



Lane to the East of Downend Road, Portchester

Summary to the Transport Proof of Evidence of Mr T Wall

Client: Miller Homes

PINS Ref: APP/A1720/W/21/3272188

i-Transport Ref: TW/ITB12212-064c

Date: 06 July 2021

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SECTION 1 Personal Qualifications and Experience

- 1.1.1 My name is Tim Wall. I hold a Degree (BA) in Geography from the University of Plymouth and a Masters' Degree (MSc) in Transport Planning and Engineering from the University of Southampton. I am a Member of the Chartered Institute of Highways and Transportation (MCIHT) and a Chartered Member of the Institute of Logistics and Transport (CMILT).
- 1.1.2 I have worked in the field of traffic engineering and transport planning for some 17 years, having previously led the Highways Development Planning Team at Hampshire County Council before joining i-Transport LLP in mid-2014.
- 1.1.3 I am a Partner of i-Transport LLP (based in the Basingstoke office) with responsibility for development planning, in particular with regard to travel planning, highways and traffic issues.
- 1.1.4 The evidence that I have prepared and provide for this appeal (APP/A1720/W/21/3272188) in this proof of evidence is true and has been prepared, and is given in accordance with, the guidance of my professional institution. I confirm that the opinions expressed are my true and professional opinions and are provided to the inquiry irrespective of by whom I am instructed.

SECTION 2 Summary and Conclusion

2.1.1 My evidence addresses the Council's Reason for Refusal for the development which relates to the proposed improvement of the Downend Road Bridge. The scheme will deliver a footway across the bridge by converting the bridge to single traffic working controlled by traffic signals.

2.1.2 The RfR itself relates to the impacts of the operation of the proposed Downend Road bridge improvement on the safety and convenience of road users, and the safety of the proposed pedestrian crossing facilities of Downend Road.

2.2 Operation of Downend Road

2.2.1 To assess the future working of the Downend Road bridge, I have prepared a LinSig model which forecasts the operation of the junction. The model is based on industry standard assessment techniques and faithfully reflects the scheme and conditions that I expected to occur. I have included robust assessments of intergreen periods, PCUs and traffic growth rates in the modelling. My model has been audited by HCC, the highway authority, and also by the owners and developers of LinSig software (JCT). Both HCC and JCT confirm that the model is acceptable.

2.2.2 My assessments demonstrate that in all time periods, the bridge junction will operate in capacity, indeed with significant reserve capacity. Queueing and delay are modest and will be well controlled by the operation of the traffic signal installation. The greatest forecast impact of the development occurs in the morning peak hour, where average delays are forecast to be between 25-30 seconds. This is not a significant impact and would fall far below the NPPF threshold for dismissal of a scheme, with the NPPF requiring that residual cumulative impacts must be 'severe'.

2.2.3 The Council's retained transport consultant (Mayer Brown) has considered the site for its ongoing allocation in the Local Plan. Mayer Brown prepared an assessment which considered the site for allocation, in the context of the Appeal Scheme that was at that time a current application. Mayer Brown concluded that the Appeal scheme is acceptable, that the reasons for dismissal of the 2019 Appeal were overcome, and the scheme will not result in unacceptable or severe impacts.

2.2.4 Despite this the Council has now raised various concerns with the approach to the assessment:

- The need to assess cycling in the modelling by using extended intergreen periods;
- The need to include a dedicated pedestrian phase; and
- The need to consider a further future year assessment (2031).

2.3 Impacts of Cyclists on Downend Road

2.3.1 In relation to cycling, demands on Downend Road are now and will remain very low, and below a level that specific assessment of cycling intergreens in the model is required.

2.3.2 The greatest cycling demand in the peak hour would be 10 cyclists, meaning that a cyclist would be present in one of every 6/7 cycles in the busiest hour. I have already allowed a robust intergreen (10 seconds) in the model when the intergreen should more correctly be 9 seconds. Even assuming a conservative assessment of cycling intergreen were made (of 18 seconds) in every 6/7 cycles, average intergreen values across the hour would be 10.25-10.5 seconds, in line with what I have already assessed. I have carried out a sensitivity test to consider the impact of an average of 11 seconds intergreen, which demonstrates the junction still operates effectively. In practice, the junction will include detection systems to identify any cyclist (or slow moving vehicle) at the junction and will dynamically call an intergreen extension where this is needed. HCC agree that no allowance should be made in the assessment for the limited cycle demand.

2.3.3 The presence of cyclists on road on Downend Road will control traffic speeds for vehicles following a cyclist. I have demonstrated that this has no overall impact on the operation of the junction or on forecast conditions on Downend Road.

2.4 Need for a Pedestrian Phase

2.4.1 The Council consider a designated pedestrian phase is needed. This is based on their assessment that the proposed pedestrian refuge crossing at Downend Road will not offer sufficient visibility or that there will be insufficient gaps in traffic to enable safe crossing movements.

2.4.2 I have demonstrated that visibility from the pedestrian refuge island is provided in line with guidance in the Traffic Signs Manual, DMRB and HCC's TG3 policy. Whilst visibility from the crossing may be temporarily and partially limited when traffic queues at the southbound stop line and access junction, these are short-lived obstructions to visibility and will not materially affect the ability of pedestrians to cross the road. The operation of the signal junction in combination with the pedestrian refuge crossing will aid safe movement across Downend Road.

2.4.3 I have considered the ability for pedestrians to find gaps in traffic to safely cross the road. The refuge island enables two-stage crossing of Downend Road. Assuming a gap acceptance requirement of between 4-6 seconds for crossing movements, forecast traffic frequencies on Downend Road will be that one vehicle arrives every 7-9 seconds, more than sufficient for pedestrians to cross.

2.4.4 In reality, traffic does not arrive in a uniform pattern, and practically there will be regular and significant gaps in traffic to ensure a pedestrian can cross efficiently and safely. Moreover, the operation of the Downend Road bridge under signal control will create large gaps in traffic platoons, offering regular and sufficient gaps in traffic for pedestrians.

2.4.5 To confirm my assessment, I have also carried out an assessment using PmV², a well-established analytical tool to determine crossing type based on demands and crossing difficulty. This is HCC's policy for considering crossing requests. My assessment demonstrates that a refuge island crossing is suitable in this location and that a controlled crossing would not be justified.

2.4.6 HCC has considered the pedestrian crossing in detail and confirms that this is acceptable, indeed it was originally recommended by HCC. I have commissioned an independent Road Safety Audit of the scheme which raises no safety issues that have not been addressed in the design. The Council at the 2019 Appeal raised no concerns with the refuge crossing, confirming in common ground that the pedestrian provisions for the Option 3 scheme were acceptable. In terms of pedestrian provision, the Appeal Scheme and the Option 3 scheme are essentially the same.

2.5 **2031 Future Year Assessment**

2.5.1 The Council also considers that a future assessment year (2031) is needed. Whilst I disagree and have assessed the appropriate year (agreed with HCC), I have considered the traffic growth estimates to 2031 compared to those I have already assessed (for 2026).

2.5.2 The latest DfT forecasts for traffic growth are lower than I have already assessed. On that basis, I demonstrate that the junction would operate effectively in 2031, as it would in 2026.

2.6 **Summary Conclusion on Impacts of Downend Road Improvement**

2.6.1 I consider that the assessments of the operation of the bridge are appropriate, realistic, and robust. This demonstrates, clearly, that the junction will operate effectively. There will be no safety concerns and the impacts of queuing and delay are modest, far below a level that could be considered significant, let alone severe.

2.7 **Pedestrian Provision at Downend Road**

2.7.1 In relation to pedestrian provisions at Downend Road, the Council agrees that the improvement scheme provides a significant benefit in relation to the safety and attractiveness for pedestrian crossing provision on Downend Road compared to the existing situation.

2.7.2 The Council's concerns in relation to the safety of the pedestrian crossing across Downend Road relate again to pedestrian visibility and the ability to find gaps. I have demonstrated that these concerns are not material and that the crossing will deliver a safe and suitable crossing facility.

2.8 Wider Matters Raised by the Council

2.8.1 Beyond matters related to the RfR, the Council has sought to expand its case, in particular related to the safety of the access arrangements, but also in relation to the impacts of the accessibility matters on travel demands generated by the scheme.

Access Design Considerations

2.8.2 In relation to access matters, the Council's concerns are squarely beyond the RfR and have no material relationship with the bridge improvement. It is common ground that the Appeal scheme and the Option 3 improvement for the 2019 Appeal are essentially the same in relation to access and pedestrian provisions. The 2019 Appeal Inspector considered the Councils concerns on access, finding these to be outside of the RfR, and that they were not material in any event.

2.8.3 The thrust of the Council's concerns on site access matters relate to the application of DMRB based standards to the scheme. DMRB relates to trunk roads and is not an appropriate basis to assess the scheme. I and HCC agree that based on conditions at the site, MfS principles apply.

2.8.4 The Council's concerns on the horizontal alignment of the scheme, the taper gradient and length of the deceleration length are unfounded and addressed by the use of MfS principles. Applying the guidance correctly removes the suggested departures. Irrespective, I have demonstrated that the practical points the Council raises are not significant or material and that the scheme is acceptable. HCC has considered the access scheme over many years, and it has been subject to various safety auditing over the past four years.

Accessibility Matters

2.8.5 In relation to accessibility, the Council is concerned that because the 2019 Inspector found only that the site was *reasonably accessible*, that this may impact on travel demands from the scheme, in relation the traffic demands generated to Downend Road. No information has been supplied at this time to demonstrate the impact the Council alleges on this point. Irrespective, my assessment has considered a robust assessment of traffic generation, using the TRICS database. I have considered the relative accessibility of the site through the TRICS assessment, choosing only sites in comparable locations. I have also based my assessment on the scheme comprising only Private Housing, taking no account of affordable dwellings (which will comprise 40% of the

scheme) or flatted development, both of which exhibit lower peak period trip rates. My assessment of traffic generation has also been validated against local data collected at a residential site in Portchester and remains realistic.

2.8.6 The Council's final concern relates to the relative attractiveness of the Downend Road route when compared to other walking and cycling options. Its concerns appear to relate solely to the proposed pedestrian crossing refuge improvement at the A27 Thicket via the Cams Bridge, and in relation to residents seeking access to westbound bus stops. The adequacy and attractiveness of the Cams Bridge route was considered as part of the 2019 Appeal and the Inspector was satisfied that this would be an acceptable route. The crossing refuge is designed in line with standards, has been considered by independent Road Safety Audit, and is agreed with HCC. It will deliver improved crossing facilities where none currently exist and is consistent with numerous other informal crossings on the A27 corridor in Portchester, which operate safely.

2.8.7 I therefore consider that the Council's allegations to be unfounded, that the assessment presented is realistic and indeed robust, and that this demonstrated the scheme will operate safely, efficiently and without material impact on the convenience or amenity of highway users.

2.9 Matters Raised by Interested Parties

2.9.1 I have considered matters raised by interested parties which relate to concerns on the safety and operation of Downend Road, accessibility, and wider traffic congestion concerns. Each of these matters has been fully addressed either through the application process or in my evidence.

2.10 Wider Scheme Benefits

2.10.1 I have explained that the development will deliver a number of wider transport benefits to the local community, including through improving highway infrastructure to increase capacity and reduce delays, providing improved connectivity for walking and cycling, enhancing existing walking and cycling routes in the local area, and through investment in public transport infrastructure. I consider these benefits to weigh in favour of granting consent for the proposal.

2.11 Compliance with Relevant Policies

2.11.1 I have assessed the development proposals against the relevant policies for the site, which in transport terms comprises the NPPF, CS5 and DSP40.

2.11.2 I conclude that the proposals are fully compliant with the NPPF, and particularly that there are no unacceptable safety impacts and that there is no severe residual cumulative transport impact.

2.11.3 In relation to Development Plan Policies CS5 and DSP40, I conclude that the proposals comply with relevant parts of both CS5 and DSP40, a view shared by HCC (CD9).

2.12 Conclusion

2.12.1 My evidence demonstrates that:

- The Appeal site will be accessible and will ensure opportunities to travel by sustainable modes will be taken up. The proposals go beyond simply addressing demands arising from the site and offer a number of wider benefits to the local community;
- Safe and suitable access to the site can be achieved for all users; and
- The residual cumulative transport impacts of the proposals fall short of the “severe” test set by the NPPF and do not result in unacceptable impacts on highway safety.

2.12.2 It is therefore my conclusion that there are no transport grounds for dismissing the appeals.

