Town and Country Planning Act 1990

Appeal to EHDC Refusal

Application by

Hallam Land Management Limited

for Land north of A507, west of A10, Buntingford, SG9 9ER

Appeal reference:

6008238

Local Planning Authority reference:

3/24/0966/OUT

Proof of Evidence of Kate Carpenter (BEng CEng FICE FCIHT FSoRSA FSaRS BSc (Hons) Psych (Open) GMBPsS)

On behalf of Hertfordshire County Council as the

Local Highway Authority

(August 2026)

Table of Contents

1. INTRODUCTION

1.1. My name is Kate Carpenter. I am a highways engineer and transport planner, providing transport, highways and infrastructure engineering advice for development projects. I hold Bachelor of Engineering and Bachelor of Science degrees, and I am a Chartered Civil Engineer. I am a Fellow of the Chartered Institution of Highways and Transportation and its current President. I am also a Fellow of the Institution of Civil Engineers, a Fellow of the Society of Road Safety Auditors (SoRSA) and a Fellow of the Safety and Reliability Society. I have 37 years' experience in highway planning, design, and network management, spent predominantly in the road safety sector. I have been undertaking Road Safety Audits for development projects and other schemes since 1998. I am currently a Director of Operational Road Safety at Jacobs, a multi-disciplinary engineering consultancy.

1.2. I am also retained by Hertfordshire County Council to provide consultancy advice on all aspects of road safety and development related transport matters in and around Hertfordshire.

1.3. I am representing Hertfordshire County Council (HCC) Highways who provided the formal response(s) to the planning application consultation on highway and transportation matters. The consultation response was considered by the LPA, East Hertfordshire District Council (EHDC), before their Decision Notice being issued on 24 October 2025.

1.4. I am familiar with the site and the surrounding area. I have visited in connection with giving evidence at the Inquiry, most recently on the afternoon of Thursday 6 August 2026, at the time of writing. The weather conditions were warm and sunny, with good visibility.

2. ROLE OF HIGHWAY AUTHORITY

2.1. HCC is the Local Highway Authority for all roads in Hertfordshire, except for motorways and trunk roads where National Highways is responsible for the management and maintenance. All highway elements mentioned in this document are those of HCC's network.

2.2. The Highway Authority is a statutory consultee on planning applications on highway and transport matters countywide. The role of the Highway Authority is to assess the transport implications in terms of policy, capacity, safety, and sustainability and make appropriate recommendations to the planning authorities including the planning committees in dealing with applications.

3. SCOPE OF THE PROOF OF EVIDENCE

3.1. This Proof of Evidence is prepared in support of EHDC as the Planning Authority who refused the planning application 3/24/0966/OUT.

3.2. As part of the planning application consultation during 2024/5, the Highway Authority raised objections (24/6/25 and 19/9/25) to the above development, including the mitigation package on the basis that the proposals were not compliant with local, county or national transport and highways policies . This Proof of Evidence expands on those grounds for objection and provides additional detail regarding how those matters affect the interaction of safety and sustainability of active travel routes between the development and the town centre and other major destinations such as educational facilities.

3.3. This Proof of Evidence focuses on matters pertaining to operational safety (for all highway users) and adequacy of a proposed Toucan crossing on the A10 immediately north of the roundabout junction with A507, and the adequacy of the Road Safety Audit.

3.4. A separate Proof of Evidence which focuses on transport planning, sustainability and active travel matters is being prepared by Richard Lewis, a consultant retained by EHDC. Planning evidence is given by Phillip Hughes of PHD Planners, and my evidence should be read in conjunction with both of those documents.

4. TRANSPORT POLICIES

4.1. Transport planning policy can be summarised into four distinct areas of consideration: National, County, Local and Waste Plan. A summary of the key points in transport planning policy in this area is provided below:

National Policy

4.2. National Policy in relation to the transport planning of developments is set out in the National Planning Policy Framework (NPPF) and its most recent revision was published in December 2024. Section 9; Paragraphs 109-118 deal specifically with transport planning and promoting sustainable transport.

4.3. Paragraph 116 of NPPF (2024) states that "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.*"

4.4. 'Manual for Streets' (MfS)[1] is a nationally recognised design guide released by the Department for Transport in 2007 to replace Design Bulletin 32 (DB32) for predominantly low speed residential areas.

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

4.5. Better Connected: A Strategy for Integrated Transport, April 2026[2], is a document which seeks amongst other modes to reinforce the principles of LTN 1/20.

4.6. Local Transport Note 1/20 (LTN1/20) published in July 2020[3] is the Department for Transport's guide to Cycle Infrastructure Design. 1.6 Summary Principles state that "Cycle infrastructure should be accessible to everyone from 8 to 80 and beyond: it should be planned and designed for everyone." Section 14.3 Providing for cycling in new developments states "Networks need to meet the five Core Design Principles set out in Chapter 4: Coherent; Direct; Safe; Comfortable; and Attractive."

4.7. Active Travel England Rural Design Guide, Published July 2026[4], seeks to advance active travel within a rural setting. It expands on the guidance in LTN 1/20 with examples and case studies.

Local Transport Policy

4.8. Hertfordshire's transport policies are set out in its 4th Local Transport Plan[5] (LTP4) adopted in May 2018 for the period 2018–2031. LTP4 contains an overall vision and policies relating to transport in the County.

---

[2] https://assets.publishing.service.gov.uk/media/69de12cb961ff0ba6bff8de9/dft-better-connected-a-strategy-for-integrated-transport.pdf

[3] https://assets.publishing.service.gov.uk/media/5ffa1f96d3bf7f65d9e35825/cycle-infrastructure-design-ltn-1-20.pdf

[4] https://assets.publishing.service.gov.uk/media/6a58dad2908b618a53702f0e/active-travel-england-rural-design-guide.pdf Travel England Rural Design Guide

[5] https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/ltp4-local-transport-plan-4-complete.pdf

4.9. The Highway Authority has a design guidance document 'Highways Place and Movement Planning and Design Guide (2024)[6]. This incorporates the guidance in LTN 1/20.

4.10. The Highway Authority has a Speed Management Strategy[7]. This document provides a framework for the setting of safe and effective speed limits (both new and changes to existing limits), within Hertfordshire.

East Hertfordshire Council Policies

4.11. The Highway Authority note the East Hertfordshire Local Plan (2018), CD5.1.

4.12. In terms of transport, the Highway Authority note TRA1 Sustainable Transport which seeks to mirror HCC's LTP4 document in terms of applying a transport user hierarchy. This transport strategy prioritises the needs of pedestrians, cyclists and public transport users over and above the private car and is applied when reviewing all planning applications.

[6] https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx#designguide

[7] Speed Management Strhttps://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/local-transport-plan-live/speed-management-strategy.pdfategy 2020

5. SITE & SURROUNDING AREA

5.1. The development site is bounded by the A507 to the south, Throcking Lane to the north and the A10 to the east.

5.2. The site is situated on the northwestern outskirts of Buntingford, with the surrounding area either semi-rural in nature or bounding (separated by the A10), the edge of the existing low density urban area. It is noted that the site is relatively isolated in terms of access to local facilities, amenities and public transport.

5.3. The A10 is a numbered A classified road (A10) and a primary distributor in the Hertfordshire roads hierarchy.

5.4. The A507 is a numbered A classified road (A507) and a main distributor in the Hertfordshire roads hierarchy.

5.5. Throcking Lane is an unclassified road, which serves as a local access road.

5.6. On the site frontages which will accommodate the proposed development access points, a speed limit of 60mph is in force on both the A507 and Throcking Lane.

5.7. It is noted that the site is located outside of the present urban area and is effectively a semi-rural location. I note that for most of the destination requirements for prospective residents (notwithstanding any limited on-site local centre provisions), such as employment, leisure, retail and medical will be outside the proposed development, so the Appellant's proposals must provide effective safe routes out of the site so users can access those destinations by all modes.

6. ACCESS DELIVERABILITY

6.1. The Appellant seeks to deliver two all-movements access points to the development: one directly from the A507 and the other from Throcking Lane connecting to A10 at the staggered junction with Neale Drive to the east of A10 at an existing ghost island junction.

6.2. The Highway Authority has accepted that a safe and suitable means of access can be delivered at both points.

6.3. In order to facilitate this, the Appellant is seeking a reduction in the speed limit to 40mph on the specified sections of Throcking Lane, the A10 and the section of A507 between the proposed access and A10 roundabout.

6.4. The Highway Authority notes that such a proposal will need to comply with HCC's Speed Management Strategy which includes the fundamental requirement of speed limits to be self-enforcing, largely influenced by environment. Proposed changes to speed limits as part of development applications are reviewed by a Speed Management Group which includes representatives of Hertfordshire Police and the LHA. These reviews evaluate proposals in the context of the Speed Management Strategy[8].

6.5. Further to consideration of the proposed access design, the environment on the A507 (existing and proposed), and Automatic Traffic Counter (ATC) data supplied by the Appellant's transport consultant (examining the mean and 85th percentile results), the Speed Management Group is of the view that the speed limit should not be reduced to below 40 mph (the Appellant having previously requested a speed limit of 30 mph). A 30mph limit was considered too low for a route with no frontage access and an environment that is not consistent with

[8] *Ibid*, footnote 7 above

an urban location with pedestrian and cycle usage crossing along the route, or on-road cycling along the route.

6.6. I understand that the Speed Management Group have not reviewed or approved any submission for a speed limit reduction on the A10. I am of the opinion that such a speed limit reduction, as proposed by the Appellant, would not be supported by the Speed Management Group for a number of technical reasons which will be set out in this proof.

6.7. In summary, the Highway Authority notes that the two proposed accesses are deliverable and would comply with HCC's Speed Management Strategy, but only if a speed reduction to 40mph is delivered on the A507 and specified parts of Throcking Lane and the A10 in the vicinity of Throcking Lane. Subject to that reduction, the Highway Authority consider that in highways engineering terms, there is no reason why a design consistent with a 40mph speed limit may not be delivered on these roads. As such, the central question is whether a reduction to 40mph can be delivered on the relevant section of the A10 in the vicinity of the proposed Toucan crossing.

6.8. To confirm that the proposal is compliant with strategy and policy, and therefore safe and sustainable, speed survey data for the A10 should have been provided, and proposals for the A10 including the Toucan Crossing updated in line with the Speed Management Strategy and the hazards noted in the Road Safety Audit report.

6.9. Since this has not been done, the lack of a safe crossing of A10 means that no safe route for active travel is provided for journeys from the proposed development to the town centre.

7. HIGHWAY SAFETY AT A10 TOUCAN CROSSING

7.1. For the proposed design of A10 crossing to be deemed safe by LHA, it must address a number of factors:

Approach speed limit and vehicle operating speed, road environment and driver comprehension

7.2. These aspects inter-relate: the road environment gives cues to drivers of when reduced speed is necessary and whether pedestrian and cyclist activity might be expected. Without those cues, drivers maintain higher speed, and when cues appear too late, excess speed causes longer reaction and braking distances when features are first seen – for example a signal head which is concealed from drivers by a large vehicle ahead, until very close to the crossing. Lowered speed limits with no other change in environment to provide those cues is likely to have minimal effect on operating speeds.

Crossing form and the control of inherent hazards to pedestrians and cyclists crossing

7.3. Designs should not induce conflict between groups of users (between cyclists and pedestrians for example) or within groups (between cycles travelling in opposite directions for example). Designs should not require sharp steering manoeuvres by cyclists, especially where an error might force them into a high-risk location, such as entering the carriageway into the path of moving traffic.

A route that feels safe to users, especially people with visual, mobility or neurological conditions

7.4. Pedestrians and cyclists need to have confidence that when signals change to green for them, drivers will stop. High observed approach speeds make pedestrians and cyclists fearful that they cannot cross in safety, and may encourage them to avoid the route, to use alternative routes or to use other modes such as driving if that is available to them.

7.5. The proposed design fails all of these tests of a safe provision, in a way that simple changes would not resolve. Specific issues are set out below.

Proposed extension of the 40mph limit

7.6. The proposal to commence the start of the 40mph limit to a point roughly 1.1km north of Neale Drive, together with a crossing warning sign, also raises issues and it seems the scheme that was subject to Road Safety Audit does not reflect the current proposal in this respect. There is no current or proposed active frontage or meaningful change in roadside environment along this section of the A10, so it is not clear how the reduced limit would be interpreted consistently by all road users or how it would remain logically justified.

7.7. The Highway Authority has observed on other routes with the same characteristics (environment, length of straight road), that isolated 40mph sections in areas with limited frontage can lead to overtaking issues, greater speed variability, and in some cases a general disregard for subsequent speed limits further along a journey. When the environment does not reinforce the posted limit, predictable behaviour becomes harder to achieve, which has implications for every road user. This is presented in the HCC Highways adopted Speed Management Strategy (Nov 2020)[9].

7.8. The Appellant relies on two developments along the east side of the A10 corridor. These are 500m north of the roundabout and the more immediate approach to the roundabout and will therefore not have an unchanged environment.

7.9. The Highway Authority note that the proposed speed limit change on the A10 has not been considered by the Speed Management Group because no speed data for A10 has been supplied.

[9] *Ibid*

Interaction between the two issues (Speed Limit and Toucan Crossing Proposal: This view along A10 in the area north of A507 showing the long straight confined character that does not hint at a crossing being anticipated.)

7.10. The proposed Toucan crossing and speed limit reduction interact with one another (in the sense that the proposed crossing relies on the speed limit reduction). The combination of a signal-controlled crossing positioned close to a roundabout, alongside a long and isolated 40mph section without supporting frontage, introduces inconsistency in how the corridor will be interpreted. That inconsistency increases risk since a safe route for active travel use by all ages and abilities has not been demonstrated by the Appellant, and as such, planning permission should be withheld. The highway safety concerns it presents are unacceptable.

Providing a Coherent Route Strategy

7.11. The Highway Authority has argued strongly that for a site located to the west of the A10, which is effectively a semi-rural location, it must have a sustainable travel strategy that can connect the development into Buntingford.

7.12. To this end, the Highway Authority notes that the proposal is for a new footbridge across the A10 and upgrades to another. It is noted that the Appellant seeks widening of Right of Way 36, although there remain doubts with respect to the quality of the route, surveillance and constraints in terms of width. It is noted that for bridges spanning the A10, there remains uncertainty about the status and timeline for cycling use, see 'Road Safety Audit' below. This relates to the deliverability of a safe and suitable cycle route.

7.13. In terms of cycling, the promotion of a route on the A507 and onto Baldock Road into the town centre would be the preference of cyclists. As such, the promotion of a corridor of improvements on Baldock Road, including the Toucan crossing, is a key part of the site's overall sustainable strategy. For cycling routes from the proposed residential development to Freeman College and the Park Farm industrial estate, if there is not a safe convenient route provided, it is likely that cyclists will use the pedestrian route, with safety and comfort of pedestrians especially those who are older and/or with disabilities for whom risk of conflict with a cyclist is more likely to result in serious injury. Alternatively – obviously – they will simply abandon their cycles and use their cars.

7.14. The widespread ownership of e-scooters means they are also likely to be present and used on pedestrian-only and walking-wheeling-cycling routes if no convenient and attractive direct route is provided. Their use is illegal on public highway, but their existence cannot be ignored because they present hazards to others as well as users being at risk of injury themselves

Interaction between the crossing and the roundabout

7.15. As the Highway Authority has communicated via formal responses to the development proposals, a signal-controlled crossing positioned very close to the A10 roundabout approach and exit remains a fundamental safety concern for a range of users.

7.16. The A10 route to the north of the A507 has the characteristics of a high-volume motor traffic movement corridor with no building frontages or contextual cues to support an isolated controlled crossing. This means that a pedestrian crossing at this location would not be expected for drivers and riders approaching in either direction on A10.

7.17. Drivers travelling eastbound on the A507, intending to turn left into the A10, are naturally focused on vehicles to their right as they enter the roundabout, and not expecting a crossing on their left.

7.18. The proposed Toucan crossing would result in northbound queues forming back onto the circulatory carriageway of the roundabout during the red phase for A10 traffic. This introduces risk to drivers and passengers in cars or goods vehicle for example, and riders of cycles or motorcycles using the roundabout and on this northbound A10 approach to the crossing and is a concern. The A10 flows at this location mean that even short red phases of the signals could cause blocking, hesitation and shunt-type collisions.

7.19. There are also concerns about southbound traffic safety, noting that southbound drivers and riders on the A10 would not have had to give way since Royston more than 7 miles to the north. Introducing a traffic signal-controlled crossing in a location where it is not in context with the route also creates the type of location where highway authorities commonly find that drivers fail to

anticipate a crossing, resulting in late braking and failure to stop at a red signal and/or rear-end-shunts between motor vehicles

7.20. Drivers would be prioritising the roundabout in their attention and may not notice the lights change. Additionally, there is a hazard of “constant-green” behaviour for traffic on the southbound approach towards the crossing – this the phenomenon where a crossing is activated infrequently and drivers become accustomed to not expecting to stop - vehicles are only ever seeing this signal green so can become ‘blind’ to it turning red (and thereby crossing onto the junction). This may result in drivers observing a red signal and continuing towards the roundabout without stopping, thereby increasing the risk of collisions with pedestrians and cyclists; or braking so harshly that a shunt collision occurs, or both.

7.21. Additionally, and as the RSA team noted, it is also possible that the narrow approach view of southbound drivers may cause them to mistake the crossing for a signal-controlled roundabout and fail to realise that they must give way at the junction despite the green light at the Toucan crossing.

7.22. Overall, the physical characteristics of the high-speed environment and proximity of the crossing to the roundabout do not support a safe and controlled crossing point at this location for drivers and pedestrians.

7.23. In my experience, I do not believe that a safe design for a crossing is proposed at this location. I consider that crossings can work well as part of a wider signals installation for a full junction, but an isolated crossing with poor advance clarity in an environment where drivers might expect a controlled crossing is not a safe facility. A fully signalised junction arrangement including the A10/A507 junction has not been considered by the Appellant as part of this Appeal.

Convenience and usage of the route

7.24. Furthermore, if the proposed Toucan crossing (or an alternative provision) fails to encourage the intended modal shift, for example due to a perception that it is unsafe, cyclists and pedestrians will not tend to use it, further aggravating the risk of drivers and riders not stopping when the signals *do* change. This further reinforces concerns about the site's ability to overcome the fundamental severance of the A10 in a policy compliant and safe way.

7.25. Additionally, if traffic flows and speeds on the A10 and A507 are too high, the need to balance active travel without propagation of queues through the roundabout may result in extended crossing wait times for pedestrians and cyclists, which would further reduce the effectiveness of the crossing, and reinforce concerns about its ability to function as a reliable and attractive route for pedestrians and cyclists. This too would fail to prioritise active travel in accordance with the NPPF, LTP and Development Plan policies.

7.26. At present the design shows a stagger for cyclists crossing the respective carriageways of the A10. If this stagger for cyclists is removed to make the crossing consistent with LTN 1/20, and remove the hazards described, this would involve either a single-stage crossing, or two-stage form. Even if cyclists have a one-stage crossing, pedestrians could remain as a two-stage movement, as some users need more time to cross and prefer two shorter crossings to one long one. Single stage is preferred for comfort and convenience of cyclists, but the longer time needed to allow riders to cross would further increase potential for queues extending on the roundabout.

7.27. In assessing the suitability of the proposals, a key consideration is whether proposals go far enough that (for example) parents would feel comfortable allowing their children to walk to school or into town unaccompanied along this route. LTN 1/20 states that "*Cycle infrastructure should be accessible to everyone from 8 to 80 and beyond: it should be planned and designed for everyone.*" A crossing that is not on a direct route to key facilities such as

schools, and/or where high-speed traffic does not always stop in time, is unlikely to operate safely. This goes to the heart of the issue addressed by Mr. Lewis, and underpins the reason why the site has not been supported in principle on sustainability as well as safety grounds.

7.28. As explained by Mr. Lewis, given the site's relatively isolated nature, it is essential that a robust and compelling sustainable transport and active travel strategy is put forward. This must be supported by clear assurance that all critical mitigation measures required to enable safe, convenient and attractive pedestrian and cycle movements will be delivered.

Toucan Crossing Design

7.29. Toucan crossings should – like all other new infrastructure for walking, wheeling and cycling - safety accommodate:

- All cyclists of all ages using all cycle types, including adaptive types for people with disabilities, such as handcycles, tricycles and handcycles. Cyclists travelling with children may use 'tag-along' attachments or trailers, making a longer combination that needs space to turn.

- All walking and wheeling use, including pedestrians on foot, using wheelchairs or mobility carriages, push-scooters, and other mobility aids such as walking frames or sticks.

7.30. The Highway Authority's principal concerns are whether a signal-controlled, at-grade installation in this exact location, with the current highway geometry and traffic flows, can operate safely and predictably for all users.

7.31. The national guidance on design for walking wheeling and cycling infrastructure is LTN 1/20 and the more recently published Rural Design Guide for active travel infrastructure provides more detail and examples, in line with the

principles set out in LTN 1/20. LTN 1/20 states in **1.6 Summary Principles** that *"Cycle infrastructure should be accessible to everyone from 8 to 80 and beyond: it should be planned and designed for everyone."* Section 14.3, Providing for cycling in new developments, states "*Networks need to meet the five Core Design Principles set out in Chapter 4: Coherent; Direct; Safe; Comfortable; and Attractive*." See Table 10-1 of LTN 1/20, reproduced below.

Table 10-1: Application of core design principles to junctions and crossings

Core design principle	Design aspects to consider
Safety	Junctions should be designed to remove or manage conflicts between cyclists, motor traffic and pedestrians by one or more of the following: › separating cyclists from motor traffic and pedestrians in space and/or time; › banning one or more motor traffic movements; › providing priority for cyclists over motor traffic; and/or › reducing the speed and volume of motor traffic movements so that cyclists can safely be integrated with them Designs should identify and reduce conflict with Heavy Goods Vehicles.
Directness	The distance and time required for cyclists to travel through a junction should be minimised. Wherever possible their level of delay should be less than for motor traffic without increasing pedestrian delay. Exempting cycles from turning movements that are banned for other vehicles will significantly increase directness and should always be considered. Cycle crossings at junctions and across links should not be staggered.
Coherence	Junctions should enable and facilitate cycle movements in all permitted directions. These should be made in a legible manner, without requiring people to deviate significantly from their overall desire lines.
Comfort	The occasions when cyclists need to stop or to give way should be minimised. Routes through junctions should ease the passage of cyclists by providing a smooth surface of adequate width, with flush surfaces at transitions, and avoid street clutter.
Attractiveness	Junctions are often important places where people gather and should be designed to suit and enhance their context.

LTN 1/20 Table 10-1 setting out the requirements that infrastructure should meet to be considered compliant with LTN 1/20

7.32. Specific design requirements set out in LTN 1/20 that the design does not address include:

7.33. **Providing radii suitable for all cycle types at cycling design speeds** (the route each side of the crossing and through the island are all non-compliant). See Table 5-7 from LTN 1/20 below. The design has a sharp turn: to enter the

crossing, 90 degrees on the west side and a little less on the east side, but on a narrower path inadequate for two-way cycling, walking and wheeling. There is also a sharp turn onto the island and when making the second stage of the crossing. Any errors in these tortuous movements create the potential for cyclists to overshoot and enter the carriageway, or to fall off into the path of a passing vehicle (as the two parts of the crossing are fully separate and the second half may well be green for traffic.) Children, older adults and people with disabilities are all especially vulnerable to these hazards and the risk to them is greater, either because of having less experience of cycling, or because of greater frailty to injury when an incident occurs. In addition to the hazards to cyclists from this form, pedestrians may be knocked into the carriageway by a cycle, or may step into the road to avoid a collision with a cycle, and be struck by a passing motor vehicle.

Table 5-7: Minimum horizontal radii

Design speed (kph)	Minimum horizontal radius (m)
40	40
30	25
20	15
10	4

.

LTN 1/20 Table 5-7 setting out the minimum radii for cycle routes

7.34. **Not providing staggered crossings for cyclists** (see 'directness' row in Table 10-1 above and Rural Design Guide extracts from Section 10.6 below) – the hazards are the same as those associated with tight radii and are in addition to the impact on comfort and directness that makes the crossing unattractive to users. Active Travel England Rural Design Guide which develops the guidance in LTN 1/20 states (Section 10.6 Page 139) "*Staggered crossings are not recommended and should not be used on routes used by cyclists. They can be*

highly problematic and sometimes impossible for those using non-standard cycles and people using large mobility devices. There is little room to manoeuvre and cyclists can conflict with pedestrians using the same space."

Figure 10-7: Parallel, separated pedestrian and cycle crossing, Hampshire.

Signal-controlled crossings should be kept as simple as possible and with short cycle times. A pre-timed maximum should be used so that the change to the pedestrian period (and cycle period where provided) begins as soon as a demand to cross is registered.

Crossings should operate in a single phase wherever possible to allow people to complete the whole crossing in one movement, reducing delay. Where the crossing needs to operate in two stages due to concerns over traffic capacity, a stagger is not needed if the central refuge is wide enough so that people understand that each part of the crossing operates separately. Experience has shown that a central refuge of around 5–7m is sufficient – see TSM Chapter 6 Para 18.3.4.

Where pedestrians and cyclists share a route on the approach to a crossing, it is acceptable to have shared provision at signal-controlled crossings, which should be provided as toucans. Where pedestrians and cyclists are separated, a signal-controlled parallel crossing can be used – see Figure 10-7. Where used as a stand-alone crossing, zig-zag markings must be provided, and authorisation will therefore be needed from the DfT.

Staggered crossings are not recommended and should not be used on routes used by cyclists. They can be highly problematic and sometimes impossible for those using non-standard cycles and people using large mobility devices. There is little room to manoeuvre and cyclists can conflict with pedestrians using the same space.

Two-stage cycle crossings do not need a stagger as cyclists must obey a red signal within a central refuge, although the island must be deep enough to store cycles and mobility scooters safely. Where a stagger is required for pedestrians, the cycle crossing can be provided separately as part of a signal-controlled parallel crossing.

Extracts from Rural Design Guide regarding cyclist crossings needing to be straight-across (single stage or dual-stage) but in any event not staggered

7.35. **Speed limit and vehicle speeds**. It is noted that LTN 1/20 (Table 10-2, reproduced below) shows that a signal-controlled crossing on a road with a speed limit of 60mph, regardless of traffic flow, is unsuitable and/or unsafe for most users (denoted by pink shading in the table). Therefore, in the current environment an at-grade crossing of the A10 is inappropriate, as illustrated below with red ring on the table.

7.36. The Appellant has not supplied speed survey evidence for this section of the A10 and therefore there is considerable doubt whether speeds might be in a safe range in the area of the proposed Toucan crossing. Changing a speed limit with no other material changes in the environment will have little effect on speed, so a crossing is not made safe simply by a reduction to 40mph as suggested.

Speed Limit	Total traffic flow to be crossed (pcu)	Maximum number of lanes to be crossed in one movement	Uncontrolled	Cycle Priority	Parallel	Signal	Grade separated
≥ 60mph	Any	Any					
40 mph and 50 mph	> 10000	Any					
	6000 to 10000	2 or more					
	0-6000	2					
	0-10000	1					
≤ 30mph	> 8000	> 2					
	> 8000	2					
	4000-8000	2					
	0-4000	2					
	0-4000	1					

Existing 60mph limit

Potential with 40mph limit and necessary supporting works

Provision suitable for most people

Provision not suitable for all people and will exclude some potential users and/or have safety concerns

Provision suitable for few people and will exclude most potential users and/or have safety concerns

Notes:
1. If the actual 85th percentile speed is more than 10% above the speed limit the next highest speed limit should be applied
2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow

LTN 1/20 Table 10-2 showing acceptable crossing types based on speed.

7.37. I consider (in line with the evidence of Mr. Lewis) that the development of this scale and at this location could only be supported if a coherent, safe and attractive route from the proposed development site into Buntingford (including from the main site access junction), that can facilitate active travel by walking and cycling could be delivered.

7.38. The Highway Authority's principal concern is whether a signal-controlled, at-grade installation in this exact location, with the current highway geometry and traffic flows, can operate safely and predictably.

7.39. The Appellant must demonstrate that a controlled crossing in this precise location can be shown, through documented compliance with the LTN1/20 criteria (Coherent; Direct; Safe; Comfortable; and Attractive), Road Safety Audit and operational modelling, to function safely under expected demand, in order for the development to comply with national and local planning policies to address the need to support safe and accessible movement for all users.

7.40. I am not satisfied that the proposed development would achieve a safe route for the duration of its length for pedestrians or cyclists and it would not overcome the severance caused by the A10. The Road Safety Audit report suggests that the design can operate safely; specific explanation of why that document does not support the development is set out below.

8. ROAD SAFETY AUDIT (RSA)

8.1. Road Safety Audit is the assessment of a proposed design to identify potential hazards when the proposed works come into use. It is undertaken by specialist Road Safety Auditors and should comply with the relevant guidance document, most commonly GG119 Road Safety Audit, which is part of the Design Manual for Roads and Bridges.

8.2. GG119 states in the Introduction: *"The objective of road safety audit is to identify aspects of engineering interventions that could give rise to road safety problems and to suggest modifications that could improve road safety."* In RSA terms, a Problem is defined as a hazard with the potential to cause harm to road users if the design is not amended, and the RSA team is required by the GG119 document to make recommendations to control that risk. RSA Reports must adhere to the requirements of the process to report hazards and make appropriate proportionate recommendations. If a hazard is evident to the RSA team, and the design proposals set out in the Brief do not demonstrate how the associated risk will be managed, then it should be reported as a Problem.

8.3. RSA is a qualitative process, and different individual auditors may identify slightly different issues and/or present them in slightly different ways. This is

why a team must include at least two auditors who are fully independent of the scheme design development. Auditors must be approved for the specific audit and that approval should consider their skill and competence for the scope of the works. GG119 Paragraph 3.8.1 states *"Experience should be relevant to the type of scheme being subject to RSA and identified in the proposed RSA team members' CV."*

8.4. The RSA brief must define scope of RSA geographically and provide sufficient detail of the proposals to enable the RSA team to identify hazards and mitigation measures where practicable. An RSA Report therefore contains an introduction defining the scheme and scope of the RSA, followed by a series of identified problems each with appropriate recommendations for mitigation proposals. In some cases, the nature of the scheme may be that the RSA team cannot recommend proportionate measures and may be forced to recommend a more comprehensive change in the proposals.

8.5. The proposed A10 crossing seeks to facilitate cycling from the proposed residential development site through to Buntingford town centre and as such it is essential that it is adequately assessed by RSA in accordance with GG119, and all identified problems adequately addressed in design changes before the scheme can be considered to be safe.

8.6. An RSA was carried out, including the development site's proposed new access points and other aspects of proposals such as active travel measures to the east of the A10. The Brief is included in the scheme's Transport Technical Note Part 2 dated June 2025, document number 2264004. The RSA Brief and report both fell short of the requirements set out above, meaning it does not provide any assurance to the LHA of the safe operating of the proposed Toucan crossing of the A10.

8.7. The Toucan Crossing was referred to in both the RSA Brief and report, which note: *"A RSA will need to consider in detail the safety of the currently proposed 'at grade' crossing of the A10 and this evidence will also need to be presented*

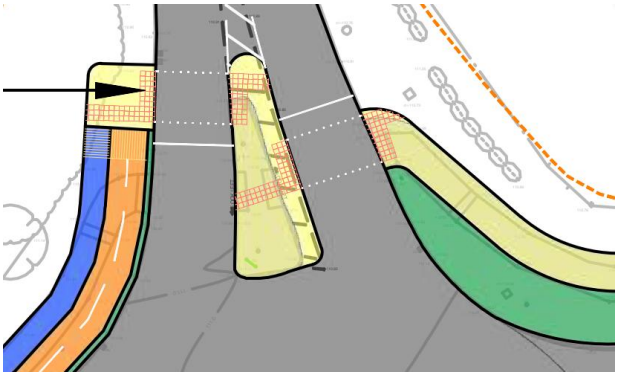
to our road safety team for their consideration. Furthermore, in the light of this, mitigation measures may be needed to achieve safe sustainable access to the site." However, the documents supplied to the RSA team did not include sufficient detail to enable this required 'consideration in detail' to have been undertaken.

8.8. In addition, the Movement and Access Principles document which forms Appendix J of the Brief shows two 'Pedestrian and Cycling Gateway' routes via PRoW 35 and 36, which does not reflect their actual status, with only one having potential for cycle route provision, and for that case, the timeline of such use is unclear, so for example it may not come into use for lawful cycling journeys until after the development has reach a stage that residents are making journeys between the site and the town centre.

8.9. The RSA Report has not followed GG119 process for RSA, namely that if a hazard is evident to the RSA team, and the design proposals set out in the Brief do not demonstrate how the associated risk will be managed, then it should be reported as a Problem.

8.10. The report for this scheme notes several road safety hazards that the scheme might introduce, which is in principle one part of what GG119 requires. Specifically, for the A10 Toucan crossing proposal, the potential hazards reported include high-speed approach by motorised traffic southbound on A10; drivers failing to stop at the crossing; and drivers mistakenly perceiving the crossing to be a signal-controlled roundabout where they have a green signal and need not give way to traffic already on the roundabout. These are hazards that would individually and collectively present substantial potential harm to road users, especially pedestrians and cyclists who are especially likely to be seriously hurt in any collision. However, despite identifying these hazards, to which the proposed design currently presents no solutions, the RSA team failed to report any Problems at all, and is therefore an RSA report that does not in my view comply with GG119 and is not acceptable to support the proposed development.

8.11. Other hazards were not noted, which might be expected to be raised by experienced Road Safety Auditors. An extract from page 101 of the Transport Assessment is reproduced below to illustrate these. It is noted that the active travel west of this area is now proposed as a shared-use path between cyclists and pedestrians, which does not change the safety aspects of the crossing.



Proposed Toucan crossing on northern arm of A10/A507 roundabout, as recorded in the Transport Assessment, showing staggered crossing on central island.

8.12. For example, I would have expected the RSA report to record other hazards that I consider significant in likelihood of occurrence and severe in potential outcome, and which have been described in more detail above:

- The requirement for cyclists to make 90 degree turns in a very small space on both sides of the A10. Sharp turns increase potential for error, which can lead to riders overshooting into the road, or falling off into the path or road, including falling into the path of moving traffic including HGVs.

- The provision of a stagger in the route on the island between the two parts of the crossing forces pedestrians and cyclists travelling in both directions to make a tortuous movement and therefore creates avoidable conflict between users. This is likely to lead to injuries when users collide on the island, and to injury when cyclists and/or pedestrians enter the road to avoid a collision and/or as a result of one. These hazards underlie the design guidance in LTN 1/20 that *"Cycle crossings at junctions and across links should not be staggered."* LTN 1/20 is well established and has been the subject of training for road safety

auditors over many years, and which might therefore be expected to be known to an RSA team approved to audit active travel measures. The RSA team might for example have recommended a straight-across form, either as a single-stage, or a two-stage, as described in the LTN 1/20 and Active Travel England Rural Design Guide.

8.13. These are substantive omitted hazards in the RSA report, in addition to the failure by the RSA team to correctly document the hazards that were identified as Problems in the report. Therefore, at present, my view is that the submitted Road Safety Audit (RSA) report does not comply with GG119 and cannot be seen as a valid document in support of the arrangement as proposed.

9. SUMMARY & CONCLUSION

9.1. To be acceptable, the proposals must provide a safe crossing of the A10, and therefore demonstrate safe pedestrian and cycle routes for end-to-end journeys. The minimum to demonstrate this would be LTN 1/20-compliant routes between the development and the town centre and educational facilities as a critical part of making the development sustainable and acceptable in planning terms. These should be supported by a GG119-compliant Road Safety Audit.

9.2. Many aspects of the location and design of the proposed Toucan crossing on the A10 fail to meet this test and no GG119-compliant RSA supports the proposals.

9.3. I have fundamental concerns with the deliverability and safety of the Toucan crossing. It would be the only potential route for travelling from the site to Buntingford town centre by cycle that could potentially be safe and legal, but the proposed crossing is out of context with its surroundings and as such, likely to be subject to drivers failing to stop. Such non-compliance deters users as well as endangering them, compounding the safety and sustainability problems. It would not feel, or be, safe.

9.4. The proposed scheme has not addressed the character of the southbound approach in which the crossing is not a feature drivers might anticipate. High speeds and failure to stop, or failure to understand the form of control are hazards identified by the RSA report but for which no solutions have been proposed in the design.

9.5. The narrow-staggered crossing island and approaches to the crossing are not compliant with the relevant design requirements but for some reason were not recognised by the RSA report as hazardous. The facility is inadequate and unsafe for cyclists and pedestrians, especially people with prams, pushchairs wheelchairs or specialist cycles for people with disabilities or adults travelling with small children – providing another reason for this being an unattractive route to and from the site for cyclists and pedestrians.

9.6. I therefore respectfully conclude that the appeal should be dismissed.