**Himley Village**

**Transport DC Response to ‘TA Addendum Response to OCC E mail 1st Dec 2016’ document submitted by Alan Baxter on behalf of P3Eco**

The document responds to our concerns under the following headings:

1. Pedestrian facilities
2. Signal equipment and traffic signs
3. Vehicle tracking
4. Proximity of proposed carriageway to railway bridge structure
5. Length of approach lanes
6. Howes Lane properties
7. **Pedestrian facilities**
	1. **Pinch point on Howes Lane**

Regarding the proposed 800mm footway pinch point on Howes Lane, the document says this can be increased to 900mm, and that this is acceptable according to Manual for Streets.

However, I cannot find the reference in Manual for Streets that says 900mm is an acceptable minimum.  Both Manual for Streets and our Residential Road Design Guide refer to Inclusive Mobility, where at 3.1, it is clear that the absolute minimum width for a footway should be 1m.

In any case neither of these two guides are truly applicable for this location, on an A classified road with no direct frontages. Design Manual for Roads and Bridges would in fact be more appropriate, and as such the footway should ideally be 2m wide, but 1.3m is permitted over short distances if there is a physical barrier such as a wall or fence. However, we are prepared to follow Inclusive Mobility in agreeing that a footway at this location could be 1m wide, but no less, at pinch points.

In any case, I am not convinced that any additional footway width could be found without detrimentally affecting traffic lane widths here. Understanding the sensitivities around footway widths one would have thought that any available footway width would already have been found by the designer.

The document states that 5m of forward visibility would be achievable around the garden fence at the pinch point. This should allow people walking to give way to one another and not collide, but it could be a safety issue if a cyclist meets a pedestrian or two runners meet, for example.

The document further argues that this risk is acceptable given the volume and tidal nature of pedestrian use. Admittedly pedestrian usage will be low and possibly tidal, given the employment site, but this does not remove the risk.

The safety aspect of cyclists using the footway at the junction does need to be considered, in my view, as it is inevitable.  The scheme does not provide any dedicated on or off carriageway facilities.  Particularly for the right turn out of Howes Lane into Bucknell Road, getting into the right hand lane approaching the lights could be difficult at busy times – plus cyclists would not want to wait in the queue.

The document proposes that a footway on the north side, linking the employment site to Bucknell Road, could be provided.  This would remove the need for people to use the footway on the south side, but we would need to see that it is feasible within the highway boundary.

* 1. **The crossing point on Bucknell Rd between Howes Lane and Lords Lane**

The document says:

*‘Reference is made to the loss of a short section of footway on the south west side of Bucknell Road adjacent to the bridge abutment. This footway is only 3m in length from the corner of the abutment/wing wall and does not have any onward connections to the north west as it becomes a grass verge. Its sole purpose is to provide access to an uncontrolled crossing of Bucknell Road beneath the bridge. The loss of this footway is not detrimental to pedestrian safety as a replacement crossing of Bucknell Road is proposed. The alignment of this crossing better aligns with the Howes Lane to Lords Lane desire line than the existing crossing.*

We agree that the loss of the footway is not likely to be an issue if there is minimal pedestrian usage north of the footway long the verge towards Bucknell - looking at streetview, there doesn’t appear to be any obvious signs of current use.

However, we still have concerns about the safety of pedestrians crossing Bucknell Road at the proposed crossing point, in - particular from west to east - and we do not consider that the new layout here results in an improvement for pedestrians. There seems to be quite a restricted view of southbound Bucknell Road traffic until close to the kerb.

The document also says:

*The purpose of the junction intervisibility zone is to allow line of sight between drivers at stop lines and pedestrians using crossings. To quote from TD 50/04 ‘The junction intervisibility zone is the area identified for the purpose of assessing visibility within the junction between drivers at each stop-line, or between drivers and pedestrians and facilitates identification of measures to mitigate the effect of obstructions’. As previously stated in the report of 25th November a driver at the stop line has visibility to the full extent of all other stop lines and the full extent of all other pedestrian crossings. The objective of providing an intervisibility zone would therefore be achieved. There is no risk to pedestrians arising from visibility issues and in fact the interim junction layout would be an improvement in this regard compared to the existing layout.*

We agree that the intervisibility zone appears to comply with standard.

It further says

*Reference is made to the signals potentially causing confusion for pedestrians using the crossing below the bridge. In terms of the likely future baseline development scenario, we have undertaken some preliminary calculations which indicate that flows at the junction would increase by up to 30% in 2021 compared to 2016 surveyed flows. This will increase the level of severance for pedestrians on Bucknell Road (and Howes Lane) but the introduction of traffic signals, that will stop south bound traffic (Stage 3) and create gaps in northbound traffic (between Stage 3 and 2), will improve the situation for pedestrians crossing at this location compared to the situation of the existing junction without any improvement.’*

We agree that the scheme could create more gaps in the traffic for pedestrians to cross in. However, whilst in the current layout pedestrians would need to judge gaps in uncontrolled traffic flows, the introduction of signals (without pedestrian phases) will change driver behaviour and patterns of accelerating and decelerating, making their movements less predictable to the pedestrian, who will not be able to see or make sense of the various signal phases. This could introduce hesitation or over confidence in pedestrian decision making, which could be particularly hazardous at this location due to their being no refuge.

1.3 **Overall conditions for pedestrians**

The report continues with the assertion that the proposed interim mitigation scheme represents an improvement over current conditions for pedestrians at the junctions:

*‘We strongly disagree with the conclusion that the proposed improvement results in an overall deterioration in conditions for pedestrians. We accept that two pinch points are created but given the low footfall through the junction we do not believe that they would have any material impact on the safety of pedestrians. Even if these were accepted as having a dis-benefit, this effect would be more than offset by the proposed improvements to crossing Pedestrian crossings on Howes Lane and Bucknell Road north would be improved through the control of vehicles, increased inter-visibility and the use of central islands. In addition, a new crossing would be added to Bucknell Road south where one currently does not exist.’*

We agree that the introduction of refuges would provide some benefit to pedestrians, although as they are narrow, they do introduce the risk of overhanging pedestrians with bikes or prams being clipped due to the tight tracking.

If the Howes Lane footway pinchpoint can be addressed by the construction of a new footway on the north side, that removes the concern about the pinchpoint.

However, we would reiterate our concerns about the crossing of Bucknell Road between Howes Lane and Lords Lane.

Taking these three factors into account, on balance we still consider that the scheme with the additional footway is detrimental to pedestrian safety.

The document says:

*At this point OCC can reasonably foresee that the overall pedestrian environment at the junction and potentially highway safety will deteriorate in the near future. OCC have an obligation under common law duty of care to address this now. The proposed interim junction improvement will enable this obligation to be discharged.*

Having consulted our legal team, we do not agree that OCC has a common law duty of care to address existing highway deficiencies. Legal justification can be provided if required. If that was the case most highway authorities would be subject to constant claims. However, if OCC proceeded to approve and essentially construct (and authorised works by a developer would equate to highway authority construction) highway works of deficient design, and an accident occurred, then there may be grounds for a successful claim against the highway authority.

This is why we are extremely reluctant to agree to a scheme that, in our professional opinion, has an overall negative impact on road safety. On the other hand the current layout operates very safely with an exceptionally low number of reported injury accidents at the junctions, and so there is no reason to suppose that intensification of use will lead to increased safety risk – there is no safety issue to exacerbate.

1. **Signal equipment and traffic signs**

Having discussed this with colleagues, there are work arounds for most situations when it comes to fitting signs into highway areas. However, we are not convinced by the report's assertion that footway widths could be increased to address our concerns. See 1.1 above.

1. **Vehicle tracking issues**

The document acknowledges that there are issues with the tracking, but states that  *‘there is still scope and space within the limits of the public highway for further refinement of the layout to address these issues’*  . I would reiterate our point made at 1.1. We are not convinced by this and believe that the scheme could fail technical audit at S278 stage.

The document dismisses the problem of tracking issues for large vehicles passing one another:

*‘Nonetheless, it must be noted that these situations would only arise with the very largest of vehicles and would only be an issue if an equally large vehicle were to be travelling in an adjacent or opposing traffic lane. In reality, because of the natural mix of vehicle types there would be sufficient clearance to vehicles in adjacent and opposing traffic lanes. In terms of vehicle tracking it must be noted that the proposed interim scheme increases carriageway space and this improves the movement of large HGVs compared to the existing situation.’*

This is an A classified road, in an area likely to experience significant construction traffic and general traffic growth in the next few years. We consider that such vehicles needing to pass one another will be a common occurrence.

It is true that the scheme increases carriageway space, but signalisation would reduce the flexibility for drivers to negotiate the road space between themselves as they currently do.

The document points to the 7.5 tonne weight restriction, obviating the need for large vehicles to turn right from Howes Lane into Bucknell Road south. These vehicles do need to be provided for because the weight restriction does not apply to vehicles accessing sites within the weight restriction zone. There is evidence of large vehicles making this turn, in the damage to the splitter island where the restriction starts.

The suggested use of vehicle containment kerbs only reinforces the fact that there could be issues with this design and that vehicles will need to constrained to prevent damage both to the highway and worse still other road users. The containment kerbs on refuges could in fact deflect vehicles into the adjacent lane, reducing capacity.

In terms of overhanging, the Road Vehicles (Construction and Use) Regulations 1988 states that maximum width of a vehicle without escort is 2.9m, or more than 305m overhang of the body. Clearly it will impossible for such a vehicle to negotiate this junction.

The document states: *‘The tracking shows that large vehicles are able to negotiate the junction without overhanging kerb lines. It is of course possible that this may nevertheless occur on occasions but the risk to pedestrians must be viewed within the context of the low pedestrian footfall through the junction.*

We do not accept that the risk would be mitigated by the low pedestrian footfall, which will in any case increase over time.

1. **Increased proximity of carriageway to railway bridge**

The document states that the risk of bridge strikes due to the carriageway moving to a position only 700mm from the bridge structure, would be mitigated by the use of containment kerbs. However, it admits that this would need approval from Network Rail and there is no suggestion that Network Rail have been consulted at all. Even if everything else was acceptable, the feasibility of the scheme could depend on this approval. The bridge has been struck in the recent past, and Network Rail will be reluctant to approve anything that unacceptably increases this risk, given the serious disruption it can cause to rail travel.

1. **Lane lengths**

The document acknowledges that the changed lane lengths in the new design could affect capacity. It is claimed that lane length can be reinstated to that of the previous design on Howes Lane whilst also providing the additional footway on the north side, but this would need to be demonstrated.  On Lords Lane the report says it will make no material difference as there are so few right turners.  This may be true but we would need to see the change modelled to demonstrate this.

The latest design was not re-modelled in LinSig, and our traffic signals team have reviewed the design and found that there would also be some slight changes needed to the LinSig parameters to reflect the differences in turning radii.

1. **Impact on properties in Howes Lane**

In response to the carriageway moving much closer to properties on Howes Lane, the document states*: ‘We acknowledge that the proposed interim junction improvement would result in vehicles being closer to existing gardens and fences by up to 3m. However, this change would have no material impact on the properties in relation to issues such as noise, vibration and air quality.’*

Noise, vibration and air quality impacts would need to be considered by the LPA and we do not have the expertise to refute the above claim. However, if this scheme were to come forward as a full S278 submission we would require a noise impact assessment to be carried out. A standard clause in our S278 agreements is that the developer will indemnify OCC against any claims arising from the implementation of the works, including noise claims brought through the land compensation act.

The document goes on to say

 ‘*A wider issue for properties in the area is the consequence for air quality of not improving the junction given the likely significant increase in flows at the junction. Without improvement there will be major queues and slow moving or stationary traffic on both Howes Lane and Lords Lane. The proposed interim junction improvement however will provide the much needed additional capacity and keep traffic moving through the area with a benefit for air quality.’*

The impact of pollution from oxides of nitrogen is highly variable depending on a number of factors including distance between source and receptor over short distances from the carriageway, and barriers such as trees. However, with signalisation, traffic would decelerate, stop, and accelerate more often at off-peak times than would be the case without signals, which could have an impact on air quality. Overall however, this would need detailed modelling to assess the impact.

1. **Conclusion**

Having considered the response document, the Highway Authority’s position is that:

* Overall, the proposed interim scheme has a negative impact on road safety
* Proposals have been made to address some of the deficiencies, but these would need to be demonstrated through a further iteration of the design.
* The concern over the crossing point under the bridge has not been addressed
* Assurance would be needed that Network Rail are content in principle with the scheme.
* OCC recommend that the above points are addressed prior to a planning decision being made. As it stands, given the constraints, we are still uncertain as to whether the scheme could be redesigned to meet S278 technical approval. Therefore if required by condition or obligation prior to occupation it may not be possible to discharge, thus preventing occupations from going ahead.

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15 December 2016