



**Paddock Wood Town Council**  
**Matter 7 – Highways Infrastructure**

***ISSUE 1 – Strategic and Local Road Networks***

**Q1. Without the proposed bypass, what effect will the suggested changes to the Plan have on the B0217 through Five Oak Green? What mitigation measures will be necessary in this location and how will they be achieved?**

**PWTC Response:**

1. Please also see PWTC's hearing statement in response to Matter 4 The Strategy for Paddock Wood where this matter is also considered.
2. Although the Five Oak Green Bypass is proposed for removal from the Local Plan it does not appear to be 'off the table' for consideration as being a requirement to mitigate the growth at Paddock Wood as part of this Examination. The modelling should also develop scenarios which include the Five Oak Green Bypass otherwise the evidence is incomplete
3. Instead, the study says that demand is not at a level to justify a major expansion in link capacity at Five Oak Green such as a bypass. It recommends considerations is given to the implementation of enhanced traffic management through the area to better support the flow of vehicles whilst also integrating it with walking, wheeling and cycling to enable safe travel along and across the link. It also states that sustainable transport measures should maximise accessibility to Paddock Wood rail services to reduce the need for car travel on this link (see the Sweco report Page 23/55 – B2017 Five Oak Green).
4. What exactly are 'enhanced traffic management' measures that the study is recommending? Where will these be delivered, what is the cost, who will fund it and when?
5. Where is the evidence to demonstrate that walking, wheeling and cycling infrastructure to enable safe travel along and across the link? What are the sustainable transport measures that will maximise accessibility to Paddock Wood rail services to reduce the need for car travel? Is this realistic when Tonbridge Town Centre is an 11 minute drive from Five Oak Green by car that residents will travel to Paddock Wood Railway Station to the east in order to travel west to Tonbridge Town Centre? Same can be said for the proposed growth to the west of Paddock Wood.

**Q2. What effect will the suggested changes to the Plan have at Kippings Cross (A21/B2160)? Do the conclusions and recommendations in the Kippings Cross Junction – Local Plan Mitigation Option Analysis remain relevant?**

**PWTC Response:**

6. Presumably the Council is now relying on its Appendix 1 (Local Plan Strategic Transport Assessment – Modelling Appraisal April 2024) to Matter 3 Hearing Statement in relation to The Strategy for Tudeley Village but the Council will need to confirm this.
7. We note that the housing trajectory used for the model was a ‘May 2023 Housing Trajectory Update for Sweco’ (see section 2.4). As we heard at the hearings last week, the Council has an updated and unpublished housing trajectory that it is now using which has not been shared. The modelling will need to be updated to reflect the latest trajectory therefore the modelling report by Sweco is using outdated housing assumptions which is critical to its reliability.
8. The modelling appraisal explains (see below) that there are already ‘*significant underlying issues*’ of queue and delay. It states that the existing issues are “*slightly exacerbated as a result of additional Local Plan demand*”. How is this possible that the Local Plan growth of over 2,600 dwellings at Paddock Wood assumed in the modelling (Table 5 Local Plan Housing Summary by Settlement) only slightly exacerbates this issue? Without seeing the modal shift report used by the Council in this modelling it is not possible to interrogate this much further.

*“The output data shows that during the AM Peak there are significant underlying issues in terms of queue and delay on the B2160 North and A21 East arms as shown in the RC. These existing issues are slightly exacerbated as a result of additional Local Plan demand, as shown in the LPMS scenario. This is replicated in the PM Peak with the A21 west arm. It should also be noted that the model analysis relates to junction arm approaches, and so it does not take account of exit issues, namely the A21 exit towards Blue Boys Roundabout, where the A21 narrows from dual carriageway to single carriageway. Congestion and delay issues have been observed when the link demand is highest along the A21 towards Hastings (eastbound) as a result.”*

9. The modelling outputs are then set out in the report and shows significant issues in a number of locations particularly B2160 (N) in the AM and A21 in the AM in addition to A21 Hastings Road (W) in the PM.

Table 19: Strategic Highway Modelling Outputs for Junction 35 A21 / B2160

	Description	2038 Reference Case (RC)					Local Plan Modal Shift (LPMS)				
		V/C	Flow pcu	Jct V/C	Avg Q (pcu)	Delays (sec)	V/C	Flow pcu	Jct V/C	Avg Q (pcu)	Delays (sec)
AM	B2160 Maidstone Road (N)	104	833	90	23	122	108	827	93	41	208
	A21 (E)	114	1,161	90	85	358	117	1,189	93	102	419
	Dundale Road (S)	14	27	90	0	30	14	27	93	0	30
	A21 Hastings Road (W)	61	1,321	90	0	13	66	1,441	93	0	14
PM	B2160 Maidstone Road (N)	70	394	81	1	27	74	435	86	1	28
	A21 (E)	69	922	81	1	49	72	957	86	1	53
	Dundale Road (S)	24	86	81	0	20	26	89	86	0	21
	A21 Hastings Road (W)	92	1,924	81	0	21	97	2,042	86	1	27

Figure 1: Table 19, Local Plan Strategic Transport Assessment – Modelling Appraisal (April 2024)

10. The report dismisses a number of potential solutions and arrives at the two options that have ‘potential to be taken forward’. For the modified roundabout option, the report explains it will be costly including removal of a barn to the north of the junction and that queuing on the western arm of the A21 is still likely due to the blocking back from Blue Boys roundabout. The full signalisation option requires ongoing revenue for signals management and queuing on the western arm of the A21 is still likely.

KX10	Potential to be taken forward	Modified roundabout layout to achieve the following: Left turn bypass from A21 to B2160 Widening on entry on B2160 Widening on A21 westbound entry	Modification to roundabout to provide a bypass for left turning traffic to the B2160. Increasing the width of the B2160 so there are two lanes on the approach to the roundabout. Both lanes would be right turns to the A21	Removes left turners from roundabout allowing more stacking space for traffic staying on A21. Increases capacity for traffic leaving B2160 Increased capacity for traffic heading west on A21	Costly and requires third party land, including removal of a barn to the north of junction. Queuing on western arm of A21 still likely as this is affected by the blocking back from Blue Boys roundabout	The roundabout exit eastbound could be widened so that the merge to one lane is improved and reduces the risk of blocking back into the roundabout circulatory. Would also require third party land.
KX11	Potential to be taken forward	Full signalisation of the roundabout	Increase size of circulatory area to provide internal stacking space for full signalisation. Layout may be more oval than circular to fit mostly within existing junction footprint	Control over flows. Detection can be used to hold eastbound A21 traffic to allow roundabout to clear.	Requires ongoing revenue for signals management. Queuing on western arm of A21 still likely.	Depending on level of stacking space to be created there is potential for this option based on previous partial signalisation roundabout modelling results. Could be combined with widening A21 east of junction for extra merge capacity.

Figure 2: Table 20: Kipping’s Cross Mitigation Options Investigated, Local Plan Strategic Transport Assessment – Modelling Appraisal (April 2024)

11. It is unclear what the Council is proposing as the mitigation for Kipping’s Cross and whether it is one or both of these options or something else. What are the estimated costs for the proposed option(s), when do they need to be delivered in relation to the housing trajectory, who will fund these and what is the funding mechanism?

**Q3. What effect will the proposed changes to the Plan and distribution of growth have on the remaining “hotspots” identified in the evidence base? Will there be any unacceptable impacts on highway safety or will the residual cumulative impacts on the road network be severe as a result of the Plan?**

**PWTC Response:**

12. The study explains in Section 4.3.2 that the identification of hotspots for the LPMS scenario follows the same methodology as the LP Core scenario, as discussed in Section 3.3 and the analysis has identified the following high-level summary. It explains that the ‘minor’ hotspot junctions have been reduced by 12

and that ‘major’ hotspot junctions have been reduced by 6. It is unclear from the report how exactly this reduction has been achieved. Presumably it is based purely on a modal shift assumption the details of which are not currently available for us to view or comment on. It will be useful to have the Council explain how these hotspots have been reduced and what sustainable and active travel solutions / infrastructure are being assumed along with the costing and deliverability of these solutions.

13. The report states at Section 4.3.2:

- 9 ‘minor’ hotspot junctions - a reduction from 21 in the LP core scenario.
- 8 ‘major’ hotspot junctions - a reduction from 14 in the LP scenario.

14. It states that the remaining ‘major’ hotspots are summarised in Table 12 and illustrated in Figure 7 below:

*Table 12: Major Hotspot Summary – Local Plan Modal Shift Scenario*

ID	Junction name	Location
8	A26 / B2017 Tudeley Road (Somerhill Roundabout)	Tudeley
12	A228 / B2160 Maidstone Road (Hop Farm Roundabout)	Paddock Wood
13	A228 / B2017 (Badsell Roundabout)	Paddock Wood
14	A228 / Alders Road / Crittenden Road	Paddock Wood
35	A21 / B2160 Maidstone Road (Kipping’s Cross)	Kipping’s Cross
72	A267 / B2169 Birling Road	Royal Tunbridge Wells
88	B2017 / Hartlake Road	Tudeley
107	B2160 / Chestnut Lane / Brenchley Road (Matfield Crossroads)	Matfield

**Figure 3:** Table 12: Major Hotspot Summary – Local Plan Modal Shift Scenario, Local Plan Strategic Transport Assessment – Modelling Appraisal (April 2024)

Figure 7: Hotspot Junction Locations – Local Plan Modal Shift Scenario

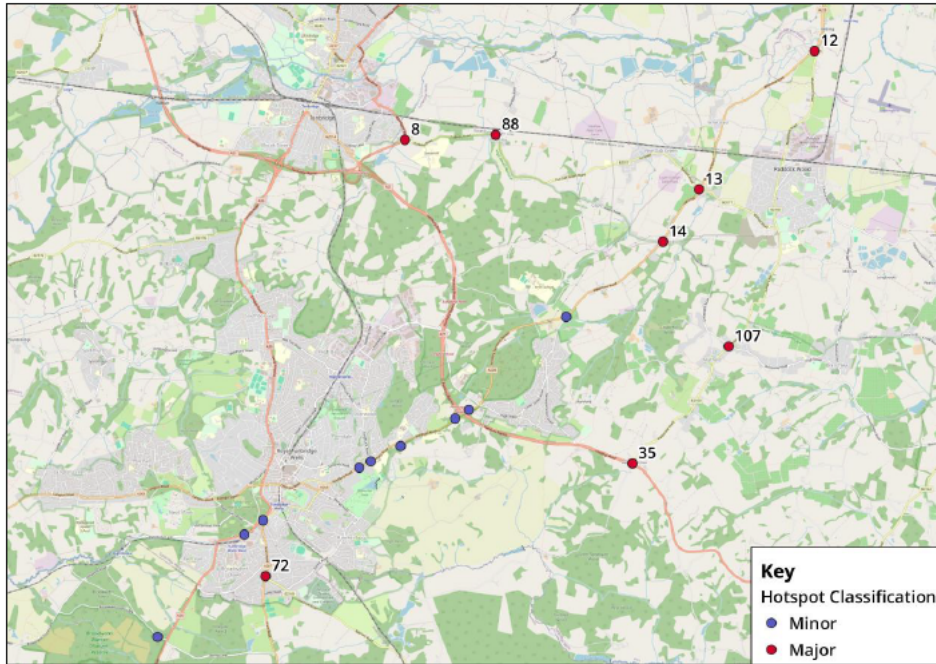


Figure 4: Figure 7: Hotspot Junction Locations – Local Plan Modal Shift Scenario, Local Plan Strategic Transport Assessment – Modelling Appraisal (April 2024)

15. All of the Major hotspots are in relation to the Paddock Wood growth apart from the A267/B2169 Birling Road Junction (Reference: 72) in Tunbridge Wells.
16. As the Examination appears to still be considering whether the Colt’s Hill Bypass is required, suitable in terms of environmental impacts and even deliverable, the modelling should surely include a scenario without Colt’s Hill Bypass as it does not appear to in the study.

Table 21: Local Plan Highway Mitigation Model Scenarios

Mitigation	LPHM1	LPHM2
Sustainable Transport Interventions (see Chapter 4)	✓	✓
Colts Hill Bypass	✓	✓
Badsell Roundabout Improvements	✓	✓
Somerhill Roundabout Improvements	✓	✓
Hop Farm Roundabout Improvements	✓	✓
Kipping’s Cross Roundabout Improvements	✓	
Pembury Road Capacity Improvements		✓

Figure 5: Table 21: Local Plan Highway Mitigation Model Scenarios – Local Plan Strategic Transport Assessment – Modelling Appraisal (April 2024)

**Q4. Where mitigation is required, can any significant impacts on the transport network (in terms of capacity and congestion), or on highway safety, be cost effectively mitigated to an acceptable degree?**

**PWTC Response:**

17. The report states in its conclusions section 6.2 the following local highway improvements are required. However, given the shortcomings of the modelling which we have outlined, how can the conclusions of the study be relied upon?

*“Whilst sustainable transport will help reduce the Local Plan impact, additional local highway improvements re required and should be considered, namely:*

- *Colts Hill bypass and associated junction improvements at Badsell Roundabout (Junction 13)*
- *Somerhill Roundabout improvements (Junction 8)*
- *Hop Farm Roundabout improvements (Junction 12)*
- *Junctions on the Pembury Road corridor which are currently the subject of a study by Stantec.*
- *Improvements on this corridor would also result in a diversion of traffic away from the B2160*
- *Maidstone Road. This has the potential to mitigate the Local Plan impact at Matfield Crossroads (Junction 107) and Kipping’s Cross Roundabout (Junction 35)”*

18. In terms of cost effectiveness how can one determine this when there are no clear or evidenced costs included in the study?

19. It appears that there are ‘high level budgets’ included for only two of the junction improvements, Junction 8: Somerhill Roundabout where it states at 5.4.7: *“A high-level cost estimate is expected to be approximately £500,000. This would be within the identified Stantec proposed masterplan budget (as part of the Strategic Sites Infrastructure Plan) for a mitigation at this location of £1,000,000. The Infrastructure Delivery Plan has identified a cost of £1,500,000 for the wider works.”*

20. For Junction 12: Hop Farm Roundabout it states at 5.5.7: *“high-level cost estimate is expected to be approximately £250,000. This is within the identified Stantec proposed masterplan budget and Infrastructure Delivery Plan estimate of £1,000,000 for mitigation at this location. As a result, there is no additional funding requirement identified for this location.”*

21. As far as we can see, there are no other cost estimates (and no detailed cost assumptions) in the study and there is no up-to-date IDP as has already been stated.

## ISSUE 2 – Policy Requirements

**Q1. Where mitigation is required, is the Plan sufficiently clear what is required, where and when? Is the Plan effective in this regard?**

### **PWTC Response:**

22. Policy STR/SS1 (The Strategy for Paddock Wood including land at east Capel) in the Development Strategy Addendum (January 2024), is entirely unclear about what mitigation is required, where when and how it will be delivered and which development will be responsible for delivery / contributions to each piece of infrastructure.
23. Under **‘Development Principles’** its only mention of transport infrastructure is where it states *“Provide walking and cycling linkages within and between each parcel, together with links to Paddock Wood town centre, existing and new employment areas, and surrounding countryside”*.
24. Under the **‘Masterplan’** section the only mention of transport infrastructure is :  
*“vi. Show the proposed transport links, including access to the development and main internal highway links and all intended links within the site and to the surrounding footpath and cycleway and bridleway network, including proposed and potential footpath and cycleway and bridleway links to the wider area*  
  
*viii. Provide for convenient and highly legible pedestrian and cycle links through the allocated site;*  
  
*ix. Show how the development will incorporate the full range of sustainable transport measures;*  
  
*xiii. The masterplans for the Eastern and Western Parcels shall include a phasing and implementation plan which shall identify the phasing of development across the whole of the relevant Parcel to ensure that the development will be carried out in a manner that co-ordinates the implementation and occupation of the development and the timely delivery of such necessary on and off-site infrastructure as shall be reasonably required to support the development and occupation of each Parcel and its proper integration with neighbouring Parcels and the timely provision of Parcel specific and shared infrastructure taking into account Table 11 of the Council’s SSMIS dated February 2021 as may be updated from time to time) or as may otherwise be reasonably required.”*
25. Under **‘Strategic Infrastructure’** it states:  
  
*“c) Occupiers have a range of sustainable travel options at their disposal, including access to bus services and the cycle and pedestrian links;*

*d) Transport links and associated transport and highway improvements and the provision of new transport and highway infrastructure is provided when it is needed to support the development and mitigate potential off-site highway and other transport impacts;*

*e) The delivery of necessary infrastructure shall be informed by ongoing discussions with relevant stakeholders, including Kent County Council and adjacent local authorities (Tonbridge & Malling and Maidstone Borough Councils) and other relevant statutory consultees and be kept under review throughout the planning stages of the development.*

*i) Cycle and pedestrian links across the development parcels and linking into the existing settlement including a north-south pedestrian and cycle bridge over the railway line linking the North-Western and South western parcels, linking neighbourhoods and providing access to community facilities;*

*j) Contributions towards the improvement of the highway network including the Colts Hill Bypass and Kippings Cross.”*

26. Under viii. what is meant by ‘highly legible’?

27. The policy is obviously vague, not effective and not justified by evidence and needs completely rewriting once the appropriate evidence has been provided, tested and consulted on.

**Q2. Have the costs associated with the necessary highways infrastructure been tested and will it be viable?**

**PWTC Response**

28. Please see our responses to Issue 1. The modelling does not set out the costs of the highways infrastructure (or sustainable / active travel measure) and there is no IDP with supporting cost estimates. The Viability evidence has not been updated as the latest version was December 2023, and the latest highways study was April 2024. Therefore no the costs have not been tested and the viability has not been assessed.