

Technical Note No. 2

Project: P/2016/00189 – Outline Application for Residential Development (up to 189 dwellings)

Title: **Response to WC comments on Transport Assessment**

Date: 16 June 2016

1.0 Introduction

- 1.1 The purpose of this Technical Note is to provide a response to the comments raised by Wrexham Councils (WC) highway officer on the proposed Transport Assessment, submitted in association with planning application P/2016/00189.
- 1.2 The trip generation of the proposed residential development (up to 189 dwellings) is anticipated to be 136 two-way trips in the Weekday AM peak hour and 132 in the Weekday PM peak hour. The proportional impact on base traffic flows on the B5425 Llay New Road during the AM peak will be 5.3% to the north of the proposed site access and 4.0% to the south of the proposed site access. During the PM peak period the proportional impact will be 5.7% to the north of the proposed site access and 3.6% to the south of the proposed site access. This is not considered to be a significant increase in traffic generation in the area.

2.0 Responses to WC Comments

Point 1:

- 2.1 The highway officer has concerns that the 2014 survey LINSIG results for the A483/ Bluebell Lane/ A5156 are different in the application than they were in the original application (P2014/0876). The model has been updated to improve validation against the queue survey data collected, to reflect previous comments made by WC. Changes made are minor and were focused on the give-way parameters on Arms 2 and 7.

- 2.2 As with the previous applications, queue length data was included within an Appendix to the TA. For clarity, a comparison of the queue data is provided in the table below.

Table 2-1: A483/ Bluebell Lane/ A5156 – Queue Survey Model Validation

Arm	Lane	AM Peak Hour		PM Peak Hour	
		Observed	Modelled	Observed	Modelled
A483 (n)	1	8	4	4	5
	2	8		5	
	3	4	1	2	1
Chester Road (n)	1	2	0	2	0
	2	7		6	
	3	3	2	2	1
A5156	1	4	5	8	14
	2	7		6	
	3	7	3	6	7
Chester Road (s)	1	4	4	2	7
	2	8		5	
	3	6	2	3	4
A483 (s)	1	3	1	2	1
	2	6		4	
	3	12	10	9	14
Blue Bell Lane	1	2	2	1	2
	2	3		1	
Industrial Estate	1	1	0	3	1
	2	0		1	

- 2.3 It should be noted that the existing traffic signals are operated under Cableless Linking Facility (CLF) control which will vary the signal timings to maximise the efficiency of the junction. These effects are not incorporated within the LINSIG model and therefore it is likely that the LINSIG results will present varying levels of queues, when compared to the existing network. However it is considered that the above table shows that the LINSIG model validates well against the queue length survey.

Point 2:

- 2.4 The highway officer has concerns that Figure 5-2 of the TA in respect of Proposed Development Trip Assignment differs from previous submissions.

2.5 The distribution that informs Figure 5-2 differs in this application compared to previous submissions. As stated in the Transport Assessment the distribution is derived using Journey to Work Statistics obtained from the 2011 Census for the Gwersyllt East and South ward. This data had not been published when the previous application(s) were submitted and these were therefore based on the 2001 Census.

Point 3:

2.6 The highway officer has concerns that the latest application omitted delay times from the PICADY assessment. This is not the case, the delay times referred to are detailed in the model outputs contained in the Appendices of the report and are therefore available for review. However in order to assist in your review these are detailed below for each of the priority junction, as requested.

Table 2-2: Plas Acton Road/ B5425 Llay Road – PICADY Results

Scenario	Arm	AM Peak Hour			PM Peak Hour		
		RFC	Queue	Max. Delay (s)	RFC	Queue	Max. Delay (s)
2021 Base	Plas Acton Road – right	0.96	7	102.57	0.96	6	112.87
	Plas Acton Road – left	0.93	7	113.74	0.93	7	107.27
	B5425 Llay Road (s) - right	0.43	1	12.3	0.52	1	12.18
2021 Base + Development	Plas Acton Road – right	1.00	11	153.65	1.00	9	166.15
	Plas Acton Road – left	1.00	10	161.94	1.00	11	155..38
	B5425 Llay Road (s) - right	0.49	1	13.48	0.57	2	13.22

Table 2-3: Plas Acton Road/ Bluebell Lane – PICADY Results

Scenario	Arm	AM Peak Hour			PM Peak Hour		
		RFC	Queue	Max. Delay (s)	RFC	Queue	Max. Delay (s)
2021 Base	Plas Acton Road (se) - right	0.02	0	5.68	0.01	0	5.59
	Plas Acton Road (se) - left	0.04	0	9.44	0.03	0	9.33
	Plas Acton Road (w) - right	0.03	0	4.99	0.02	0	4.95
2021 Base + Development	Plas Acton Road (se) - right	0.02	0	5.70	0.01	0	5.64
	Plas Acton Road (se) - left	0.04	0	9.57	0.03	0	9.49
	Plas Acton Road (w) - right	0.03	0	4.93	0.02	0	4.94

Table 2-4: B5425 Llay Road/ Rhosrobin Road – PICADY Results

Scenario	Arm	AM Peak Hour			PM Peak Hour		
		RFC	Queue	Max. Delay (s)	RFC	Queue	Max. Delay (s)
2021 Base	B5425 Llay New Road (s)	0.27	0	13.18	0.22	0	12.79
	Rhosrobin Road	0.72	2	38.57	0.65	2	36.11
	B5425 Llay New Road (n)	0.16	0	7.54	0.30	1	10.28
2021 Base + Development	B5425 Llay New Road (s)	0.32	1	16.82	0.26	0	15.54
	Rhosrobin Road	0.78	3	50.45	0.72	2	47.92
	B5425 Llay New Road (n)	0.16	0	7.70	0.31	1	10.36

Table 2-5: B5425 New Road/ Ty Gwyn Lane – PICADY Results

Scenario	Arm	AM Peak Hour			PM Peak Hour		
		RFC	Queue	Max. Delay (s)	RFC	Queue	Max. Delay (s)
2021 Base	Ty Gwyn Lane – left	0.34	1	21.94	0.25	0	12.30
	Ty Gwyn Lane - right	0.70	2	43.90	0.52	1	26.20
	B5425 New Road	0.18	0	11.08	0.18	0	9.49
2021 Base + Development	Ty Gwyn Lane – left	0.39	1	27.70	0.21	0	12.28
	Ty Gwyn Lane - right	0.75	3	53.97	0.54	1	27.29
	B5425 New Road	0.19	0	11.49	0.18	0	9.59

Table 2-6: B5425 New Road/ Price's Lane/ Stansty Road – PICADY Results

Scenario	Arm	AM Peak Hour			PM Peak Hour		
		RFC	Queue	Max. Delay (s)	RFC	Queue	Max. Delay (s)
2021 Base	Stansty Road – left & ahead	0.77	3	27.93	0.95	9	76.18
	Stansty Road – right	0.54	1	25.86	0.54	1	31.97
	B5425 Rhosddu Road	0.48	1	13.15	0.43	1	11.31
	Price's Lane	0.58	1	20.17	0.56	1	19.19
	B5425 New Road	0.66	2	16.13	0.71	2	22.23
2021 Base + Development	Stansty Road – left & ahead	0.79	4	29.97	0.99	13	110.13
	Stansty Road – right	0.58	1	30.13	0.56	1	34.34
	B5425 Rhosddu Road	0.49	1	13.59	0.44	1	11.40
	Price's Lane	1.18	23	301.45	0.58	1	20.49
	B5425 New Road	0.64	2	15.14	0.72	3	23.48

Point 4:

- 2.7 The highway officer has concerns that the 2021 Base PICADY analysis for the New Road/ Prices Lane/ Stansty Road junction differs significantly from the 2020 figures submitted within the technical note for the previous application.

- 2.8 The modelling work undertaken has been updated to reflect previous comments by WC. The geometric parameters input into the model are based upon on-site geometric measurements. This resulted in differences between the models submitted, with the previous application being based on OS Data.
- 2.9 Specific changes relate to the visibility and the width of Stansty Road. All other parameters, with the exception of the assessment year remain unchanged.

Access Comments:

- 2.10 The Wrexham Council minimum standards of Adoptable Highways is a document that is not available on the Wrexham Council website, is not available for purchase and does not form part of the Council's Planning Guidance document suite as it is accepted by Wrexham Council that the document is out of date. Accordingly very little weight should be attached to this document as it based on the 1992 second edition document 'Design Bulletin', which has been superseded twice since this time and most recently in 2007 by 'Manual for Streets'.
- 2.11 The development proposal does provide two access points, albeit the second is a 3.75 metre access/ egress for use by vehicles in an emergency. It should be noted that modern guidance in 'Manual for Streets' does not provide any draconian numbers to define how many dwellings are accessed from a single point of access. Indeed 'Manual for Streets' places the emphasis on considered design by engineers rather than relying on definitive numbers as has been the approach since the first publication of DB32 in 1977. Such an approach on unit numbers was developed initially in the 1998 document Places, Street and Movement which originally superseded the second edition 1992 DB32 document.
- 2.12 On the matter of the Rhosrobin proposals there is no evidence to indicate that a development of 189 units accessed from a single point of access with a second point of access to be used by vehicles in an emergency; would give rise to operational issues. It has been demonstrated that the proposed single point of access and egress will operate efficiently and effectively in serving 189 units.

2.13 Accordingly the proposals are presented in the terms of modern design guidance, there is no evidence presented to indicate the access/ egress proposals will give rise to any operational or highway safety issues and therefore are deemed to be an acceptable design solution as presented in the masterplan.