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Civic Centre, Maltravers Rd
Littlehampton
West Sussex
BN17 5LF

Date: 12 February 2021

Our ref: 14714/02/SSL/ZS/19433495v1

Your ref: BE/148/20/OUT

Dear Amy

Application at Nursery Fields, Land to the north of Chalcraft Lane, West Bersted (ref. BE/148/20/OUT)

On behalf of our clients, The Church Commissioners for England and Landlink Estates, please find enclosed comments made in relation to the planning application submitted for land at Nursery Fields, land to the north of Chalcraft Lane, West Bersted by Landform Bersted Ltd. The application seeks permission for the following:

“Outline application with some matters reserved to provide up to 225 residential units with associated infrastructure, open space and vehicular and pedestrian access. This application affects a Public Right of Way.”

As you will be aware, the site forms part of Strategic Allocation site SD3 Land West of Bersted which is allocated for at least 2,500. The Church Commissioners for England and Landlink Estates are the majority landowners for the site and are in the process of preparing an outline application for up to 2,200 dwellings.

Having reviewed the details of the planning application submitted for the Nursery Fields application, our clients have a number of concerns with the application and, as such, are objecting to the planning application. The objection is on the basis of the following three grounds:

- 1 The site forms part of a strategic site allocation and the application should be treated as being a part of that and not in isolation; this includes all assessments submitted with the application and any costs associated with the delivery of required mitigation and infrastructure should be proportionally split. The application submitted has not considered the site comprehensively and there is no commitment to make a reasonable contribution to the overall infrastructure costs of delivering necessary mitigation measures for the strategic site.
- 2 Significant shortcomings have been identified in the submitted Transport Assessment. A detailed technical note has been provided at Appendix 1. These concerns should be shared with West Sussex County Council (WSCC) who may not have been aware of the importance of considering these matters comprehensively and, if necessary, should be reviewed by an independent transport consultant on behalf of Arun District Council as appropriate highway mitigation has not been provided.

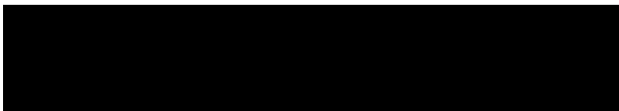


- 3 The application proposals are not consistent with the principles of the Framework Masterplan as it shows a vehicular link between the two ownership parcels. The application shows this as a possible bus/pedestrian link only.

Unless the application is amended to respond to the above issues, the Church Commissioners for England and Landlink Estates will maintain their objection to the application.

I trust the above is clear and helpful, however, should you require any further information please don't hesitate to contact me or my colleague Clare Catherall.

Yours sincerely



Zoe Simmonds
Senior Planner

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**Appendix 1 Review of i-Transport Modelling prepared by Pell Frischmann
(dated 03 February 2021)**

Pell Frischmann		Project No. A13395
		Version No. Final
TECHNICAL NOTE	Project West Bersted	Date 16/02/2021
Subject Review of i-Transport Modelling		By Chkd S. Moody P. Smith

Introduction

- 1.1 Pell Frischmann is providing transport consultancy advice for development being delivered as part of the strategic allocation at West Bersted. This note summarises a review of the modelling of the B2259/ North Bersted Street/ Chalcraft Lane double mini roundabout.

Review of i-Transport model inputs

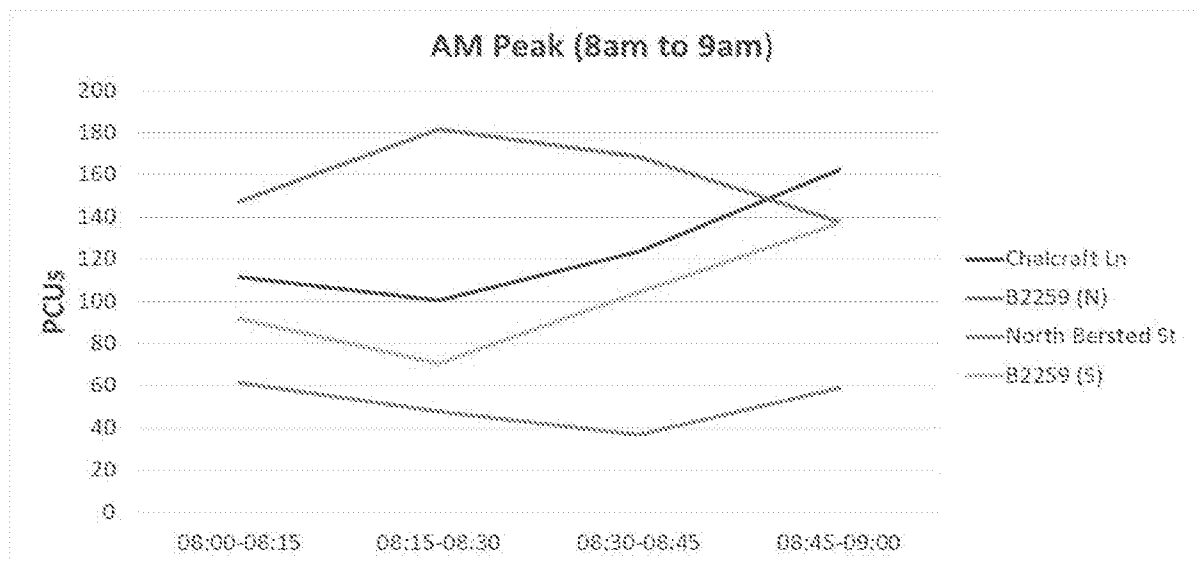
Observed traffic data

- 1.2 Pell Frischmann commissioned manual classified count, queue length and video surveys of the B2259/ North Bersted Street/ Chalcraft Lane junction and these were undertaken in November 2019. It is understood from the i-Transport transport assessment report that they commissioned surveys that were undertaken in November 2018.

Traffic data input to model

- 1.3 The i-Transport modelling uses the ONE HOUR data entry methodology which simulates a profile where the peak demand is in the middle 30 minutes of the modelled period. It is considered that it is more representative to model the junction using the DIRECT data entry methodology and it is assumed that i-Transport commissioned a survey that provided the data in 15 minute intervals during the peak periods.
- 1.4 The focus of this review is on the AM peak period due to known traffic congestion concerns at the junction. Consideration of the traffic profile across the period 8am to 9am for each of the entry arms to the double mini-roundabout shows that a ONE HOUR data entry would not accurately reflect traffic patterns at this junction. The profiles from the November 2019 survey are shown in Figure 1.

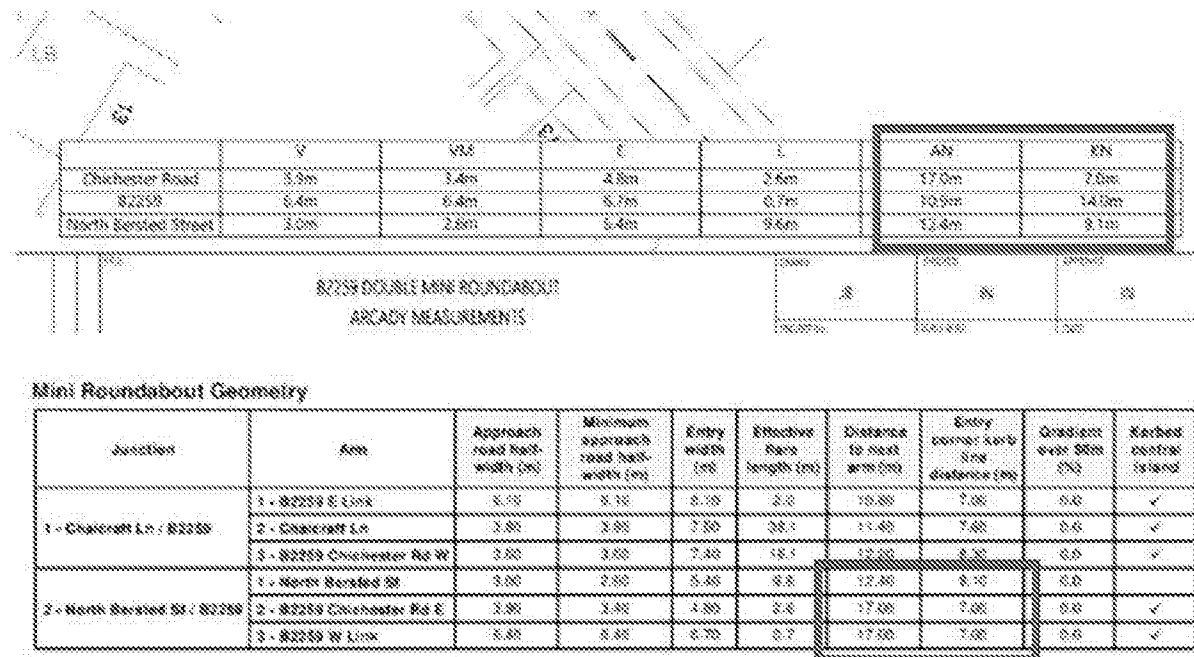
Figure 1: Observed traffic flows (November 2019) AM peak hour (8am to 9am)



Junction measurements

- 1.5 Review of the geometric inputs to the junction models has determined that two values shown on Drawing ITB14224-GEOM-003 do not match those input to the model (based on review of the model output files appended to the transport assessment report). These are highlighted in Figure 2.

Figure 2: i-Transport junction measurements



Junction model calibration

- 1.6 Pell Frischmann has reviewed the traffic surveys and video footage from November 2019, and it is observed that there is congestion on the B2259 during the AM peak hour. It is understood that this is due upstream delay at the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road roundabout which blocks back through the junction, resulting in a slow moving rolling queue on Chalcraft Lane and the B2259. When the video footage is considered alongside the queue length survey data, it is considered that an adjustment to the capacity of these arms in the model is necessary to more accurately reflect the junction performance. The traffic survey data and video footage from November 2019 was shared with i-transport on 9th February 2020.
- 1.7 The intercept adjustments made are summarised in Table 1, and it is considered that these should be made to modelling undertaken by i-Transport.

Table 1: AM peak hour (8am to 9am) before and after calibration junction model results

	Queue without intercept (PCU)	RFC without intercept adjustment	Observed queue (PCU)	Intercept Adjustment (%)	Queue after adjustment (PCU)	RFC after intercept adjustment
North Rbt: B2259 (S) (internal)	1.5	0.59	5.67	75	4.0	0.81
North Rbt: Chalcraft Lane	1.5	0.59	7.25	80	3.8	0.81
North Rbt: B2259 (N)	1.4	0.58	3.08	0	1.4	0.58
South Rbt: B2259 (N) (internal)	1.1	0.51	1.83	0	1.1	0.51
South Rbt: North Bersted Street	0.6	0.39	4.33	0	0.6	0.39
South Rbt: B2259 (S)	1.9	0.65	0.25	0	2.5	0.72

Forecast year traffic growth

- 1.8 It is noted that the approach adopted in the i-Transport assessment was to apply growth directly from committed developments and from TEMPro using the alternative assumptions feature.
- 1.9 It is also noted that Table 7.1 of the i-Transport report shows the difference between the existing households and future households in TEMPro for the periods 2018 to 2023, 2018 to 2025, and 2018 to 2031. An extract from the report is shown in Figure 3.

Figure 3: Table 7.1 from i-Transport report

Table 7.1: TEMPRO Assumptions

Scenario	Area	Existing H/Holds	Future H/Holds	Existing Jobs	Future Jobs
2018 – 2023					
Existing Assumptions	Arun 012	3,413	3,606	2,771	2,818
Alternative Assumptions	Arun 012	3,413	3,413	2,771	2,818
2018-2025					
Existing Assumptions	Arun 012	3,413	3,577	2,771	2,835
Alternative Assumptions	Arun 012	3,413	3,413	2,771	2,835
2018-2031					
Existing Assumptions	Arun 012	3,413	3,848	2,771	2,878
Alternative Assumptions	Arun 012	3,413	3,413	2,771	2,878

Source: TEMPRO and Consultant calculations

- 1.10 The modelling of the wider strategic allocation at West Bersted has been required by WSCC to considered background traffic growth and all local plan and committed developments in the assessment years 2031 and 2038 using the strategic traffic model, and includes the Chalcraft Nurseries site.
- 1.11 It is apparent from review of the transport assessment that WSCC has not required i-Transport to consider the traffic growth of the wider strategic allocation at West Bersted. It is noted that there appears to be an inconsistency of advice provided to different applicants undertaking technical analysis of the same overall strategic housing allocation.

2031 strategic traffic modelling (AM peak hour)

- 1.12 The strategic model outputs provided by WSCC for the assessment of the development impact have been input into the junction model and the do minimum results for the AM peak hour are summarised in Table 2.
- 1.13 This demonstrates that with the baseline model calibration still applied to the 2031 do minimum junction model, the junction performance exceeds capacity on some arms. It is noted again that the

need to calibrate the junction is driven by the due upstream delay at the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road roundabout which blocks back through the junction.

- 1.14 The site access strategy for the wider allocation include a spine road and site access to the A259. The North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road junction would need to be enlarged to provide a site access for the wider allocation on the West Bersted site, and the congestion that currently exists along the B2259 will be reduced as a result of this scheme.
- 1.15 It is therefore considered appropriate in the do something model scenarios to remove the calibration adjustments that need to be made to the 2019 base and 2031 do minimum models. The results from the 2031 AM peak hour do something models are shown in Table 3.

Table 2: AM peak hour (8am to 9am) 2031 do minimum junction model results

	AM Peak (8am to 9am)	
	RFC	Queue
North Rbt: B2259 (S) (internal)	0.81	4.0
North Rbt: Chalcraft Lane	0.80	3.7
North Rbt: B2259 (N)	0.62	1.6
South Rbt: B2259 (N) (internal)	0.50	1.0
South Rbt: North Bersted Street	1.05	9.9
South Rbt: B2259 (S)	1.24	31.9

Table 3: AM peak hour (8am to 9am) 2031 do something junction model results

	AM Peak (8am to 9am)	
	RFC	Queue
North Rbt: B2259 (S) (internal)	0.79	3.6
North Rbt: Chalcraft Lane	0.65	1.8
North Rbt: B2259 (N)	0.72	2.5
South Rbt: B2259 (N) (internal)	0.60	1.5
South Rbt: North Bersted Street	0.48	0.9
South Rbt: B2259 (S)	0.80	3.8

- 1.16 This demonstrates that the arms that are over capacity in the 2031 do minimum modelling can be resolved through improvements to the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road junction as it is considered this would address the existing blocking back problem through the B2259/ North Bersted Street/ Chalcraft Lane junction, and traffic reassignment forecast by the strategic traffic model when the spine road is provided to allow an alternative route to using Chalcraft Lane.
- 1.17 The i-Transport report is currently suggesting that the link road is not required to allow the Chalcraft Nurseries development to proceed, but does identify there would be a benefit through a traffic reduction on Chalcraft Lane. Paragraph 7.4.6 states:

"Notwithstanding the above, the link road will provide a significant redistribution effect on the local network. As the impact of the link road is not associated nor required for the delivery of the proposed development further assessment of the link road has not been undertaken as part of this TA however, it is evident that it will remove traffic from Chalcraft Lane that is travelling to the A259 from locations within the southern areas of Bognor and its surround (e.g. Pagham).

- 1.18 Based on the assessment above, it is considered that the Chalcraft Nurseries site does rely on the blocking back issue to be resolved and would benefit from the delivery of the spine road through the wider West Bersted site allocation.

Summary

- 1.19 The following key point are highlighted:
- The i-Transport modelling uses the ONE HOUR data entry methodology. It is considered more representative to model the junction using the DIRECT data entry methodology.
 - Review of the geometric inputs to the junction models has determined that two values shown on Drawing ITB14224-GEOM-003 do not match those input to the model.
 - Review of the traffic surveys and video footage from November 2019 shows there is congestion on the B2259 during the AM peak hour. It is understood that this is due upstream delay at the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road roundabout which blocks back through the B2259/ North Bersted Street/ Chalcraft Lane junction.
 - When the video footage is considered alongside the queue length survey data, it is considered that an adjustment to the capacity of these arms in the model is necessary to more accurately reflect the junction performance.
 - It is apparent from review of the transport assessment that WSCC has not required i-Transport to consider the traffic growth of the wider strategic allocation at West Bersted. There appears to be an inconsistency of advice provided to different applicants undertaking technical analysis of the same overall strategic housing allocation.
 - The forecast year assessments presented by i-Transport in their report should have included capacity adjustments and additional traffic growth to take account of local plan traffic growth, including the wider allocation on the site at West Bersted.
 - Modelling of a 2031 do minimum scenario that includes the Chalcraft Nurseries development plus background traffic growth and all local plan and committed developments is shown to result in a performance where capacity is exceeded on some arms.
 - The North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road junction would need to be enlarged to provide a site access for the wider allocation on the West Bersted site, and the congestion that currently exists along the B2259 will be reduced as a result of this scheme. This would allow the capacity adjustments made to the base model to be removed from the 2031 do something scenario.
 - The results from the 2031 do something modelling (which includes the full buildout of the site allocation) shows that the arms that are over capacity in the 2031 do minimum modelling can be resolved through improvements to the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road junction as it is considered this would address the existing blocking back problem through the B2259/ North Bersted Street/ Chalcraft Lane junction.
- 1.20 Based on this technical review, it is considered that there are some resolvable issues with the i-Transport modelling which can be rectified through DIRECT data input, model calibration and consideration of consistent development growth assumptions to those required as part of transport assessment of the wide site allocation.
- 1.21 However, i-Transport could utilise the findings above which recognise that delivery of the spine road and importantly the capacity improvements at the North Bersted Bypass/ Elbridge Avenue/ B2259/ Chichester Road junction which address the blocking back issue on the B2259 in the AM peak are necessary to improve the operation of the B2259/ North Bersted Street/ Chalcraft Lane roundabout.

