

The Hurlstone Partnership

APPEAL BY MESSRS PRICE & BALL, LAND SOUTH OF CHEAR FEN BOAT
CLUB, TWENTYPENCE ROAD, COTTENHAM, CAMBS CB24 8AH

Proof of Evidence on Highway Matters of
Jeremy P. Hurlstone BSc (Hons), CMILT, MCIHT

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Transportation Planning, Highway Design and Environmental Assessment

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1 INTRODUCTION

1.1 My name is Jeremy Peter Hurlstone; I am the Managing Director of The Hurlstone Partnership Limited, which provides specialist highway advice to developers and Local Authorities. I hold a BSc (Hons) in Civil Engineering Management. I am a Member of the Chartered Institution of Highways and Transportation (MCIHT) and a Chartered Member of The Institute of Logistics and Transport (CMILT).

1.2 I have over 35 years of experience in the transportation industry, during which time I have been involved in many projects of varying development type.

1.3 I worked for the multi-disciplinary consultancy Scott Wilson Kirkpatrick for approximately 11 years before moving to The Denis Wilson Partnership, a more specialised transportation company, for a further 4 years, where I was employed as a Principal Transportation Planner. I continue to undertake work with HaskoningDHV (which incorporates what was DWP) in addition to servicing the expanding client base of The Hurlstone Partnership.

1.4 I have prepared and given evidence at numerous Public Inquiries and Hearings during my career for various types and scale of development.

1.5 I was initially contacted by Green Planning Studio on 29 June 2022 following receipt of the Highway Authority's consultation response to planning application 22/01703/FUL. Due to time constraints in terms of the ability to arrange traffic surveys, it was not possible to undertake neutral traffic counts before the application was refused by South Cambridgeshire District Council for "Change of use of land through intensification to the stationing of caravans for residential purposes, nine dayrooms and the formation of hardstanding ancillary to that use" at "Land To The South Of Chear Fen Boat Club Twentypence Road Cottenham Cambridgeshire" on 05 September 2022.

1.6 Planning permission was refused for 8 reasons. I am instructed to consider the 8th reason for refusal:

"The proposed development would lead to the creation of an access on a stretch of classified highway where the principal function is that of carrying traffic freely and safely between centres of population. The vehicular movements associated with the use of the access in respect to stationing of caravans for residential purposes, nine dayrooms and the formation of hardstanding ancillary to that use would lead to conflict and interference with the passage of through vehicles to the detriment of the principle function and introduce a point of possible traffic conflict, being detrimental to highway safety. The proposed development is therefore contrary with Policy TI/2 of the South Cambridgeshire Local Plan 2018 and Section 9 of the NPPF."

1.7 Through the evidence contained within my Proof of Evidence and its Appendices, I will demonstrate that the proposed development is acceptable when considered in the context of national guidance and policy.

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2 PLANNING HISTORY

2.1 It is apparent from the 8th reason for refusal that the Council believes “*The proposed development would lead to the creation of an access...and introduce a possible point of conflict, being detrimental to highway safety*”. This is factually incorrect, as the access pre-existed the proposed development and, based on Google Earth imagery, has existed since at least December 1999, when it is clearly visible (see Appendix JPH-A) and potentially as far back as 1945, although the imagery is less conclusive at that date. However, it does appear to indicate a track following the line of the existing access from Twentypence Road.

2.2 Also, the site benefits from a Certificate of Lawful Development (Ref S/1346/16/LD), which was granted in October 2016. Information submitted with the application confirmed evidence was available to confirm the mobile home had been lived in for at least 10 years at the date of the application in May 2016.

2.3 As a result, the proposed development does not create an access and therefore cannot introduce a possible point of conflict, being detrimental to highway safety. Reason for refusal 8 is therefore fundamentally flawed and unreasonable in this regard.

2.4 In terms of the current appeal, Cambridgeshire County Council (CCC) as Local Highway Authority responded on an undated document:

“The Highway Authority requests that the above planning application be refused in its present format for the following reasons:-

The applicant has failed to provide a drawing showing the required visibility splays. The Highway Authority requests that a plan showing the visibility splays is provided prior to determination of the application. The visibility splay should have the dimensions of 2.4 metres by 215 metres as measured from and along the nearside edge of the carriageway shall be provided on both sides of the access. However, if the applicant can provide empirical data, in the form of speed and traffic flows and subjective observations these will be considered by the Highway Authority and the use of the lower visibility splays as detailed in Manual for Streets may be applicable. The area within each splay shall be kept clear of any obstruction exceeding 600mm in height at all times. The inter vehicles visibility splays must be within the existing adopted public highway or land under the control of the applicant

Reason: To provide adequate inter-visibility between the users of the access and the existing public highway for the safety and convenience of users of the highway and of the access”.

2.5 Within its response, the Highway Authority also states:

“The proposed development would lead to the creation of an access on a stretch of classified highway where the principal function is that of carrying traffic freely and safely between centres of population. The vehicular movements associated with the use of the access in respect to stationing of caravans for residential purposes, nine dayrooms and the formation of hardstanding ancillary to that use would lead to conflict and interference with

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the passage of through vehicles to the detriment of the principle function and introduce a point of possible traffic conflict, being detrimental to highway safety.”

- 2.6 It is apparent from the CCC response that it also incorrectly believed the proposed development would result in the creation of a new access, and that the creation would introduce a point of possible conflict, which underpinned its objection. As a result, the Highway Authority objection which underpins the reason for refusal is also unreasonably flawed.
- 2.7 Whilst not specified in the 8th reason for refusal, CCC also raises specific concerns regarding the visibility at the site access, but it was receptive to considering empirical data and the potential use of Manual for Streets to reduce the quoted visibility splays of 2.4m x 215m, which is the default applied to the trunk road network with a 60 mph speed limit. Whilst the B1049 Twentypence Road is subject to a 60 mph speed limit, it is not a trunk road and therefore Manual for Streets should be the starting point for assessment, taking into account local context.
- 2.8 The CCC response invited the provision of a Transport Report to allow it to consider the proposal in more detail. Unfortunately, I was only notified of the response on 29 June 2022, by when it was not possible to arrange for the necessary traffic surveys to be undertaken and analysed before permission was refused on 5th September 2022, due to the 14 working day notice period CCC imposes prior to the installation of traffic counters and the start of the school summer holidays on 22 July 2022. It is necessary to avoid school holidays in order to obtain typical traffic flow and speed data.
- 2.9 The CCC consultation response is provided at Appendix JPH-B for information. Although visibility is not explicitly mentioned in the reason for refusal, it is referenced in the officer report, which does not confirm the visibility at the site access is actually acceptable.
- 2.10 Adequate visibility is required to avoid conflict and maintain safety. As a result, I have reviewed the adequacy of the existing visibility within my assessment, in order to confirm that safe access is available and that the proposed development would therefore not unacceptably compromise safety.

3 EXISTING SITUATION

- 3.1 The existing site access sits on the outside of a bend approximately 150m to the south of the River Great Ouse, which the B1049 Twentypence Road crosses on an over-bridge incorporating a double bend highlighted by warning signs and chevron boards from both directions.
- 3.2 The access itself extends approximately 28.5m along the east side of the carriageway and progressively narrows to the gates which have a clear opening width of 4.3m between the hinges, which are set back around 16.5m from the carriageway along the access centreline.

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- 3.3 In this respect, it is apparent that the existing access arrangement exceeds the specification set out in the CCC consultation response, which required: *“The access shall be a minimum width of 5m, for a minimum distance of 10m measured from the near edge of the highway boundary.”* in the interests of highway safety.
- 3.4 The width of the B1049 Twentypence Road at the site access is 6.3m and the route is subject to the national speed limit of 60 mph. Double-yellow lines are introduced on the carriageway at the southern end of the access and continue north along both sides of the road to the far side of the double bend across the bridge, beyond which the carriageway is straight. The opposing traffic lanes are segregated by an intermittent line along the centre of the road.
- 3.5 The warning signs to drivers approaching the bends are located approximately 165m to the south and 317m to the north of the access centreline, which are supplemented by “SLOW” road markings on the carriageway surface.
- 3.6 Visibility was measured on site using traffic cones and a road wheel. From the 2.4m set-back requested by CCC, visibility to the left (south) was measured to extend 503.5m to the nearside edge, which coincides with the approximate centreline of a layby on the east (site) side of the road, at the next bend to the south.
- 3.7 When heading northbound from the bend, there is a sign, warning drivers “DANGER LORRIES TURNING” located immediately south of the bend ahead warning sign and associated “SLOW road-markings facing southbound traffic, which is located 370m south of the site access.
- 3.8 Due to the straight alignment of the carriageway to the south, the access is visible to drivers heading northbound immediately when exiting the bend at the southern end of the straight, around 480m distant. It is therefore apparent that the visibility splay to the south of the site access significantly exceeds the 2.4m x 215m requirement of the Council.
- 3.9 The visibility to the right (north) of the site access centreline from the same 2.4m set-back was measured to extend 127.1m to the near edge when looking along the road-side face of the posts adjacent to the west side of the carriageway. However, due to the gradient and alignment of the carriageway, which rises towards the bridge, it is possible to see above the post and pole fence to a distance of 146m to the near edge, which is approximately coincident with the southern end of the bridge parapet on the east side of the carriageway. However, in practical terms, the visibility splay extends significantly beyond that distance, as approaching vehicles can be seen on the bridge, as the photographs and Figure 1 in Appendix JPH-C illustrate.

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4 TRAFFIC SURVEY DATA

- 4.1 I requested Automatic Traffic Counters (ATCs) be installed at 3 locations to record data over a 7 day period between Monday 09th and Sunday 15th January 2023 inclusive.
- 4.2 ATC Site 1 was fixed to a telegraph pole approximately 115m to the north of the site access, between the bridge over the River Great Ouse and the public footpath which crosses Twentypence Road and runs along the river. ATC Site 2 was fixed to the chevron board immediately to the south of the site access, and ATC Site 3 was fixed to the bend warning sign facing northbound traffic, approximately 165m to the south.
- 4.3 The ATC location plans and results summaries are provided at Appendix JPH – D for information.
- 4.4 At Site 1, the total daily flows varied between 1959 movements on Sunday and 5123 on Tuesday, giving a day to day variation of 3164 movements, with an average of 4149. The weekday (Monday – Friday) AM peak hour occurred between 07:00 – 08:00 with an average of 675 movements from daily flows between 578 (Friday) and 750 (Thursday), giving a daily variation of 172 movements. The comparable PM peak hour fell between 16:00 – 17:00 with an average of 495 movements from daily totals between 430 (Friday) and 533 (Tuesday), giving a daily variation of 103 movements.
- 4.5 The 85th percentile speeds recorded at Site 1 were 45.7 mph northbound from 13837 vehicles, and 46.3 mph from 15201 vehicles southbound.
- 4.6 At Site 2, the total daily flows varied between 1991 movements on Sunday and 5194 on Tuesday, giving a day to day variation of 3203 movements, with an average of 4184. The weekday (Monday – Friday) AM peak hour occurred between 07:00 – 08:00 with an average of 678 movements from daily flows between 573 (Friday) and 749 (Thursday), giving a daily variation of 176 movements. The comparable PM peak hour fell between 16:00 – 17:00 with an average of 501 movements from daily totals between 434 (Friday) and 535 (Tuesday), giving a daily variation of 101 movements.
- 4.7 The 85th percentile speeds recorded at Site 2 were 47.9 mph northbound from 14086 vehicles, and 46.8 mph from 15204 vehicles southbound.
- 4.8 At Site 3, the total daily flows varied between 2012 movements on Sunday and 5121 on Tuesday, giving a day to day variation of 3109 movements, with an average of 4157. The weekday (Monday – Friday) AM peak hour occurred between 08:00 – 09:00 with an average of 625 movements from daily flows between 486 (Friday) and 826 (Tuesday), giving a daily variation of 340 movements. The comparable PM peak hour fell between 16:00 – 17:00 with an average of 493 movements from daily totals between 469 (Friday) and 522 (Wednesday), giving a daily variation of 53 movements.

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- 4.9 The 85th percentile speeds recorded at Site 3 were 54.6 mph northbound from 13910 vehicles, and 53.5 mph from 15189 vehicles southbound.
- 4.10 As is apparent from the survey results, traffic speeds vary along the length of Twentypence Road, as would be expected when considering its horizontal and vertical alignment, with speeds being higher on the straighter sections then decreasing to negotiate the bends.
- 4.11 This pattern of variable speeds has an impact on what it is necessary to design for when considering visibility splay requirements. As speeds are not constant, there is no practical benefit in providing visibility splays beyond those required for safe stopping.
- 4.12 Based on guidance in Manual for Streets 2, using the relevant trunk road parameters of a 2 second perception / reaction time and 0.375g deceleration rate for all vehicles, visibility splays extending 99.623m to the north (right) and 129.788m to the south (left) of the site access are established based on the observed 85th percentile speeds.
- 4.13 As is apparent from the measured distances on site, the northern splay of 127.1m and the southern splay of 503.5m from the 2.4m set back, significantly exceed the requirements for all vehicles to slow down and stop safely to avoid a collision.
- 4.14 Within section 6 of this Proof, I have undertaken a detailed review of relevant design guidance to explain how these distances are calculated. It is not necessary to read or consider section 6 if it is accepted that the above parameters are acceptable, as recommended by the guidance.
- 4.15 In terms of the impact of the proposed development on the free movement of traffic along the B1049 Twentypence Road, I consider that would be insignificant given the character of the road and the neighbouring accesses and junctions. To the north of the site is a marina, which appears to have around 70 berths/moorings, based on the recent Google Earth imagery, which shows several cars within the marina area, plus numerous cars outside the dwellings with which it shares access.
- 4.16 To the south of the site, Long Drove provides access to Cambridge Gun Club, which provides various ranges for full bore rifles, air rifles, clay shooting, practical range where people walk around obstacles shooting at targets, a skeet range, on site café, gun shop buggy hire and tuition. During the site visit, regular turning movements to / from Long Drove were observed to take place, with little impact on through-traffic movements, due to the relatively low traffic volumes.
- 4.17 There are also numerous access and gateways distributed along its length, all of which attract turning movements.
- 4.18 The proposed development includes 9 gypsy traveller pitches, which naturally limits the number of turning movements. To demonstrate the insignificant impact on the route, I have undertaken a PICADY assessment based on the busiest hour recorded during the surveys,

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which was recorded at ATC Site 3 between 08:00 – 09:00 on Tuesday. During this period a total of 127 vehicles were recorded to travel northbound, including 1 HGV and 1 bus. The southbound traffic flow was 699 movements including 5 HGVs and 3 buses.

- 4.19 I have input the base flows with the relevant geometric data, then added 9 movements into and out of the site for each possible direction, giving a total of 36 movements to and from the site access, which equates to 4 movements per pitch in the peak hour and at least 4 times what could be considered realistic in the peak hour period. I then reversed the baseline flows so that the 699 vehicles would head northbound and potentially be delayed by a vehicle turning right into the site.
- 4.20 The results of the PICADY analysis are provided in Appendix JPH-E and confirm the maximum ratio of flow to capacity (RFC) based on the observed flows was 0.063 for the outbound movement from the site, with resulting queues of 0.1 vehicles and an inclusive delay of 0.18 minutes per vehicle. The comparable RFC for the right turn into the site was 0.023 with 0.0 vehicles queuing on Twentypence Road and an inclusive delay of 0.12 minutes per vehicle.
- 4.21 When the base flows were reversed the queues on the respective turning movements remained the same, with no queuing on Twentypence Road, but the RFCs reduced to 0.53 on the site access and 0.22 on the right turn into the site. The corresponding inclusive delays reduced to 0.15 and 0.07 minutes per vehicle respectively.
- 4.22 To place these results in context, the maximum desirable RFC at a junction is 0.85 and its theoretical capacity is an RFC of 1.0, although many junctions operate above this level.
- 4.23 It is therefore apparent that contrary to the assertions in the reason for refusal, the proposed development, even when assessed under the worst-case scenario of more than 4 times the expected number of turning movements at the site during the busiest hour of the survey, would not *"...lead to conflict and interference with the passage of through vehicles to the detriment of the principle function and introduce a point of possible traffic conflict, being detrimental to highway safety."*

5 HIGHWAY SAFETY

- 5.1 I have reviewed the safety performance of the Appeal Site access by referring to Crashmap data, which confirms there have been no recorded personal injury accidents over the 25 year period 1999 to 2023 inclusive.
- 5.2 As is apparent from the Google Earth imagery from 1999 at Appendix JPH-A, there appears to have been activity at that time. The residential use of the mobile home would also result in traffic movements through the access.
- 5.3 In the event there is a particular feature of the local road network that results in compromised safety for its users, it is normal to find a number of incidents which share

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common characteristics within a relatively short period of time, with normal assessment periods being 3 years or the preferred 5 years. Beyond the Appeal Site access, I have considered accidents nearby within the latest 5 year period available.

- 5.4 The absence of recorded injury accidents at the Appeal Site access in this case provides empirical data that users of the access and Twentypence Road may safely interact with each other. This is unsurprising when considering the local context, access visibility and relevant design guidance.
- 5.5 There is reference within representations to the planning application from the Parish Council that *"The site access is located on a bend with the national speed limit. There is extremely limited visibility for slowing and turning vehicles. It is a known accident hotspot (including fatalities)."*
- 5.6 However, based on the Crashmap evidence, the fatality referred to was approximately 85m to the south of the Appeal Site access and involved a single vehicle accident when a driver travelling southbound ran into the bridge parapet immediately to the south of the Long Drove junction, resulting in fatal injuries to the passenger. The unfortunate and regrettable accident occurred in August 2019.
- 5.7 The nearest accident to the site access was in July 2020, when a single vehicle heading south crashed approximately 30m to the north of the Appeal Site access when negotiating the right-hand bend, resulting in serious injury.
- 5.8 In both incidents, no other vehicles were recorded as being involved, which indicates they occurred as a result of driver error, rather than any specific defect in the road alignment. In both cases, weather conditions were fine and dry in daylight hours.
- 5.9 A further recorded slight accident occurred in September 2023 at the junction with Long Drove to the south of the Appeal Site access, involving a light goods vehicle (3.5 tonnes maximum gross weight or under which was in the process of turning left when its front collided with the offside of a vehicle travelling along the road, in dry, light conditions.
- 5.10 Given the differing characteristics of the recorded incidents and taking into account the number of drivers who have successfully travelled along the road without crashing, it cannot be concluded that either the Appeal Site access or the road itself are inherently dangerous, or that the Appeal Site access is a known accident hotspot, as alleged.
- 5.11 Whilst all accidents are regrettable, the number of recorded incidents is not considered to be unusual and, given their circumstances, would not normally trigger remedial works to the highway alignment.

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6 DESIGN GUIDANCE

- 6.1 As stated in section 4 above, this section provides a detailed review of design guidance, which explains the basis of the visibility splay requirements of 99.623m to the north and 129.788m to the south, both of which are exceeded on site. It is not necessary to read and consider this section if it those visibility splays are accepted, as it basically explains the different parameters that may be used in different circumstances and why the selected parameters have been applied in this case.
- 6.2 It does appear through the discussions regarding the Statement of Common Ground on Highway Matters (SoCG), that the selected parameters have been accepted by the Highway Authority, but the SoCG remains in discussion at present; hence the inclusion of this section my Proof.
- 6.3 There are two primary sources of national highway design guidance. One is the Design Manual for Roads and Bridges (DMRB), which is written for the strategic trunk road network; and the other, is Manual for Streets/Manual for Streets 2 (MfS1/MfS2). Extracts from MfS1/MfS2 are provided at Appendix JPH-F for information.
- 6.4 In terms of visibility requirements, DMRB and MfS take a different approach to the required length of the appropriate visibility splay.
- 6.5 The lateral visibility at an access or junction is the distance a driver emerging from the minor arm of a junction or access can see to the left and right (Y distance). There are also variations between the guidance documents regarding the set-back distance from which the emerging driver can see along the main road (X distance). Forward visibility is the distance a driver travelling along the main road can see ahead of them towards a potential hazard, such as a stationary vehicle etc, but it is also based on the appropriate Y distance.
- 6.6 The Y distance is dictated by the speed of travelling along the priority route and is not affected by the scale of development or flow on the minor arm/access in terms of the design guidance. Effectively, whether an access/junction accommodates 100 or 1000 movements per day on the minor arm, the Y distance does not change as it is predicated on the speed of traffic on the main/priority route.
- 6.7 In terms of the Y distance and forward visibility splays, DMRB is based on a requirement to maintain a continuous traffic speed on the priority route, on which emphasis is placed on the trunk road network, where traffic volumes are higher, as confirmed at paragraph 9.4.7 of MfS2: *"TD 42/95 recommends that consideration should be given to providing a right turning lane at priority junctions where the side road flow exceeds 500 vehicles per day, but this advice relates to trunk roads where there is an emphasis on providing an unimpeded route for through traffic. It is a relatively low flow, and junctions without right turn lanes will often be able to cater for higher levels of turning traffic without resulting in significant congestion."* (Emphasis added).

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- 6.8 The purpose of the Y distance dimension within DMRB is also explained in the now withdrawn TD 41/95 “*Vehicular Access to All Purpose Trunk Roads*” at paragraph 2.17 (see Appendix JPH-G), which states “*Visibility splays shall be provided to enable emerging drivers using the direct access to have adequate visibility in each direction to see oncoming traffic in sufficient time to make their manoeuvre safely without influencing the major road traffic speed.*”
- 6.9 As confirmed in paragraph 7.5.4 of MfS1 “*The desirable minimum SSDs used in the Design Manual for Roads and Bridges are based on driver perception-reaction time of 2 seconds and a deceleration rate of 2.45 m/s² (equivalent to 0.25g where g is acceleration due to gravity (9.81 m/s²)). Design Bulletin 32 adopted these values.*”
- 6.10 Paragraph 7.5.6 of MfS1 advises at the third bullet: “*carriageway surfaces are normally able to develop a skidding resistance of at least 0.45g in wet weather conditions. Deceleration rates of 0.25g (the previously assumed value) are more typically associated with snow-covered roads.*”
- 6.11 By contrast, when considering the requirement for vehicles to actually stop, rather than maintain a continuous speed, paragraph 7.41 of TD 42/95 “*Geometric Design of Major/Minor Priority Junctions*” (see Appendix JPH-H) confirmed the basis of the deceleration length within the right-turn lanes, within which vehicles on the trunk road are expected to slow down and stop safely, to wait for a gap in the oncoming traffic stream, through which to turn right into the minor arm. It confirms: “*The deceleration lengths can be seen on Figs 7/4, 7/5 and 7/6. The deceleration lengths are based on the assumption that vehicles will slow down by one design speed step on the trunk road before entering the length. The deceleration rate on the level is assumed to be 0.375g. There is no reaction time as this is a planned manoeuvre.*”
- 6.12 Although both TD 41/95 and TD 42/95 have been withdrawn and superseded, the Y distance for any given design speed in Table 7/1 of TD 42/95 is identical to those in Table 2/1 of TD 41/95 and Table 2.10 of CD 109 “*Highway link design*” to which section 3.4 of CD 123 “*Geometric design of at-grade priority and signal-controlled junctions*” refers readers for visibility requirements in terms of the Y distance. A copy of Table 2.10 is provided with other relevant parts of the document at my Appendix JPH-I.
- 6.13 CD 123 replaced TD 41/95 and 42/95 (amongst others) but carried forward the visibility splay lengths from its predecessors. This consistency also extends to the deceleration lengths in right turn lanes, as demonstrated by comparing Table 7/5a of TD 42/95 (Appendix JPH-H) and Table 5.22 of CD 123 (Appendix JPH-I). Unfortunately, CD 123 has omitted to provide the explanation of the basis of the deceleration lengths it references. This appears to be a common theme within the ongoing evolution of the updating of DMRB, which generally omits some key information from the text that assisted in understanding what underpins the trunk road design standards.
- 6.14 Knowing the assumption of a 1 design speed reduction assumed to occur, prior to entering the right turn lane, as confirmed at paragraph 7.41 of TD 42/95, for the comparison between the published Y distances in Table 7/1 and the deceleration lengths in Table 7/5a of TD 42/95, in the latter it is necessary to refer to the design speed above that for the route in

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question. For example, to obtain the deceleration length for a design speed of 100 kph, it is necessary to refer to the row containing 120 kph in Table 7/5a, to allow for the fact that Table 7/5a includes an assumed reduction of 1 speed step before confirming the appropriate deceleration length.

- 6.15 The deceleration length from 100 kph (see 120 kph in Table 7/5a) is 110m except for uphill gradients above 4%. The actual figure calculated for the 100 kph design speed is 104.873m based on the specified rate of 0.375g, but as with most distances in the DMRB tables, it has been rounded up.
- 6.16 This may be compared with the 215m Y distance in the relevant Tables from TD 41/95, TD 42/95 and CD 109. However, as paragraph 7.41 of TD 42/95 confirms, the deceleration length does not include a reaction time, as it is a planned manoeuvre. Based on the 2 second perception / reaction time adopted by DMRB, a vehicle travelling at 100 kph (27.778 m/s) would cover 55.556m, which when added to 110m gives a total combined stopping distance of 165.556m; some 49.444m below the quoted Y distance of 215m for the same 100 kph design speed.
- 6.17 It is therefore demonstrably apparent that the Y distance splay lengths in DMRB provide for something other than safe stopping. As already confirmed by reference to the guidance, the increased distances provide for the continuous speed of traffic on the main road, as explained in paragraph 2.17 of TD 41/95 and paragraph 9.4.7 of MfS2 (see above).
- 6.18 MfS and TD DMRB documents used wet weather speeds as the basis for calculating visibility splay lengths. However, during the update of DMRB, CA 185 "Vehicle speed measurement", changed its approach and now requires dry weather, rather than wet weather speeds. Given vehicles stop faster on dry roads than wet roads, it is surprising that the Y distances were not amended at the same time as the DMRB approach; although, as previously stated, the DMRB Y distances are predicated on maintaining a continuous speed, not physically stopping, which may explain why the previous Y distances related to wet weather speeds remained in place.
- 6.19 Knowing that wet weather speeds underpinned the same DMRB distances and remains the relevant parameter upon which visibility requirements are calculated within MfS/MfS2 away from the trunk road network, and that the 0.25g deceleration rate adopted in the DMRB Y distance calculation relates to performance on a snow-covered road, also demonstrates the DMRB Y distances are for something other than safe stopping from the relevant 85th percentile wet weather speeds, as drivers tend to travel much slower on snow covered roads than merely wet routes. Therefore, their starting speed for the application of the 0.25g deceleration rate would be lower if it the calculated Y distance provided only for safe stopping based on the surface being covered in snow, rather than being wet.
- 6.20 Basically, the DMRB Y distance provides for a vehicle in an access or minor arm of a junction to turn onto the priority route and accelerate from rest up to the design speed without the oncoming driver travelling along the priority route reacting or varying their speed. That is to say the driver already travelling along the major road at a given speed does not alter their speed by lifting off the accelerator or braking. The identified splay therefore allows sufficient distance for the initial comparatively high closing speed between

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the vehicles together with the reducing closing speed as the emerging driver accelerates, without influencing the oncoming driver's speed or impeding the through traffic.

- 6.21 This principle is considered important on trunk roads, the most important national strategic routes below Motorways, where there is a desire to maintain the speed of long-distance through-traffic for capacity and safety reasons. On non-trunk roads or lower order routes with less strategic importance, this consideration is less critical. In many cases, the natural reaction of a driver experiencing an emerging vehicle is to lift off the accelerator, which instantly nullifies the basis of the DMRB Y distance, as the oncoming speed has, at that point, been influenced.
- 6.22 Similarly, in the absence of a right turn lane on the priority route, as is the case at the accesses and junctions along Twentypence Road, any vehicle approaching another waiting to turn right would need to stop before reaching it in order to avoid a collision. This is considered acceptable, even on trunk roads, as it is not a DMRB requirement to provide a right turning lane at every priority junction on the trunk road network.
- 6.23 By contrast, the principle of MfS considers the ability of a vehicle to stop safely in order to avoid a collision, as confirmed in paragraph 10.1.4 of MfS2: *"Stopping sight distance (SSD) is the distance drivers need to be able to see ahead and they can stop within from a given speed. It is calculated from the speed of the vehicle, the time required for a driver to identify a hazard and then begin to brake (the perception-reaction time), and the vehicle's rate of deceleration. For new streets, the design speed for the location is under consideration is set by the designer. For existing streets, the 85th percentile wet-weather speed is used"*. Very similar wording appears at paragraph 7.5.2 of MfS1.
- 6.24 It is this basic difference in approach to what is required in order to maintain an adequate level of safety for the differing circumstances, which differentiates the visibility splay lengths calculated using DMRB Y distance and MfS principles. The former provides for continuous through traffic speeds, whilst the latter provides for vehicles to stop safely in order to avoid a collision.
- 6.25 Given the speed survey data at the three sites on Twentypence Road demonstrates that vehicle speeds vary along its length due to the alignment of the route, there is no practical safety benefit designing for constant speeds where they naturally are not constant. The DMRB constant speed parameters are therefore irrelevant to safety in this case on Twentypence Road, where traffic flows are relatively low, particularly when considered in the context of a comparable trunk road.
- 6.26 MfS2 confirms that *"most MfS advice can be applied to a highway regardless of speed limit. It is therefore recommended that as a starting point for any scheme affecting non-trunk roads, designers should start with MfS"*—emphasis as per paragraph 1.3.2 of MfS2.
- 6.27 As Twentypence Road is not a trunk road, it is therefore apparent that national guidance confirms MfS should be the starting point, not DMRB. In its consultation response, the Highway Authority specified 2.4m x 215m visibility splays based on the default DMRB trunk

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road parameters for a 60 mph road, but fairly accepted it would consider empirical data and the potential application of MfS parameters.

- 6.28 I consider the application of MfS principles of designing for safe stopping is appropriate in this case, given speeds are not constant in the vicinity of the site access, and therefore there is no practical safety benefit to be gained by the application of the DMRB desirable parameters for Y distances, which seek to maintain continuous traffic speeds on the trunk road.
- 6.29 MfS2 paragraph 1.3.3 advises: *“Where designers do refer to DMRB for detailed technical guidance on specific aspects, for example on strategic inter-urban non trunk roads, it is recommended that they bear in mind the key principles of MfS, and apply DMRB in a way that reflects the local context. It is further recommended that DMRB or other standards and guidance is only used where the guidance contained in MfS is not sufficient or where particular evidence leads a designer to conclude that MfS is not applicable.”*
- 6.30 Table 1.1 of MfS2 confirms that the Stopping Sight Distance (SSD) principle may be applied on routes subject to 40 mph and 50+ mph speed limits *“subject to local context.”*
- 6.31 At paragraph 1.3.5. MfS2 advises *“Much of the research behind MfS1 for stopping sight distance (SSD) is limited to locations with traffic speeds of less than 40 mph and there is some concern that driver behaviour may change above this level as the character of the highway changes. However, 40 mph speed limits in built-up areas cover a wide range of contexts, from simple urban streets with on-street parking and direct frontage access to 2/3 lane dual carriageways. Furthermore, local context varies not only from street to street but also along the length of a street”.*
- 6.32 Paragraph 1.3.6 continues *“Where a single carriageway street with on-street parking and direct frontage access is subject to a 40mph speed limit, its place characteristics are more of a residential street or high street, with higher traffic flows, and may result in actual speeds below the limit. It is only where actual speeds are above 40mph for significant periods of the day that DMRB parameters for SSD are recommended. Where speeds are lower, MfS parameters are recommended.”*
- 6.33 At paragraph 1.3.7 MfS2 confirms that *“in rural areas many parts of the highway network are subject to the national speed limit but have traffic speeds significantly below 60 mph. Again, in these situations where speeds are lower than 40 mph, MfS SSD parameters are recommended.”*
- 6.34 Paragraph 1.3.9 advises *“This approach demonstrates that the key MfS principles can be applied widely to improve the quality of highways and their application is not limited to low speed or lightly trafficked routes.”*
- 6.35 The Presidential Foreword of MfS2 confirms: *“The Chartered Institute of Highways and Transportation’s new guidelines builds on the advice contained in MfS1, exploring in greater detail how and where its key principles can be applied to busier streets and roads in both*

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urban and rural locations up to, but not including, trunk roads. Manual for Streets 2 – Wider Application of the Principles will help to fill the perceived gap in design advice between MfS and the design standards for trunk roads set out in the Design Manual for Roads and Bridges.”

- 6.36 The Status and Application section on page 4 of MfS2 reiterates the point of the perceived gap in design guidance between MfS1 and DMRB.
- 6.37 Chapter 2 of MfS2 considers “*Networks, Context and Street Types*”. Section 2.8 _ Context – Rural Areas confirms at its sub-heading “*Common Street Type: Rural Roads and Lanes*”. Under the sub-heading “*Typical Characteristics*” it confirms at paragraph 2.8.2: “*There is a considerable variation in the highway network running through rural areas from motorways to Green Lanes. The majority of other rural roads follow old pathways and boundaries and do not conform to present guidance on highway standards. Indeed to do so could be to the detriment of local character and lead to intrusion into some of our most outstanding landscapes.*”
- 6.38 It is therefore clear that MfS2 does apply to rural roads, as they are specifically referenced within the default guidance for non-trunk roads.
- 6.39 In this case, it is apparent that the speeds exceed the 40 mph threshold of paragraph 1.3.7 for rural routes such as Twentypence Road. Therefore, it may be reasonably concluded that MfS parameters should not be used. However, whilst its specific parameters may not be used, the DMRB parameters which reflect the use of MfS key principles to design for safe stopping, as recommended at MfS2 paragraph 1.3.3, may be utilised in this case.
- 6.40 MfS2 confirms that HGVs and buses have different rates of deceleration to cars and light vehicles at paragraph 10.1.7. Paragraph 10.1.9 confirms “*...the pre-MfS1 Absolute Minimum value of 0.375g is recommended for HGVs*”.
- 6.41 The same 0.375g rate is referenced for HGV stopping distances and as the basis of establishing the absolute minimum stopping distances for all vehicles on the trunk road where speeds exceed 60 kph in Table 10.1 of MfS2.
- 6.42 As explained above, the same 0.375g rate of deceleration is used in DMRB for calculating the stopping distance, and hence the length of right turn lanes at ghost island junctions, which are designed on the assumption that vehicles will stop safely within them.
- 6.43 By design, DMRB provides for all types of vehicles anticipated to use the strategic trunk road network, and therefore the slower rate of deceleration of 0.375g applicable to HGVs is adopted when designing right turn lanes, to provide for their safe stopping on the strategically important road network.
- 6.44 It is also apparent that the 0.375g deceleration rate does not reflect an emergency stop or minimum stopping distance, as it relates to the length specified for the design of right turn

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lanes on trunk roads where drivers are anticipated to brake and stop in a comfortable, controlled manner, not in emergency circumstances.

- 6.45 In terms of the physical effects of experiencing 0.375g of deceleration, paragraph 10.1.10 of MfS2 advises *“For buses, the limiting design factor is passenger comfort and safety rather than the ability of the vehicle to stop, and therefore for buses, the recommended maximum deceleration rate is the same as the pre-MfS1 Absolute Minimum SSD values.”*
- 6.46 The passenger comfort consideration is to ensure that the braking is not so harsh that passengers in buses feel uncomfortable, become unseated, or possibly fall over; in the same way that when slowing to turn right in a right turn lane, drivers do not normally brake harshly. It is therefore apparent that visibility splay lengths calculated based on these parameters do not represent the ultimate ability of a vehicle to stop, but provide for a reasonably comfortable rate of deceleration.
- 6.47 It is for these reasons MfS2 states at paragraph 9.4.2 within the section *“Priority and Uncontrolled Junctions”*: *“Detailed guidance on the design of priority junctions is given in TD42/95 but (as with all sections of DMRB) this is written specifically for trunk roads and, where used in other situations, should not be applied uncritically”*.
- 6.48 Some practitioners misguidedly believe that where speeds exceed either 60 kph (37.28 mph) or 40 mph, MfS cannot apply, despite Table 10.1 of MfS2 clearly providing parameters for speeds above that level and paragraph 10.1.13 confirming *“...recommended values for reaction times and deceleration rates for SSD calculations are given in Table 10.1 below and the resulting SSD values for initial speeds of up to 120kph are shown on the graph below”*.
- 6.49 This confusion arises because some people fail to distinguish that the guidance in MfS2 refers to both its ‘parameters’ and ‘principles’. MfS2 paragraph 1.3.3 confirms the key principles of MfS2 should be borne in mind when referring to DMRB, and paragraph 1.3.7 confirms MfS parameters are recommended at speeds below 40 mph, on the basis of the perceived change in driver behaviour at speeds above 40 mph reported in MfS2 paragraph 1.3.5. Noting the change in driver behaviour, not vehicle performance, this relates to the drivers perception/reaction time and not the vehicle’s deceleration rate.
- 6.50 By reference to Table 10.1 of MfS2, it is apparent that there are two sets of parameters for speeds above 60 kph, both of which are derived from TD 9/93, which was the DMRB standard at the time MfS2 was written. The 0.375g absolute minimum reflects the deceleration for stopping whilst the 0.25g reflects the continuous speed parameter, as previously explained. For both deceleration parameters, a 2 second Reaction Time is applied, as adopted in DMRB, rather than the faster 1.5 seconds adopted within the MfS parameters.
- 6.51 Therefore, in this case, if we take the MfS principles of designing for safe stopping by all traffic and apply the corresponding DMRB parameters presented as the Absolute Minimum for the trunk road network safety, as may be cross referenced within MfS2 paragraphs 10.1.7 (for HGVs) and 10.1.10 (for buses), by reference to Table 10.1 we arrive at a 2

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second perception / reaction time and 0.375g deceleration rate, as it is perceived drivers may react more slowly when speeds exceed 60 kph, despite neither DMRB or the Highway Code changing the driver perception / reaction time across the full range of speeds they respectively consider, which cross the 40 mph threshold.

6.52 By way of comparison, if applying the MfS parameters for light vehicles, as these tend to represent the faster vehicles on the road and therefore are more likely to sit at the 85th percentile speed than large vehicles (HGVs and buses) a 1.5 second Reaction Time and 0.45g deceleration rate would be utilised.

6.53 It is understood that the weather conditions were mixed during the traffic surveys. Wet weather speeds are normally accepted to be 4 kph / 2.5 mph lower than speeds recorded in dry conditions. In mixed conditions, if deducting 2.5 mph from the recorded speeds, there is potential to under-estimate the actual wet weather speed. Conversely, if applying no reduction, the recorded speeds are likely to represent an over-estimate of the true wet weather speed and associated visibility requirement for safety.

6.54 For comparison purposes, the table below sets out the visibility splay requirements to the north of the site access based upon the recorded southbound speed of 46.3 mph at ATC Site 1, towards the far end of the visibility splay within the carriageway margin.

Vehicle	Perception/ Reaction Time	Deceleration Rate	Stopping Distance
<i>Southbound Visibility Splay to North of Access Based on 46.3 mph Observed Speed</i>			
Light Vehicle (MfS)	1.5s	0.45g	81.970m
Heavy Vehicle (MfS)	1.5s	0.375g	91.674m
All Vehicles (DMRB Desirable)	2.0s	0.25g	128.737m
All Vehicles (DMRB Minimum)	2.0s	0.375g	99.623m
<i>Southbound Visibility Splay to North of Access Based on 43.8 mph 'Corrected' Speed</i>			
Light Vehicle (MfS)	1.5s	0.45g	75.192m
Heavy Vehicle (MfS)	1.5s	0.375g	91.674m
All Vehicles (DMRB Desirable)	2.0s	0.25g	117.320m
All Vehicles (DMRB Minimum)	2.0s	0.375g	91.267m

6.55 By comparing the above distances with the 127.1m minimum distance measured on site to the road-side edge of the fence, it is apparent that it exceeds all requirements except for the uncorrected 128.737m based upon the trunk road constant speed parameters, which are considered irrelevant to the safety in this case, due to the naturally varying speeds.

6.56 To place this minor shortfall below the more onerous standard in context, the 1.637m distance equates to either a 0.35 mph reduction in speed, or a 0.08 second faster perception /reaction time. Given the mixed conditions during the survey, applying just 14% of the 2.5 mph wet weather correction is considered more than reasonable, which would bring the northern splay into compliance with the desirable constant speed parameter.

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- 6.57 Similarly, a 0.08 second reduction in the perception reaction time is also insignificant when considering the 1.5 seconds used in MfS remains conservative. As the research paper TRL 332 confirms at part 3.3.1 (see Appendix JPH-J): *"They were based on a local single carriageway road close to the Laboratory. This is a road of trunk road standard through undulating country, having a roundabout junction mid-way along its length and several side roads joining at various points."*
- 6.58 It is also noteworthy that the 1.5 second perception / reaction time is some 2.23 times the 0.67 seconds adopted in the Highway Code for drivers confronted with an emergency, such as the potential of being involved in a collision.
- 6.59 Given these variables, and the fact that safe stopping based on the recommended principles from an uncorrected speed requires only 99.623m, it is apparent that the on-site minimum provision to the north is some 27.5% above the requirement for safety.
- 6.60 In terms of the visibility splay to the south, the view to the near carriageway edge specified by the Highway Authority extends some 503.5m, which is 2.34 times the 215m default distance it specified in its consultation response. However, as confirmed at ATC Site 3, the northbound speed on Twentypence Road reduces from 54.6 mph to 47.9 mph on the immediate approach to the access.
- 6.61 Taking the worst-case DMRB constant speed parameters into account, this equates to a distance of 170.274m, reducing to 129.788m when considering the safe stop based on the DMRB Absolute Minimum parameters recommended in Table 10.1 of MfS2. However, these distances assume the vehicle travels at a constant speed for 2 seconds, before the driver reacts. As we know the speeds are already reducing on the approach to the site access, the distance travelled by the vehicle within the 2 second period would be reduced, thereby reducing the actual stopping distance required, because the vehicle is already decelerating.
- 6.62 Notwithstanding this, taking these calculated distances as requirements, it is apparent that the southern visibility splay towards northbound traffic is between 2.95 and 3.87 times greater, depending upon which parameters are adopted.
- 6.63 Due to the relatively low traffic flows on Twentypence Road, there are large gaps in the traffic flow. As a result, a driver emerging from the site is able to check the road is clear before waiting whilst watching to the north before deciding to leave the access.
- 6.64 Given these factors in the local context, it is unsurprising that there have been no recorded personal injury accidents for the 24 year period for which data is available. Due to the good visibility, which exceeds requirements for safety in both directions, there is no reason to believe the use of the access would have a material adverse impact on the road network.
- 6.65 This conclusion is not dependent upon the volume or type of traffic using the access, as if the visibility is adequate for the speeds of traffic on Twentypence Road, it is adequate. The visibility splays do not change due to the volume of traffic using the access, within the

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realms of the scale of development proposed in this case, where access capacity is not a material concern.

- 6.66 As reported in MfS2 at paragraph 3.1.8, the Highway Code provides advice to drivers to *“take the road and traffic conditions into account. Be prepared for unexpected or difficult situations, for example, the road being blocked beyond a blind bend. Be prepared to adjust your speed as a precaution...where there are junctions, be prepared for road users emerging.”* Paragraph 3.1.10 of MfS2 advises that drivers are responsible for their own safety and cites a ruling *“The overriding imperative is that those who drive on the public highway do so in a manner and at speed which is safe having regard to such matters as the nature of the road, the weather conditions and the traffic conditions. Drivers are first and foremost responsible for the own safety.”*
- 6.67 MfS2 is critical of the approach of some practitioners at paragraph 3.2.1 which states: *“For some time there have been concerns expressed over designers slavishly adhering to guidance regardless of local context.”* The document goes on to state in the following paragraphs *“Designers are expected to use their professional judgement when designing schemes and should not be over-reliant on guidance....Available guidance is just that, guidance, and cannot be expected to cover the precise conditions and circumstances applying at the site under examination....The authors of guidance, how ever accomplished, will not be cognizant of the site and situation in question. It would be neither reasonable nor rational to presume that anyone could produce an optimal design in abstract. The informed judgement of trained professionals on-site, should logically take precedence over guidance”.*
- 6.68 As previously indicated, specific guidance is given for rural areas at section 2.8 of MfS2, which states at paragraph 2.8.1: *“Rural roads are an integral part of the landscape, often reflecting and preserving historic landscape features such as ancient routes or field boundaries and set within outstanding countryside. Elements such as hedges, verges, banks and fingerposts may contribute strongly to local character and historic significance.”* MfS2 Paragraph 2.8.2 I referred to previously is also relevant.
- 6.69 MfS2 refers to DCC’s good practice advice, with the following text: *“Junction improvements will only be considered where there is a proven safety need...There should be a presumption of retaining trees hedges and verges including any central grass areas...If a traditional Devon hedge needs to be removed for the realignment of a road, the practicality of translocation/moving the hedgebank should be considered in the first instance. Where this is not feasible, the next option should be to carefully dismantle and reconstruct the hedge. Archaeological recording and supervision may be required.”*
- 6.70 As is clear, MfS2 seeks to steer away from the slavish adherence to guidance and encourages practitioners to think about the circumstances of the case, the local context and evidence, based on actual safety records.
- 6.71 This evidence-based approach is reiterated in an article contained in the November 2010 edition of Transportation Professional, the magazine of the Chartered Institution of Highways and Transportation. The Cover Story article *“Manual for Streets 2”*, which is reproduced at Appendix JPH-K quotes Alan Young, the principal author of MfS1 and MfS2:

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"The advice is to look at speed first, then detailed assessment of local context and vehicle and pedestrian collision records. If there is a problem of safety, deal with it as appropriate; if collision records are acceptable, avoid rigorous following of standards and focus on the quality of the place," says Mr. Young." The article concludes with a further quotation *"This research combined with what's been recognised before suggests greater visibility could be increasing hazards, but the important message is do not get hung up on standards. Be flexible and make decisions based on evidence."*

6.72 This advice supports my conclusion that the visibility at the site access is acceptable.

7 POLICY CONSIDERATIONS

7.1 The Council cites conflict with Policy T1/2 of the South Cambridge Local Plan 2018 and section 9 of the National planning policy framework (NPPF) as justification for its 8th reason for refusal.

7.2 However, a review of Policy T1/2 *"Planning for Sustainable Travel"* revealed it is not related to the introduction of accesses to a network or their impact on the through-movement of traffic. Policy T1/2 focuses, as its title suggests, on Sustainable Travel by alternative modes to the car. However, paragraph 1 does state *"Development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location."* It is therefore apparent that the location of a development is a consideration when assessing what is or is not acceptable when considering access by alternative travel modes. Similarly, paragraph 2 refers to *"...sufficient integration and accessibility..."*, which must also be considered with respect to the location of the development.

7.3 The notes following the Policy text reference the NPPF, albeit the 2012 version due to the age of the Local Plan.

7.4 Given the foregoing, I am unsure how Policy T1/2 relates to the 8th reason for refusal, which appears to be based on the safety implications of the access itself and the associated vehicular turning movements on the free flow of traffic on Twentypence Road.

7.5 NPPF does not preclude development in rural areas. Paragraph 89 of NPPF specifically recognises:

"Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist." (Emphasis added)

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- 7.6 Paragraph 92 of NPPF advises: *"When considering edge of centre and out of centre proposals, preference should be given to accessible sites which are well connected to the town centre. Applicants and local planning authorities should demonstrate flexibility on issues such as format and scale, so that opportunities to utilise suitable town centre or edge of centre sites are fully explored."*
- 7.7 Whilst paragraph 93 continues: *"This sequential approach should not be applied to applications for small scale rural offices or other small scale rural development."*
- 7.8 Paragraph 110 of NPPF confirms: *"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."* (Emphasis added)
- 7.9 Paragraph 125 advises: *"Planning policies and decisions should:*
- a) encourage multiple benefits from both urban and rural land..."*
- 7.10 It is clear from the foregoing that national policy confirms development in rural areas, where accessibility by alternative modes and public transport may be more limited, is not inherently unacceptable.
- 7.11 When considering specific guidance for Gypsy / Traveller sites, Policy B of Planning policy for traveller sites - December 2024 (PPTS) advises at paragraph 13:
- "Local planning authorities should ensure that traveller sites are sustainable economically, socially and environmentally. Local planning authorities should, therefore, ensure that their policies:*
- a) promote peaceful and integrated co-existence between the site and the local community*
 - b) promote, in collaboration with commissioners of health services, access to appropriate health services*
 - c) ensure that children can attend school on a regular basis*
 - d) provide a settled base that reduces both the need for long-distance travelling and possible environmental damage caused by unauthorised encampment*
 - e) provide for proper consideration of the effect of local environmental quality (such as noise and air quality) on the health and well-being of any travellers that may locate there or on others as a result of new development*
 - f) avoid placing undue pressure on local infrastructure and services*

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g) do not locate sites in areas at high risk of flooding, including functional floodplains, given the particular vulnerability of caravans

h) reflect the extent to which traditional lifestyles (whereby some travellers live and work from the same location thereby omitting many travel to work journeys) can contribute to sustainability."

- 7.12 It is therefore apparent that national policy does not necessarily consider gypsy / traveller sites to be unsustainable if they are not accessible by a choice of travel modes, as that test is not included within the sustainability tests imposed by the document. In terms of transport, the test is that the development should avoid placing undue pressure on local infrastructure and services.
- 7.13 I consider this test has been passed, as I have demonstrated that the proposed site access is safe and would not result in unacceptable delays to through-traffic movements. It is also apparent that beyond the site access the impact of the development traffic would also be insignificant, given it falls well within the range of normal variations based upon any realistic assessment of trip generation or attraction. It has not been suggested by the Councils that the impact of the development traffic would be significant beyond the access itself.
- 7.14 When specifically considering the potential locations of traveller sites, Policy C of PPTS confirms: *"When assessing the suitability of sites in rural or semi-rural settings, local planning authorities should ensure that the scale of such sites does not dominate the nearest settled community"*.
- 7.15 Policy D of PPTS states: *"If there is a lack of affordable land to meet local traveller needs, local planning authorities in rural areas, where viable and practical, should consider allocating and releasing sites solely for affordable traveller sites. This may include using a rural exception site policy for traveller sites that should also be used to manage applications. A rural exception site policy enables small sites to be used, specifically for affordable traveller sites, in small rural communities, that would not normally be used for traveller sites.⁶ Rural exception sites should only be used for affordable traveller sites in perpetuity. A rural exception site policy should seek to address the needs of the local community by accommodating households who are either current residents or have an existing family or employment connection, whilst also ensuring that rural areas continue to develop as sustainable, mixed, inclusive communities."*
- 7.16 Paragraph 26 of PPTS confirms: *"Local planning authorities should very strictly limit new traveller site development in open countryside that is away from existing settlements or outside areas allocated in the development plan. Local planning authorities should ensure that sites in rural areas respect the scale of, and do not dominate, the nearest settled community, and avoid placing an undue pressure on the local infrastructure."*
- 7.17 It is therefore clear that traveller sites in rural areas are acceptable in principle, and that their location does not necessarily have to be accessible by a choice of transport modes, having recognised the scope of sustainability extends significantly beyond that specific and limited consideration due to the challenges faced by this group of people.

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- 7.18 Having considered this national policy guidance, it is concluded that the proposed development is in an acceptable location, even though it may not benefit from the transport accessibility available within many villages, towns and cities. In the context of gypsy / traveller policy, I consider that the site is in a sustainable location, as travel distances to services and facilities are reasonable, as will be explored by the evidence of Green Planning Studio Ltd.
- 7.19 It was also noted during the site visit that numerous cyclists were travelling along Twentypence Road, which suggest cycling to / from the site is a realistic prospect for those who choose to cycle.
- 7.20 When considering transport impacts, NPPF advises at paragraph 115:
- In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
- a) *sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;*
 - b) *safe and suitable access to the site can be achieved for all users;*
 - c) *the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code⁴⁸; and*
 - d) *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach.*
- 7.21 Paragraph 116 continues: “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.”
- 7.22 A severe impact is a high threshold to breach. In circumstances where safe access can be achieved to a route with sufficient capacity to accommodate cumulative flows, it would be difficult to reasonably conclude that the proposal would result in an unacceptable impact on highway safety or a severe residual cumulative impact on the road network.
- 7.23 Having considered the foregoing it can only be reasonably concluded that the proposed development should not be prevented or refused on highway grounds. Accordingly, I respectfully invite the Inspector to allow the Appeal.
- 7.24 Having considered the findings of the review undertaken, the Council is respectfully invited to reconsider reason for refusal 8 and formally withdraw that reason from the Appeal proceedings, in order to avoid unnecessary costs.

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- 7.25 A draft Statement of Common Ground on Highway Matters was sent to the Highway Authority with a view to securing agreement on the highway matters being considered. Appendix JPH-L contains the submissions and correspondence to date for information, which suggests a strong possibility of the highway issues associated with reason 8 being resolved based on the information already provided to the Council.
- 7.26 The principle of overcoming the Highway Authority's concerns and the subsequent withdrawal of reason for refusal 8 from the matters in dispute appears to be agreed, but the precise wording of some paragraphs of the draft SoCG has yet to be finalised.
- 7.27 It is anticipated that agreement will be reached and a signed SoCG provided to the Inspector before the inquiry opens.

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8 SUMMARY

- 8.1 My name is Jeremy Peter Hurlstone; I hold a BSc (Hons) in Civil Engineering Management, am a Member of the Chartered Institution of Highways and Transportation and a Chartered Member of The Institute of Logistics and Transport. I have over 37 years of experience in the transportation industry.
- 8.2 I have presented evidence at numerous Public Inquiries and Hearings during my career for various types and scale of developments.
- 8.3 I was instructed to review the 8th reason for refusing planning permission, which relates to concerns regarding the creation of an access, its impact on the through-movement of traffic and highway safety.
- 8.4 As part of my assessment, I have visited the site, reviewed visibility at the access and the collision records in its vicinity, empirical traffic survey data, relevant design guidance and policy.
- 8.5 Having completed the review I have found that the proposed development would not lead to the creation of an access, as the access already exists and has done for many years, serving a lawful residential use within a mobile home.
- 8.6 Following a review of empirical speed and traffic data, I have demonstrated the turning movements at the site access would not have a material detrimental impact on through-movement along Twentypence Road and that visibility at the access is adequate when assessed against national guidance.
- 8.7 Having completed my review, I conclude that the highway impact of the proposed development is acceptable, and that planning permission should not be refused on highways grounds, as confirmed by national planning policy.
- 8.8 It is hoped that the evidence presented in this Proof of Evidence will allow the Council to formally withdraw their Highway concerns and therefore the 8th reason for refusal from the Appeal proceedings, in order to reduce unnecessary costs being incurred on both sides and to save time at the Public Inquiry. Progress to date on a draft SoCG suggests this is likely at present.
- 8.9 Irrespective of the Council's decision whether or not to withdraw the highway objections and 8th reason for refusal, I trust the Inspector agrees with my own conclusion, that planning permission should not be refused on the alleged highway grounds, as the access is demonstrably safe due to the visibility being adequate in the local context, and the cumulative residual impact on the road network would not be severe. Accordingly, I respectfully invite the Inspector to allow this Appeal.