained in this email. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Motion. Any personal information we obtain will be processed in accordance with the relevant Privacy Notice which can be accessed at https://www.motion.co.uk/datasubjectprivacy

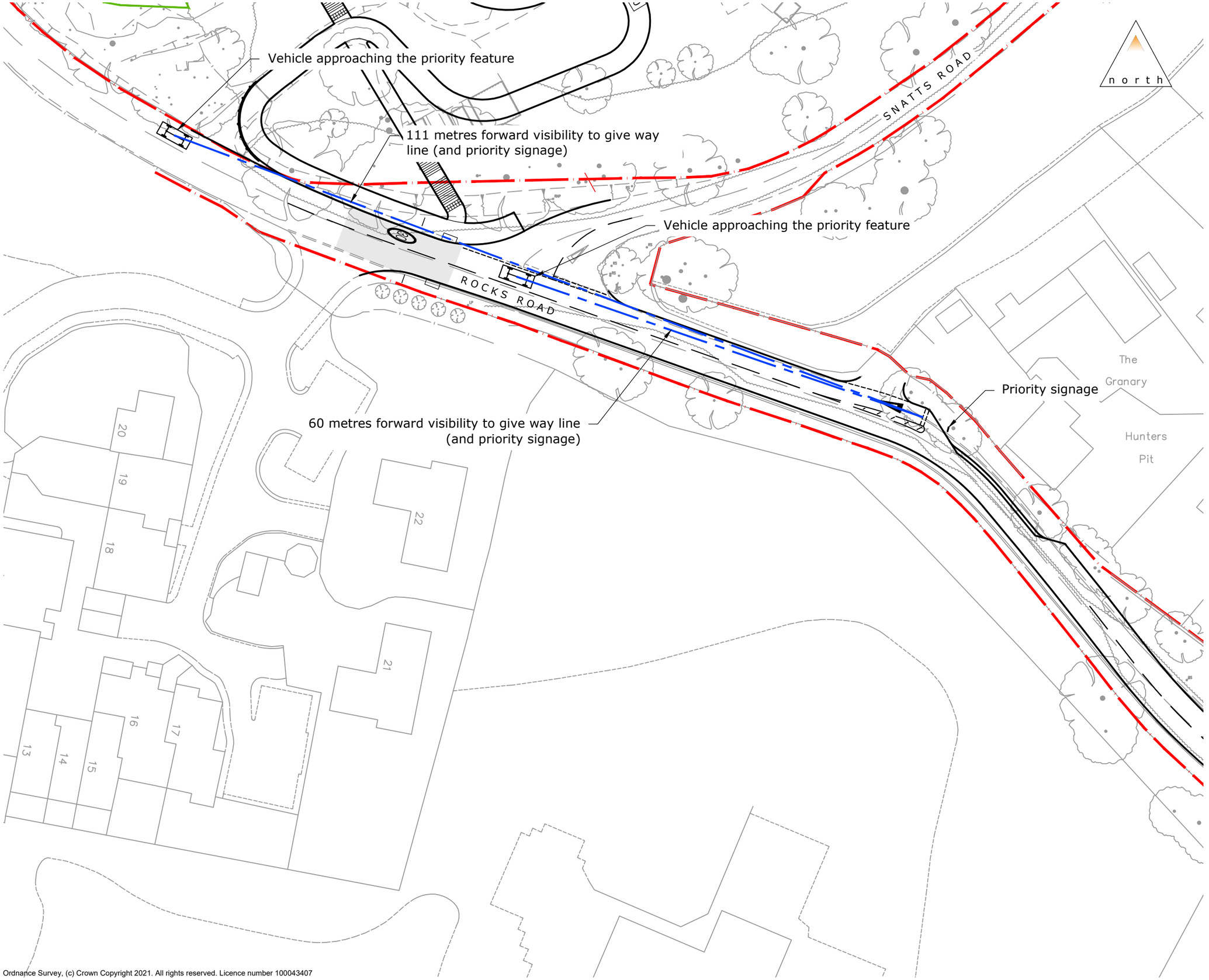
Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more Click Here.

Appendix PAB-R3

Forwards visibility at Rocks Road priority working



Ordnance Survey, (c) Crown Copyright 2021. All rights reserved. Licence number 100043407

Legend:

Indicative highway boundary

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Golden Cross House
8 Duncannon Street
London
WC2N 4JF

T: 020 8065 5208

www.motion.co.uk

Project:
Downlands Farm, Uckfield

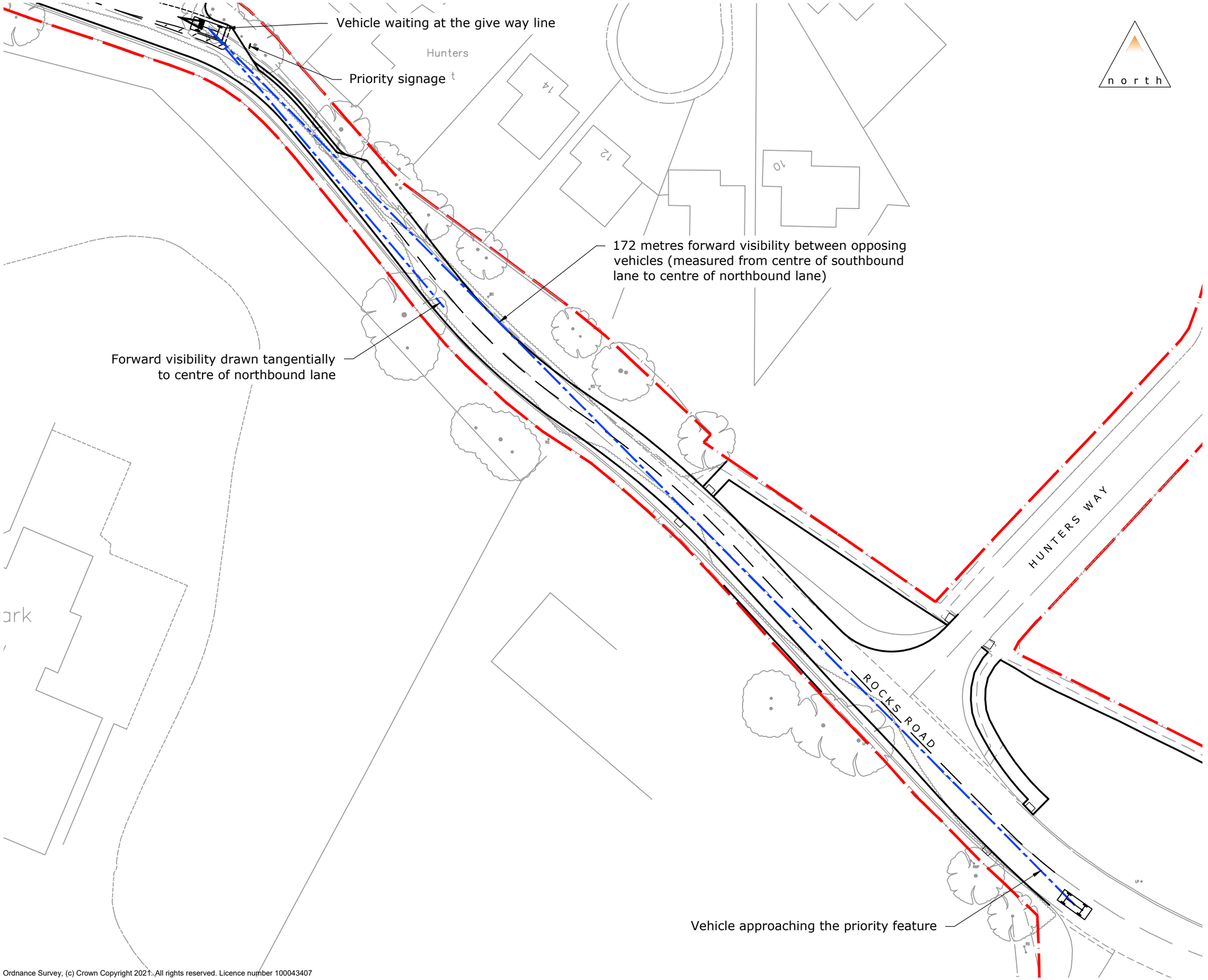
Title:
Rocks Road Priority Feature
Forward Visibility

Scale: 1:500 (@ A3)

Drawing: 2001061-143

Revision:

C:\Users\JulianSmith\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-143, 144 [Rocks Road Priority Feature].dwg



Legend:

Indicative highway boundary

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Golden Cross House
8 Duncannon Street
London
WC2N 4JF

T: 020 8065 5208

www.motion.co.uk

Project:
Downlands Farm, Uckfield

Title:
Rocks Road Priority Feature
Forward Visibility

Scale: 1:500 (@ A3)

Drawing: 2001061-144

Revision:

Ordnance Survey, (c) Crown Copyright 2021. All rights reserved. Licence number 100043407

C:\Users\JulianSmith\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-143, 144 [Rocks Road Priority Feature].dwg

Appendix PAB-R4

Extracts from The Traffic Signs Manual

1.7 Upright sign sizes

1.7.1. It is important that upright signs giving effect to TROs, and intended to be read from a moving vehicle, are of sufficient size to enable drivers to recognise them and assimilate the information in time. They therefore need to be of a size appropriate to the prevailing traffic speed on the road on which they are used (see **Appendix A**). All sign sizes, generally based on the 85th percentile approach speed, are in millimetres unless stated otherwise.

1.8 Siting of upright signs

1.8.1. It is essential that drivers have an unobstructed view of upright signs. The distance which should be kept clear of obstructions to the sight line, whether caused by vegetation, other signs or street furniture, is known as the clear visibility distance. The higher the prevailing traffic speeds, the greater this distance needs to be.

1.8.2. **Table 1-1** specifies minimum clear visibility distances. These should normally be measured from the centre of the most disadvantaged driving lane. It is important that the full recommended sight line to the whole of the sign face is preserved. Cutting back of vegetation only in the immediate vicinity of the sign might not be sufficient; sign visibility should always be checked from the appropriate viewing distance.

Table 1-1 Minimum clear visibility distances

85th percentile speed of private cars (mph)	Minimum clear visibility distance (m)
Up to 20	45
21 to 30	60
31 to 40	60
41 to 50	75
51 to 60	90
Over 60	105 (120)

1.8.3. The bracketed visibility distance of 120 m in **Table 1-1** is generally for dual carriageway roads and motorways with a 70 mph speed limit, where the bracketed larger size of sign in **Appendix A** should be used.

1.8.4. **Table 1-1** does not apply to the following:

a) speed limit and speed camera signs (see section **8**)
b) the sign to diagram 958 (S11-2-37; see **9.3.4**)
c) the sign to diagram 958.1 (S11-2-38; see **11.3.2**)
d) time plates that are parallel to the kerb.

1.8.5. There is no specific requirement that signs indicating the beginning of a restriction or prohibition must be placed on each side of the road or on each side of the appropriate carriageway of a dual carriageway road (see **8.2** in respect of speed limit signs). This relaxation has been made to reduce environmental impact, but care should be taken to ensure that a single sign is clearly visible to all road users and does not give rise to issues relating to enforcement or road safety. This might require a single sign in some instances to be placed on the off side of the road.

1.8.6. There are likely to be some situations where two signs will still be preferable, such as on the side road at junctions, and where obstruction of a sign by other vehicles is possible. Drivers

4.7.5. The sizes of 270 and 300 mm for signs to diagrams 610 and 611 are intended for use in bollards, although some bollards will accommodate larger sizes. Sizes of 450 mm and above are intended for use at higher level or for post-mounted signs at road works (see **Appendix A**). Where a sign is mounted in a bollard, especially where the speed limit is greater than 30 mph, a larger post-mounted sign may also be provided at the same location to give greater emphasis.

4.8 Priority signs

4.8.1. The sign to diagram 615 (S3-2-9, see **Figure 4-27**) indicates that drivers must give priority to vehicles from the opposite direction on a narrow length of road. It should be used only when vehicles at each end of the priority section are clearly visible to each other and speeds are not high. The sign must not be displayed to traffic approaching from both directions. Schedule 3 General Direction 3 requires that the circular sign must always be used with its associated supplementary plate; legends are specified at S3-3-5, 9 and 10. The circular sign must never be used upside down without the plate in an attempt to imply reversed priority. The plate legend "Give way to oncoming vehicles", with or without a distance, should be used at the start of the priority section.



Figure 4-27 Diagram 615 (S3-2-9) Priority must be given to vehicles from the opposite direction (Alternative types)

4.8.2. The sign to diagram 811A (S11-2-1, see **Figure 4-28**) is mounted to face traffic approaching from the other direction. The upper sign must never be used upside down on its own in an attempt to imply reversed priority. The Regulations do not permit the plate forming the lower part of the sign to be omitted.

4.8.3. Unless the limits of the priority section are obvious, e.g. through the arch of a bridge, the signs to diagrams 615 and 811A should include the distance over which the priority applies, in accordance with S18-3. Where the distance is indicated, signs to diagram 615 with the plate legend "End" (see **Figure 4-27**) and 811B (S11-2-1, see **Figure 4-29**) as appropriate may be located at the termination of the priority section.

4.8.4. Where a priority system is used on a gradient steeper than about 2.5%, the sign to diagram 615 should be mounted to give priority to traffic travelling up the gradient. Where the gradient is less and the road narrows on one side only, the sign to diagram 615 should be mounted on that side of the road. In other cases the sign should be erected to face traffic which tends to give way more readily.

Appendix PAB-R5

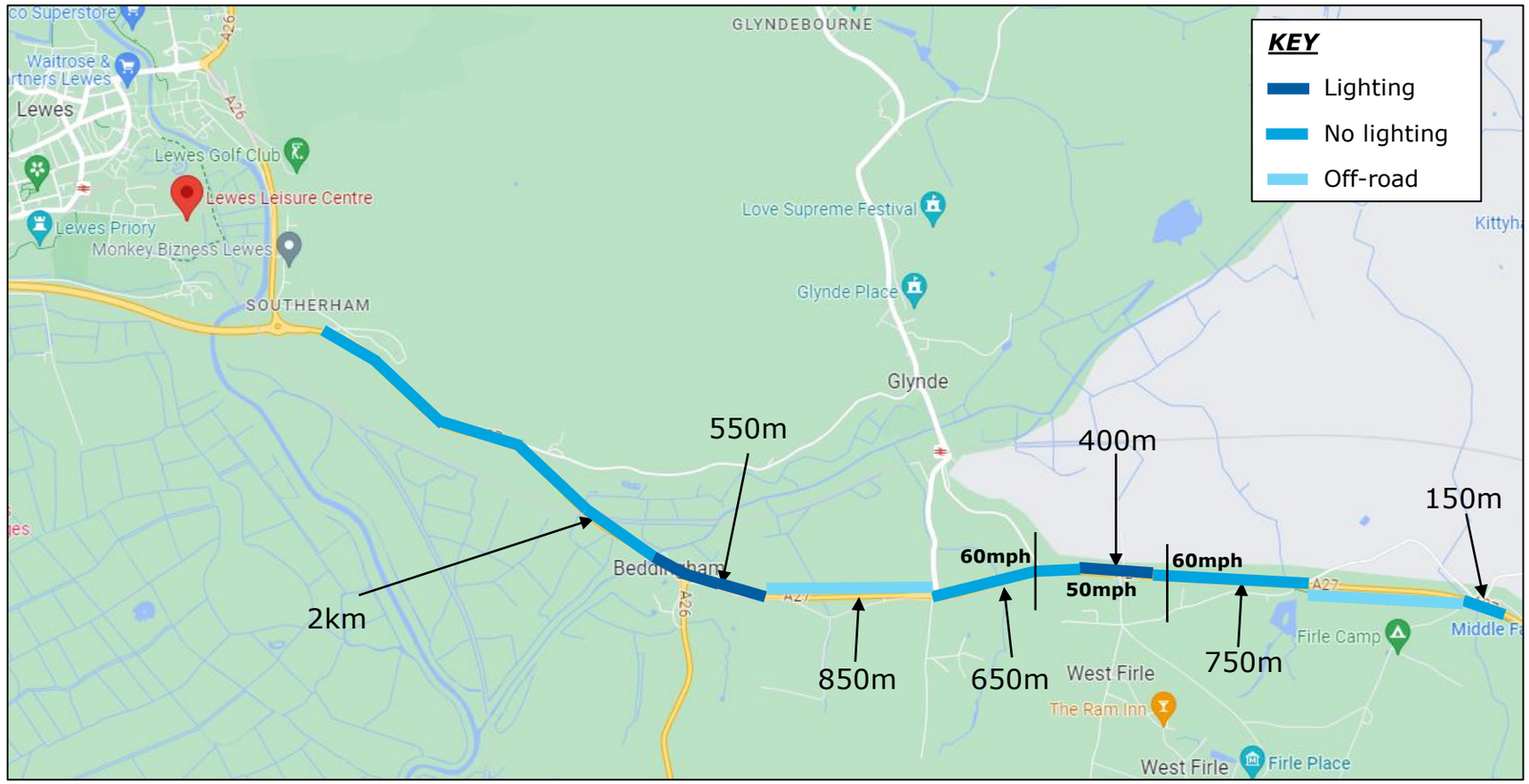
Plan of cycle routes along major roads

ROUTE: A27 east of Lewes, East Sussex

Location: East from Southerham roundabout

Type: Shared foot/cycleway adjacent to carriageway, separated in some places by grass verge, generally unlit

Speed limit & no. lanes : Generally, 60mph (short section 50mph) with 2 or 3 lanes





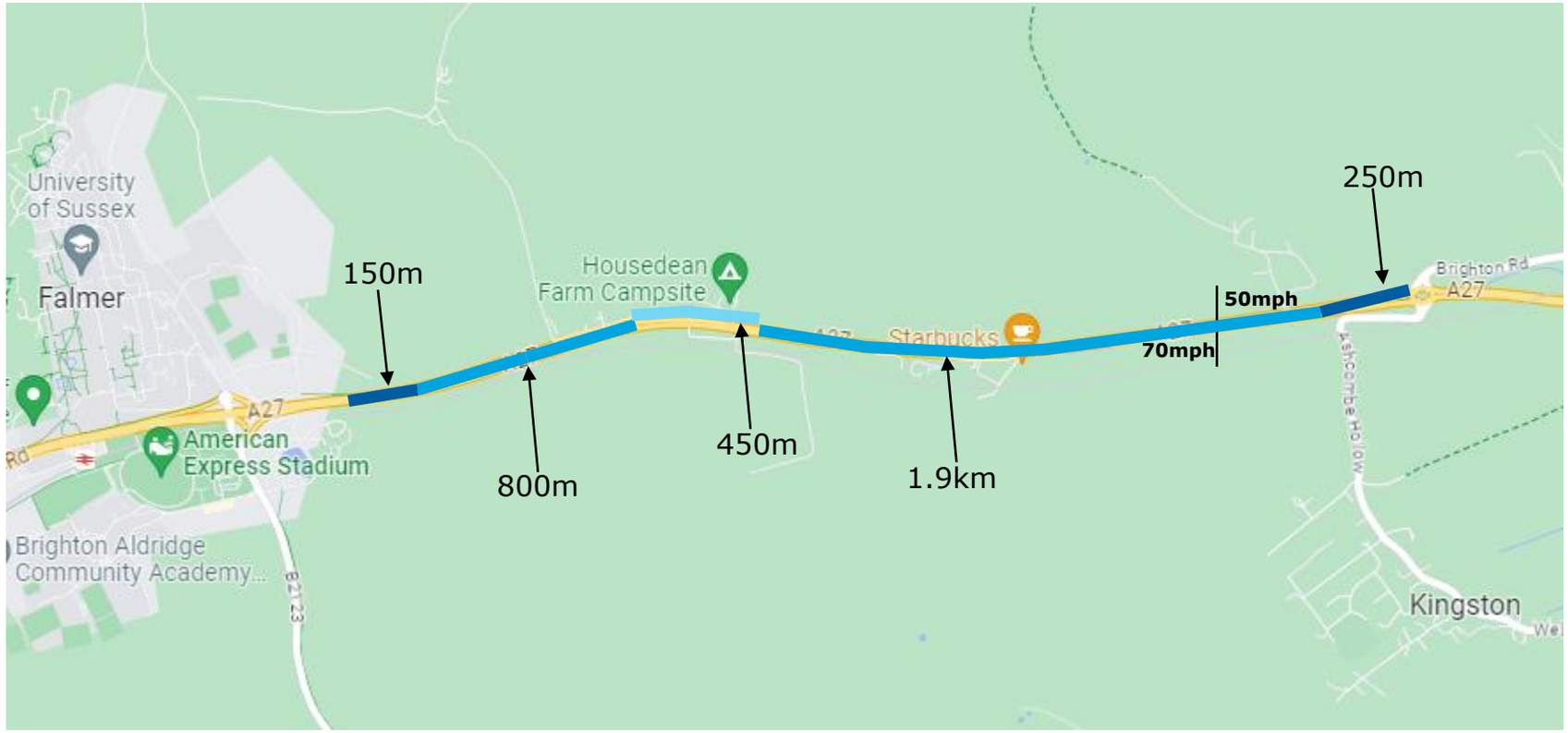


ROUTE: A27 east of Falmer, East Sussex

Location: Approximately between Falmer and Lewes (B2123 and Ashcombe roundabout)

Type: Shared foot/cycleway adjacent to carriageway, separated in some places by grass verge, generally unlit

Speed limit & no. lanes : Generally, 70mph dual carriageway (2 to 4 lanes), 50mph on approach to Lewes



KEY

- Lighting
- No lighting
- Off-road



