

Examination of the Tunbridge Wells
Borough Local Plan

Tunbridge Wells Borough Council
Hearing Statement

Matter 7: Highways Infrastructure
Issue 1: Strategic and Local Road
Networks

Document Reference: TWLP/142



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Matter 7 – Highways Infrastructure

Issue 1 – Strategic and Local Road Networks

Inspector's Question 1: [re. What will be the impacts on the B2017?]

Without the proposed bypass, what effect will the suggested changes to the Plan have on the B2017 through Five Oak Green? What mitigation measures will be necessary in this location and how will they be achieved?

TWBC response to Question 1

Introduction

1. The Development Strategy Topic Paper Addendum [[PS_054](#)] (DSTPA) sets out that, in response to the Initial Findings [[ID_012](#)], the Council has sought a significant reduction in housing in the Plan as a result of the reduction in number of dwellings associated with Paddock Wood and land at east Capel (STR/SS1) and the removal of the Tudeley Village allocation (STR/SS 3). The DSTPA sets out that further transport modelling has been carried out as part of the work on the revised strategy for the Strategic Sites.
2. This comprises the Tunbridge Wells Stage 1 Technical Note [[PS_047](#)] and includes:
 - Review of robustness of the Baseline 2019 model in the wake of the Covid-19 pandemic and how flows within the model relate to observed data in 2022.
 - Assessment of NTEM/TEMPro 7.2 housing and growth factors against NTEM/TEMPro 8, and update of Local Plan reference case model as required.
 - Review of Paddock Wood zone loading to confirm accuracy in key junctions where traffic flows will be loading onto the network.

- Review of the wider road network surrounding the wider Paddock Wood area. These reviews primarily focus on the congestion, demand and routing around Paddock Wood and Kippings Cross, and identified existing committed transport schemes (both pre-existing and those that have come forward since the original model), based on planning permissions as of August 2023.
3. Two further stages of modelling were carried out, Stage 2 [[PS_048](#)], assessed hotspots junctions within the network based on the proposed growth scenarios (without mitigation or any reduction to accommodate reduced traffic flows based on the use of sustainable modes of transport) and Stage 3 [[PS_049](#)], regarding model shift impact reporting (assessed the respective reduction in traffic flows based on sustainable transport assumptions).
 4. A further comprehensive assessment has been undertaken by the Council's transport consultants Sweco Strategic Transport Assessment – Modelling Appraisal (Matter 3 Issue 3 Appendix 1) (STA) which has sought to bring together all previous evidence.
 5. The Council has been in discussions and guided by National Highways and Kent County Council Highways throughout the process of responding to the Initial Findings. The work has been thorough, comprehensive and detailed.

Consideration

6. The outcomes from the Stage 3 modelling shows the following junctions of the B2017 as a 'major hotspot' where location specific mitigations would be needed to assist in easy congestion issues here and improving traffic flow.
 - A26 / B2017 Tudeley Road (Somerhill Roundabout)
 - A228 / B2017 (Badsell Roundabout)
7. Since the publication of the Stage 1, 2 and 3 Highways Modelling Technical Notes referenced above, further more detailed modelling has been carried out as outlined within the SWECO STA. The report provides the conclusions regarding the strategic modelling appraisal of the revised Local Plan growth scenario, setting out the key outcomes of each stage of the modelling within a single

document. It also details the outcomes of the Stage 3 Part 2 modelling, together with the final conclusions of the strategic transport modelling appraisal.

8. For the B2017 at Five Oak Green, the report concludes at section 5.2.2 (page 23), that: “whilst data analysis shows that congestion rises along the B2017 through Five Oak Green link in the Local Plan scenario, the demand is not seen as being of a level to justify a major expansion in link capacity or a new link road such as the Five Oak Green bypass that was previously considered”.
9. The report goes on to outline the implementation of enhanced traffic management through the area to better support the flow of vehicles could be provided. In support of this, enhanced infrastructure for people walking, wheeling and cycling should be incorporated to support more sustainable travel along this link.
10. Mitigation schemes, in the form of junction upgrades, are outlined within the report for both the A26 / B2017 Tudeley Road (Somerhill Roundabout) and A228 / B2017 (Badsell Roundabout) at sections 5.4 and 5.6 respectively.
11. Although the data analysis shows that congestion does rise along the B2017 through Five Oak Green link in the Local Plan scenario, the demand is not seen as being of a significant level to justify a major expansion in link capacity or importantly a new link road such as the Five Oak Green bypass that was previously considered and has been discussed in the Stage 3 Matter 3 hearing.
12. However, the modelling work does recommend that consideration is given to the implementation of enhanced traffic management through the area to better support the flow of vehicles whilst also integrating this with enhanced infrastructure for people walking, wheeling and cycling in the area to enable them to safely travel along and across the link. More broadly the sustainable transport measures should be designed to maximise accessibility to Paddock Wood rail services to reduce the need for car travel on this link. The design and implementation of these measures would be expected to be linked to Travel Plans and Monitor and Manage agreements for all major Local Plan developments in the wider Paddock Wood area.

Conclusion

13. The Council's response to the Initial Findings results in a significant reduction in development and as such a reduction in the associated impacts on the road network through traffic journeys. The Development Strategy Topic Paper is supported by a significant level of additional traffic modelling work which indicates where certain junction improvement work is required in particular at either end of the B2017 between Badsell Road roundabout and Somerhill Road roundabout.
14. Additional traffic management may be necessary along the B2017 between these two points to support walking, wheeling and cycling, however it is recommended that these measures, should they be necessary, be secured through Travel Plans and Monitor and Manage agreements as applications come forward with associated transport Assessments at the Development Management stage.

Inspector's Question 2: [re. What are the effects on Kipping's Cross?]

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?

TWBC response to Question 2

Introduction

15. The Council published as part of the Stage 2 hearings a Kipping Cross Option Note [[PS_033](#)] which is part of the Core Document Library (CDL) but has not been subject to formal consultation. The respective note relates to the highway mitigation measures that would have been necessary as part of the Submission Local Plan growth which at that point included a minimum of 3,490 dwellings at Paddock wood and land at east Capel (STR/SS 1), and 2,100 dwellings within the plan period (2,800 in total) at Tudeley Village (STR/SS 3).
16. The Councils response to the Initial Findings is summarised in the Development Strategy Topic Paper Addendum [[PS_054](#)] (DSTPA) which seeks to resolve matters raised in the Initial Findings [[ID_012](#)] by, amongst other things, significantly reducing the level by removing the STR/SS 3 allocation and lowering housing numbers by approximately 1,000 dwellings at STR/SS 3.
17. A significant level of additional transport modelling has been undertaken as a result which has been published in the CDL, but includes:
 - Stage 1 technical note [[PS_047](#)]
 - Local Plan Stage 2 reporting note [[PS_048](#)]
 - Local Plan Stage 3 modal shift Impacting reporting [[PS_049](#)]
 - Local Plan Stage 3 Part 2 Outcomes note [[PS_059](#)]
18. Since the initial findings were published the Council has continue to work with respective parties at National highways and Kent County Council highways on

the modelling and necessary mitigation. As such further documents have been published:

- Local Strategic Transport Assessment (STA) [Stage 3, Matter 3, Issue 1 Appendix 1]
- Modal Shift Analysis document [Stage 3, Matter 4, issue 4, Appendix 1]
- Tunbridge STA Addendum [Stage 3, Matter 7, Issue 1 Appendix 1]
- A264 Pembury Road corridor – Junction capacity assessment [Stage 3 Matter 7 Issue 1 Appendix 2]

Consideration

19. The transport modelling work undertaken on behalf of the Council has identified the potential for two different strategic interventions in the highway network at Kipping's Cross on the A21 which is part of the Strategic Road network.
20. The council in consultation with National Highways and KCC Highways has requested that consultants Sweco and Stantec undertake further modelling work in relation to capacity across the network. This has resulted in the A264 Pembury Road corridor – Junction capacity assessment (Appendix 1) and the Strategic Transport Assessment Addendum (appendix 2) being prepared to assist in looking at mitigation associated with Kipping's Cross.
21. The resolution of the additional modelling work is that with junction improvements associated with the A264 Pembury Road corridor, associated relief would be provided to the existing A21 Kippings Cross Junction, to the extent that upgrade works to the Kippings Cross junction would not be required as a result of the Local Plan development. Implementing improvements to the A264 Pembury Road corridor, rather than implementing improvements to the A21 Kippings Cross junction, would be the preferred strategy of TWBC which has been agreed in principle by National Highways and Kent County Council Highways.

Inspector's Question 3: [re. What are the effects on the remaining "hotspots"?)

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?

TWBC response to Question 3

Introduction

22. Review of the Local Plan has been undertaken in order to resolve matters raised by the Initial Findings [[ID_012](#)], which are in turn set out in the Councils Development Strategy Topic Paper Addendum [[PS_054](#)] (DSTPA).
23. A comprehensive and detailed review of highways modelling associated with the Councils response in the DSTPA is set out in the above Matter 7 statements and published as part of the proposed changes consultation.

Consideration

24. The matter of 'hotspots' was discussed during the Stage 3 Matter 3 sessions on Wednesday 19th June 2024. The Inspector raised whether the Council's consultants would be able to draft a comprehensive document which sets out the impacts from the change in strategy on respective junctions within the road network associated with the remaining strategic housing growth. The Tunbridge Wells Local Plan Junction Hotspot Comparison (JHC) has been prepared by Sweco on behalf of the Council and is found at Appendix 3 of this statement.
25. The JHC sets out how the hotspot junctions have reduced in number as a result of the amended development strategy (DSTPA) which is a consequence of the significant reduction in housing proposed. The quantum of residential development included in each of the model scenarios is summarised as the removal of the Tudeley Village strategic site results in a large decrease of 2,800 dwellings within the settlement of Capel. There is also a reduction of approximately 1,000 dwellings in Paddock Wood compared to the Submitted

Local Plan modelling. The JHC has modelled a number of scenarios to test junction capacity based on this revised position:

- Local Plan (LP)
- Local Plan Modal Shift (MS)
- Local Plan Highways Mitigation Option 2 (LPHM2)

26. The review of junctions has resulted in a significant difference in junctions considered to be a hotspot from the Submission Local Plan which is set out in significant detail in the JHC but summarised as follows and shown in Table 3 of the JHC at Appendix 3 of this statement:

LP Scenario	Number of 'hotspots'
Submission Local Plan (LP)	40
Local Plan Highways test (LPH)	43
Mitigation Scenario (MS)	16
DSTPA Local Plan (LP)	14
Local Plan Modal Shift (MS)	8
Local Plan Highways Mitigation Option 2 (LPHM2)	5

27. The addition of the revised Local Plan development on the highway network, without mitigation, is forecast to have a significant impact at locations throughout the Borough of Tunbridge Wells. The analysis identifies the need for additional capacity beyond what is currently provided. The results from the Local Plan Mitigation Scenario show that delivering sustainable transport schemes with high levels of modal shift can contribute to bringing about the congestion relief required. This outcome follows the direction of travel from the Government with a need for more focus on enabling walking and cycling and using public transport.

28. The level of mitigation necessary is identified in the Local transport Assessment, and further to these standalone junction improvements other locations should also be considered as part of the Monitor and Manage approach with a view to

investigating minor local mitigation measures as part of relevant planning applications. The proposed growth associated with the Local Plan (as amended by the DSTPA) will not result in any unacceptable highway safety impacts, and those cumulative impacts that have been identified will not be severe.

Inspector's Question 4: [re. Can any significant impacts on the transport network be cost effectively mitigated?]

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?

TWBC response to Question 4

Introduction

29. The aforementioned transport and highway modelling that has been undertaken to support the Council's response to the Initial Findings [[ID_012](#)] is set out in the DSTPA [[PS_054](#)] and the associated highways reports which are identified in the above hearings statements.

30. DSTPA sets out what the proposed changes to the plan are and the key infrastructure requirements are outlined in the Strategic Sites Master Planning and Infrastructure Study Follow on Study [[PS_046](#)] (FOS) to ensure the development can come forward with the necessary infrastructure to meet the local requirements.

31. The Council's Consultants Dixon Searle Partnership have undertaken an Addendum to the Local Plan Viability Assessment Main report [[PS_061](#)].

Consideration

32. The Council's consultants have prepared further modelling work based on the proposed changes to the Submission Local Plan as set out in the DSTPA, which is set out above in earlier Matter 7 statements. The impacts identified from that modelling work are considered to be satisfactorily resolved as a result of a combination of modal shift and road junction enhancements and mitigation which has been identified as part of the modelling work.

33. The Strategic Transport Assessments sets out what these development related highway mitigation measures are and when completed they will mitigate any significant impacts on the transport network (in terms of capacity and congestion), and/or on highway safety.

34. The Viability Assessment Addendum has included the specific junction improvements associated with the transport modelling work based on cost assumptions that have been reviewed and based on any likely cost increases since the Stage 2 hearings, and the viability assessment includes a contingency of up to 5% to cover any variances that may come forward.
35. Consequently the impacts that are required can be cost effectively mitigated as part of the overall package of delivery measures identified in the Plan. In order to identify which junctions do require mitigation and when they will come forward, the council is working with consultants and such measures will be identified in a revised Infrastructure Delivery Plan that will be published and consulted on with the Main Modifications.

Appendices

Appendix 1: Tunbridge Wells Local Plan – STA Addendum

Tunbridge Wells Local Plan – Strategic Transport Assessment Addendum

Project Tunbridge Wells Local Plan Transport Assessment
Name:

Author: Ben Hope
Review and Approve: Ben Hope
Date: 12/06/2024
Document Reference:

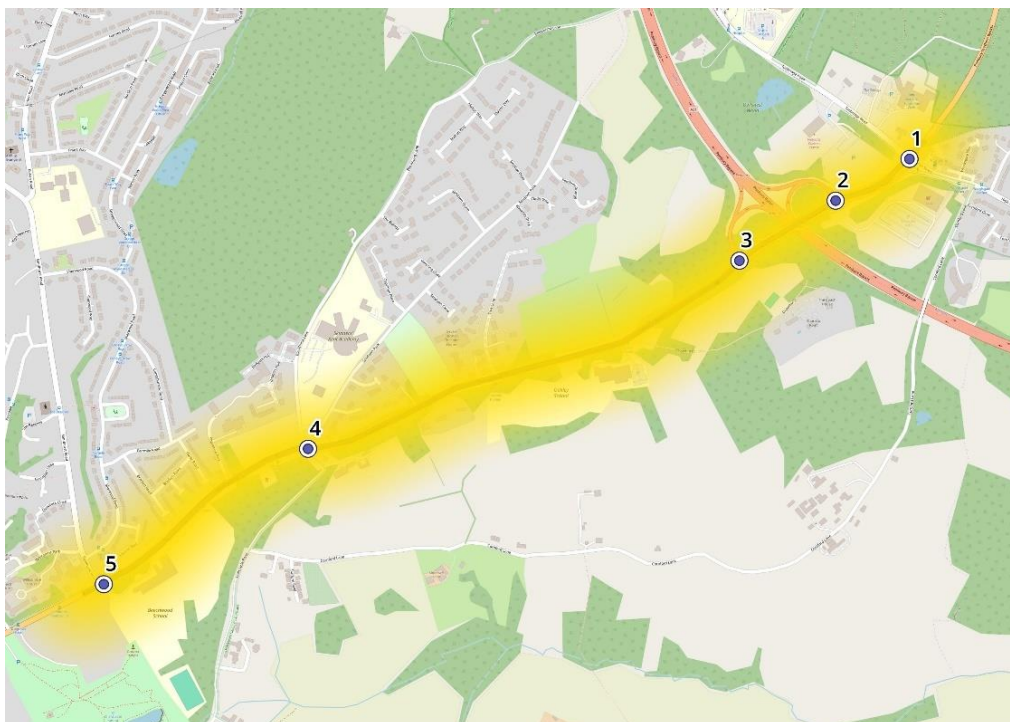
3 Revision: 1

1. Introduction

Sweco has been commissioned by Tunbridge Wells Borough Council (TWBC) to undertake further traffic modelling for the TWBC Local Plan submission to assist in addressing Inspector's comments at the Examination in Public (EiP) for the TWBC Local Plan. The work undertaken is set out in the Tunbridge Wells Local Plan - Strategic Transport Assessment (STA)¹.

During the Local Plan modelling, improvements to the Pembury Road corridor (illustrated in Figure 1) were identified as a potential highway mitigation option. At the time, Stantec was looking at potential improvement options along the corridor however detailed proposals were not available.

Figure 1: Pembury Road Junctions



¹ [TWLP_123-Appendix-1-SWECO-Strategic-Transport-Assessment.pdf \(tunbridgewells.gov.uk\)](#)

To reflect an emerging scheme along the corridor, strategic modelling using the Tunbridge Wells Traffic Model (TWTM) assumed an uplift in capacity of 10% at the five junctions illustrated in Figure 1. These assumptions were included within the Local Plan Highway Mitigation Option 2 (LPHM2) scenario. It was the intention to review these assumptions following the completion of the optioneering work undertaken by Stantec with a view to undertaking an updated model run once more detailed proposals were available.

Stantec's study is now complete with the findings reported in A264 Pembury Road Corridor – Junction Capacity Assessment Technical Note. The study identified deliverable improvements at 4 of the 5 junctions on the corridor.

The STA also identified other highway measures required to mitigate the impact of Local Plan traffic and the estimated year these will be needed. This analysis estimated the Colts Hill Bypass and Badsell Roundabout schemes will be needed in 2029. This was a high-level assessment which considered when Badsell Roundabout is forecast to become over capacity in both peaks due to a combination of Reference Case and Local Plan development. Following the publication of the STA, and further discussions between Sweco, Stantec and TWBC, further information was requested on when the impact of Local Plan traffic in isolation is expected to have a significant impact on the operation of Badsell Roundabout. Further analysis has therefore been undertaken to estimate the likely future year when the impact of Local Plan traffic at Badsell Roundabout will meet the 'hotspot' criteria.

This technical note details the results of the updated strategic model run of the LPHM2 scenario, incorporating the interventions presented in A264 Pembury Road Corridor – Junction Capacity Assessment Technical Note. The results presented in this note supersede those presented for the LPHM2 scenario in Section 5.11 of the STA. This note also presents the new analysis on the required delivery date of the Colts Hill Bypass and Badsell Roundabout schemes. It should be read in conjunction with the STA.

2. Model Scenario

The revised LPHM2 model includes the following interventions:

- Sustainable Transport Interventions (see Chapter 4 of STA)
- Colts Hill Bypass
- Badsell Roundabout Improvements
- Somerhill Roundabout Improvements
- Hop Farm Roundabout Improvements
- Pembury Road Capacity Improvements
 - A228 Pembury Road / Tonbridge Road (Woodgate Corner)
 - A228 Pembury Road A21 flyover South West Dumbbell
 - A264 Pembury Road / Hall's Hole Road
 - A264 Pembury Road / Sandhurst Road

No improvements at Kipping's Cross are included in this scenario.

3. Model Results

Traffic Flow Differences

The impact of the highway mitigation interventions on traffic flows is illustrated in the flow difference plots presented in Figure 2 (AM) and Figure 3 (PM). These compare the revised LPHM2 scenario with the Local Plan Modal Shift (LPMS) scenario.

Figure 2: Local Plan Highway Mitigation Option 2 – Local Plan Modal Shift Flow Difference AM

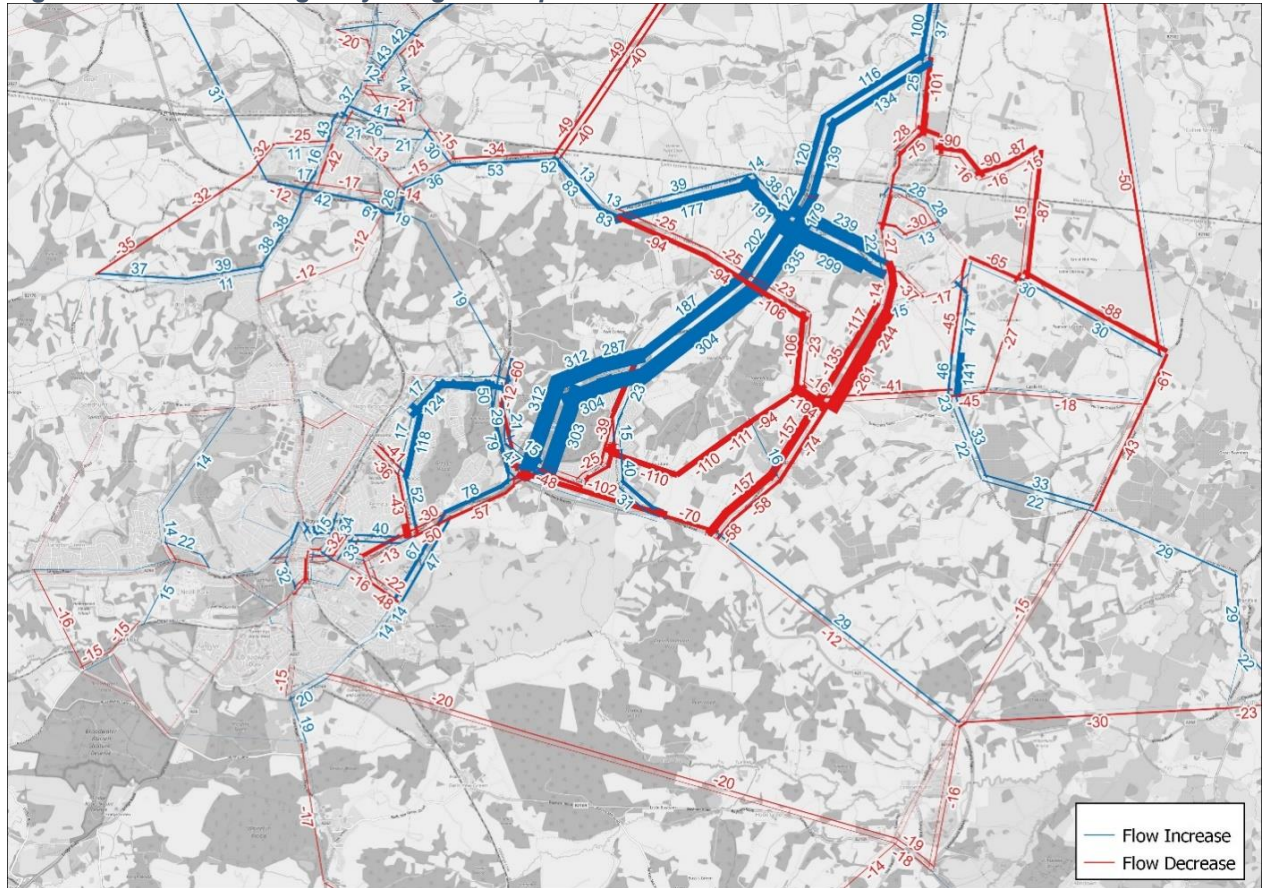
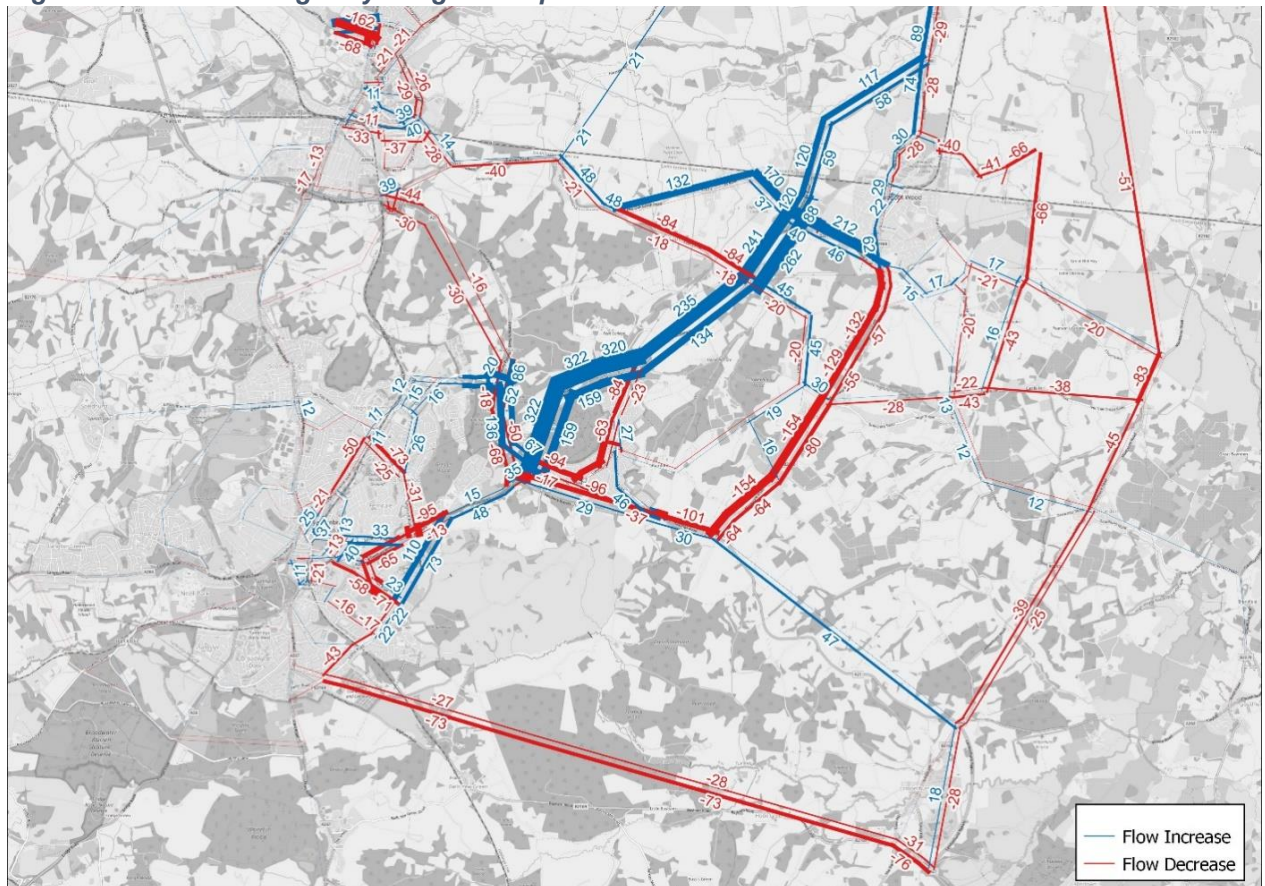


Figure 3: Local Plan Highway Mitigation Option 2 – Local Plan Modal Shift Flow Difference PM



The above demonstrates a notable increase in traffic on the A228 corridor. This can be attributed to the Badsell Roundabout improvement, Colts Hill bypass and Pembury Road junction interventions. The combination of these interventions leads to a greater increase in traffic along this corridor in comparison to the Local Plan Highway Mitigation Option 1 (LPHM1) scenario which does not include the Pembury Road junction improvements. There are corresponding decreases on the alternative routes via Kipping's Cross and Pembury.

Hotspots

The identification of hotspots for the revised LPHM2 scenario follows the same methodology as the LP Core and LPMS scenarios, as discussed in Section 3.3 of the STA. The analysis has identified the following high-level summary:

- 9 'minor' hotspot junctions – this is the same number as in the LPMS scenario. It should be noted that 4 of these junctions were classed as 'major' hotspots in the LPMS scenario.
- 5 'major' hotspot junctions - a reduction from 8 in the LPMS scenario. These include 3 that remain from the LPMS scenario and 2 additional locations.

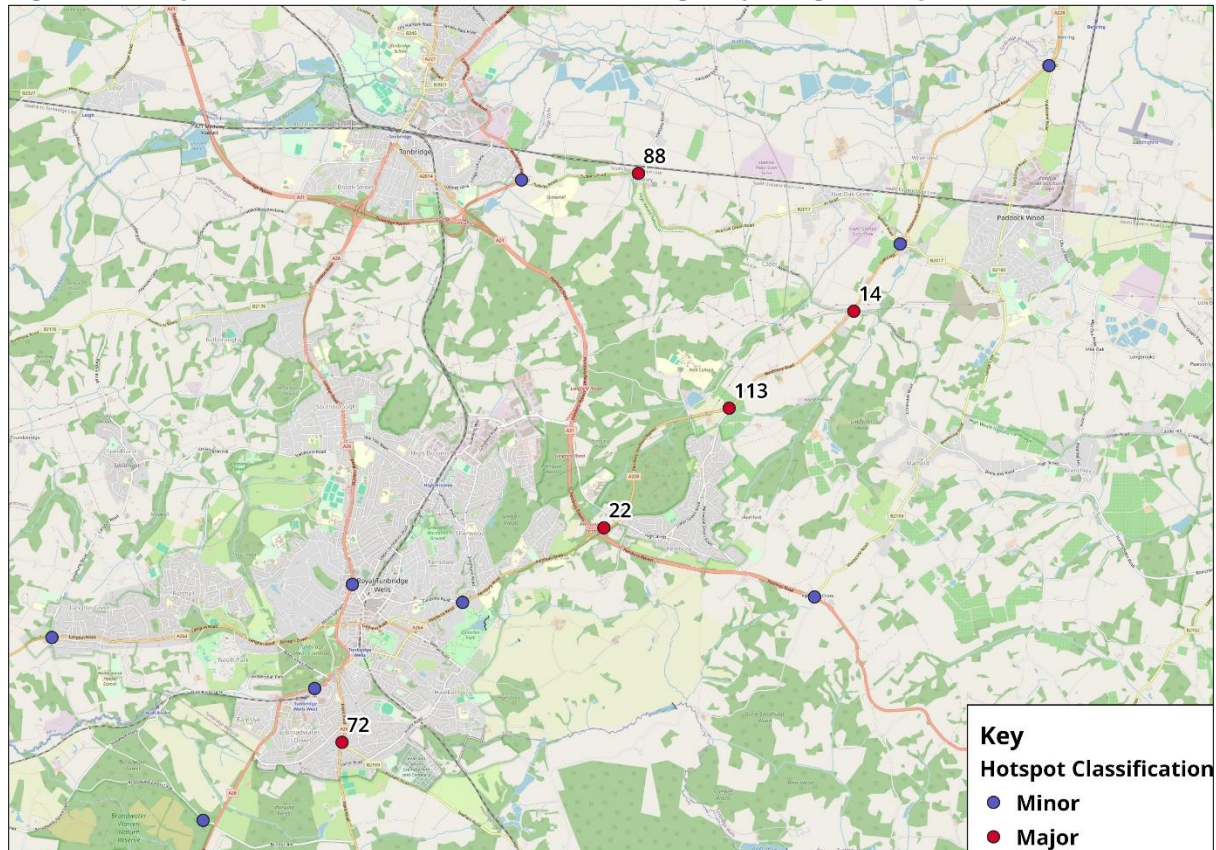
The 'major' hotspots are summarised in Table 1 and illustrated in

Figure 4.

Table 1: Major Hotspot Summary – Local Plan Highway Mitigation Option 2 Scenario

ID	Junction name	Location
14	A228 / Alders Road / Crittenden Road	Paddock Wood
22	A228 Pembury Road A21 flyover North East Dumbbell	Pembury
72	A267 / B2169 Birling Road	Royal Tunbridge Wells
88	B2017 / Hartlake Road	Tudeley
113	A228 / Maidstone Road	Pembury

Figure 4: Hotspot Junction Locations – Local Plan Highway Mitigation Option 2 Scenario



A total of 5 junctions that fall out of the 'major' hotspot list from the LPMS scenario, 3 are as a direct result of the highway mitigation measures included in the model as follows:

- Junction 8: Somerhill Roundabout
- Junction 12: Hop Farm Roundabout
- Junction 13: Badsell Roundabout

The remaining 2 junctions falling out of the 'major' hotspot list are resultant of the combined effect of the Colts Hill Bypass, Badsell Roundabout, and Pembury Road corridor improvements which divert traffic away from B2160 Maidstone Road:

- Junction 35: Kipping's Cross Roundabout
- Junction 107: Matfield Crossroads

Of the outstanding 5 'major' hotspots the following 3 junctions have not been considered for detailed highway interventions for the reasons set out in Section 4.3.2 of the STA:

- Junction 14: A228 / Alders Road / Crittenden Road
- Junction 72: A267 / B2169 Birling Road
- Junction 88: B2017 / Hartlake Road

The remaining 'hotspot' junctions are additional to those presented in the LPMS scenario:

- Junction 13: A228 / Maidstone Road – this junction is located on the Pembury Road corridor to the north of the junctions where capacity has been added in the LPHM2 scenario and to the south of Colts Hill Bypass and Badsell Roundabout. The general increase in traffic on this corridor due to these capacity improvements has caused this junction to also become over capacity. This junction is also identified as a 'hotspot' in

the LPHM1 scenario. It is recommended that this junction is either considered as part of the A228 Pembury Road corridor study or taken account of in the Monitor and Manage plan with a view to investigating mitigation measures as part of relevant planning applications.

- Junction 22: A228 Pembury Road A21 flyover North East Dumbbell – it is notable that this junction was considered within Stantec’s Pembury Road Corridor study. The study concluded no improvements are required as the detailed junction modelling indicated the junction is expected to perform within capacity even with the increased demand on Pembury Road. Further investigation into the strategic modelling results shows that the hotspot criteria are met in the PM peak when the Volume over Capacity (V/C) on the Pembury Road northbound approach increases from 86% in the Reference Case (RC) to 97% in the LPHM2 scenario. Whilst the Local Plan is expected to have an impact at this location, the junction is still forecast to operate within its ultimate capacity in the strategic modelling. The purpose of the strategic modelling is to identify potential hotspot locations which require further detailed investigation. Given the detailed junction modelling indicates the junction would be within capacity, and the proposed wider capacity increases along the Pembury Road corridor demonstrated by both the strategic and junction modelling, no further mitigation has been considered at this location.

4. Badsell Roundabout / Colts Hill Bypass Delivery Date

The analysis presented in the STA estimated the Colts Hill Bypass and Badsell Roundabout schemes will be needed in 2029. This was a high-level assessment which considered when Badsell Roundabout is forecast to become over capacity in both peaks due to a combination of Reference Case and Local Plan development. The analysis was based on the capacity at Badsell Roundabout as this is the main capacity constraint within the area and the two schemes are intrinsically linked.

Following the publication of the STA, and further discussions between Sweco, Stantec and TWBC, further information was requested on when the impact of Local Plan traffic in isolation is expected to have a significant impact on the operation of Badsell Roundabout. Further analysis has therefore been undertaken to estimate the likely future year when the impact of Local Plan traffic at Badsell Roundabout will meet the ‘hotspot’ criteria described in Section 3 of this report.

The analysis is based on Volume over Capacity (V/C) statistics by year derived using the following methodology:

- V/C results for 2018 Base Case and 2030 and 2038 forecast years are taken directly from relevant models.
- V/C results for remaining years calculated using interpolation based on total future residential development build out rates.
- Analysis compares the Reference Case (RC) and Local Plan Modal Shift (LPMS) scenarios. The hotspot criteria are met when the increase in V/C on any approach is forecast to be greater than 5% in the LPMS scenario compared to the RC.

The analysis is presented in Table 2 and Table 3 for the AM and PM peak hours respectively. This shows the hot spot criteria are met in 2031 in the AM and 2032 in the PM.

Table 2: Badsell Roundabout Modelled V/C Results - AM

Time	Scenario	Approach	Year																
			2018	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
AM	Reference Case	A228 Maidstone Road (N)	99	104	104	105	105	106	106	106	107	107	108	109	109	110	110	111	
		B2017 Badsell Road (E)	78	95	98	100	101	103	104	105	106	106	106	107	107	107	107	107	108
		A228 Maidstone Road (S)	77	88	90	91	92	93	94	95	95	95	95	94	94	94	94	94	94
		B2017 Badsell Road (NW)	43	53	55	56	57	58	59	60	60	61	62	63	64	64	64	65	66
	Local Plan Modal Shift	A228 Maidstone Road (N)	99	105	106	107	108	109	110	111	111	112	112	113	113	113	113	113	113
		B2017 Badsell Road (E)	78	94	97	100	102	105	107	110	111	113	114	115	116	116	116	116	116
		A228 Maidstone Road (S)	77	87	89	91	92	94	96	97	98	99	100	101	101	101	101	101	102
		B2017 Badsell Road (NW)	43	55	57	58	60	62	64	66	67	68	69	70	71	71	71	71	71
	% Difference	A228 Maidstone Road (N)	0%	1%	2%	2%	2%	3%	3%	4%	4%	4%	4%	4%	3%	3%	2%	2%	
		B2017 Badsell Road (E)	0%	-1%	-1%	-1%	0%	1%	3%	4%	5%	7%	8%	8%	8%	8%	8%	8%	8%
		A228 Maidstone Road (S)	0%	-1%	-1%	-1%	0%	1%	2%	3%	4%	5%	6%	7%	7%	7%	7%	7%	8%
		B2017 Badsell Road (NW)	0%	3%	3%	4%	5%	6%	8%	11%	11%	12%	12%	12%	10%	10%	8%	7%	

Table 3: Badsell Roundabout Modelled V/C Results - PM

ID	Scenario	Approach	Year																
			2018	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
PM	Reference Case	A228 Maidstone Road (N)	62	75	78	80	81	82	83	84	85	86	87	89	90	91	92	94	
		B2017 Badsell Road (E)	45	57	60	61	62	64	64	65	66	66	66	67	67	67	68	68	
		A228 Maidstone Road (S)	89	95	97	97	98	99	99	99	99	100	100	100	100	100	100	100	100
		B2017 Badsell Road (NW)	74	91	94	96	97	99	100	101	101	101	101	101	101	102	102	102	102
	Local Plan Modal Shift	A228 Maidstone Road (N)	62	76	79	81	83	85	87	90	92	95	98	100	100	101	101	101	101
		B2017 Badsell Road (E)	45	59	61	63	65	68	70	72	75	78	81	83	84	84	84	84	85
		A228 Maidstone Road (S)	89	95	96	97	98	99	100	101	102	103	103	104	104	104	104	104	104
		B2017 Badsell Road (NW)	74	89	92	94	96	99	101	103	105	107	108	109	110	110	110	110	110
	% Difference	A228 Maidstone Road (N)	0%	1%	1%	1%	3%	4%	5%	7%	8%	11%	12%	13%	12%	11%	10%	8%	
		B2017 Badsell Road (E)	0%	2%	2%	3%	5%	6%	8%	11%	14%	19%	22%	25%	25%	25%	25%	25%	
		A228 Maidstone Road (S)	0%	0%	0%	0%	0%	1%	1%	2%	3%	3%	4%	4%	4%	5%	5%	5%	
		B2017 Badsell Road (NW)	0%	-2%	-2%	-2%	-1%	0%	1%	2%	4%	5%	7%	8%	8%	8%	8%	8%	8%

5. Summary

This report is an addendum to, and should be read in conjunction with, the Tunbridge Wells Local Plan - Strategic Transport Assessment (STA)². It presents the results of an update to the Local Plan Highway Mitigation Option 2 (LPHM2) scenario based on more detailed feasibility design and junction modelling work undertaken by Stantec on the Pembury Road corridor. In addition, further detailed analysis has been undertaken on the required delivery date of the Colts Hill Bypass and Badsell Roundabout schemes.

The updated LPHM2 scenario results presented in this report are broadly similar to those presented in the STA. Whilst one additional hotspot location was identified within the strategic modelling, the A228 Pembury Road A21 flyover North East Dumbbell (junction 22), the more detailed junction modelling forecasts that this junction would operate within capacity. The conclusions of this scenario are therefore in line with those presented in the STA.

A detailed analysis of the model results show that the hotspot criteria are expected to be met at Badsell Roundabout in 2031 due to the addition of Local Plan traffic. It is therefore considered that the Colts Hill Bypass and Badsell Roundabout scheme would be required by 2031 to mitigate the impact of Local Plan development.

² [TWLP_123-Appendix-1-SWECO-Strategic-Transport-Assessment.pdf \(tunbridgewells.gov.uk\)](#)

Appendix 2: A264 Pembury Road Corridor – Junction Capacity Assessment.

Please see separate document TWLP_142 Appendix 2 A264 Pembury Road corridor –
Junction capacity assessment.pdf

Appendix 3: Tunbridge Wells Local Plan – Junction Hotspot Comparison

Please see separate document TWLP_142 Appendix 3 Junction Hotspot Comparison.pdf