

Traffic Volume Through and Around Peasmarsh

Background

The parish, like other parishes, is having issues with speeding traffic; in August 2013 the parish council called for volunteers in order to set-up a Speed Watch group in Peasmarsh. This group started monitoring sessions from October 2013 to the present. However, this activity was only effective in reducing the speed of traffic for the periods when speed monitoring was taking place at the roadside.

The parish council agreed to pay to have a Vehicle Activated Sign (VAS) installed at the Rye end of the village, outside Two Hoots. This was installed in September 2017; the option was taken to have software installed that would record the date, time and speed of any vehicle speeding past the sign. This data is down loaded and analysed on a monthly basis.

It became quickly apparent that the VAS was over recording the number of speeding vehicles. This was determined by observing when the VAS flashed and where the vehicle was located at the time. The VAS location is quite close to the start of the speed restriction for the village. However, the range of the VAS is such that it can detect vehicles whilst they are still in the 50mph zone, so not strictly speaking speeding. Various methods were tried to determine if the values recorded could be calibrated to give a more realistic picture of the speeding problem, but with no success.

Given that the parish council was unable to give accurate speeding data to the relevant authorities, nothing was going to be done about speeding traffic. The parish council then discussed the purchase of a Black Cat monitoring device. This device is a covert device that is mounted to a convenient traffic sign pole and records the date, time, speed and length of each vehicle that passes it in both directions. The device was expensive so other parishes were asked if they would be interested in a joint purchase. These negotiations did not bear fruit and as the parish had decided to generate a neighbourhood development plan, accurate traffic data would be needed to support the plan. A device was purchased and first deployed in August 2021 by the bus stop outside the village hall.

In order to use the device, the monitoring locations have to be approved by ESCC Highways and licences purchased. Initially monitoring was done over a period of a week on a monthly basis at this one location. After several months it was decided that a second location should be set-up at the other end of the village where the VAS was located. Monitoring started here in November 2021 and over the next twelve months data was collected at both locations for each month of the year.

The Black Cat gave accurate speeding data at the location of the VAS for the week it was deployed; this data was compared with that generated by the VAS over the same period thus enabling the VAS data to be calibrated. Some local residents commented upon the increase in traffic volume around the village lanes so these were also monitored.

Monitoring Points

The monitoring points around the village are defined in Table 1.

Site No.	Location
1	Outside the village Hall
2	The VAS at the Rye end of the village
3	Outside Old Winders (40mph zone)
4	School Lane (top off)
5	Tanhouse Lane (Jempson's roundabout)
6	Brickfields
7	Church Lane (junction with the A268)
8	Mill Lane (junction with the A268)
9	Dew Lane (junction with Church Lane)
10	Stravecrow Lane (junction with Dew Lane)
11	Dew Lane (bridleway)
12	Mackerel Hill (junction of Kitchenour Lane)

Table 1 Location of monitoring points

Traffic Volumes

Traffic volumes around the lanes was monitored at each location during the winter and summer of 2023 and the traffic volumes and differences in volume between winter and summer is summarised in Table 2 below.

Location	Monitor from/to	Direction	Volume	Variance	% change	Note	
Church Lane junction with A268	24/10/22 to 30/10/22	Towards A268	864				
	25/06/23 to 01/07/23		1178	265	30	1	
	24/10/22 to 30/10/22	Away from A268	913				
	25/06/23 to 01/07/23		1249	336	37	1	
Mill Lane junction with A268	09/02/23 to 15/02/23	Towards A268	273				
	22/07/23 to 28/07/23		364	91	32		
	09/02/23 to 15/02/23	Away from A268	282				
	22/07/23 to 28/07/23		335	53	19		
Tanhouse Lane junction with Jempson's roundabout	09/09/22 to 15/09/22	Towards Jempson's	1129				
	04/07/23 to 10/07/23		1137	8	0.7%	6	
	09/09/22 to 15/09/22	Away from Jempson's	1066				
	04/07/23 to 10/07/23		1017	-49	-4.6%	6	
Junction of Dew Lane with Church Lane (triangular junction)	01/03/23 to 07/03/23	Starvecrow Lane to	275				
	31/07/23 to 06/08/23	Church Lane	310	35	13		
	01/03/23 to 07/03/23	Church Lane to	235				
	31/07/23 to 06/08/23	Starvecrow Lane	336	101	43		
	01/03/23 to 07/03/23	Starvecrow Lane to	724				
	31/07/23 to 06/08/23	Tanhouse Lane	1332	608	84	2	
	01/03/23 to 07/03/23	Tanhouse Lane to	704				
	31/07/23 to 06/08/23	Starvecrow Lane	1070	366	52	2	
	21/02/23 to 27/02/23	Tanhouse Lane to	154				
	08/08/23 to 14/08/23	Church Lane	33?	-121	-78		
	21/02/23 to 27/02/23	Church Lane to	51				
	08/08/23 to 14/08/23	Tanhouse Lane	10?	-40	-78		
	21/02/23 to 27/02/23	Starvecrow Lane to	774			2	
	08/08/23 to 14/08/23	Tanhouse Lane	784	10	1.3		
	21/02/23 to 27/02/23	Tanhouse Lane to	785			2	
	08/08/23 to 14/08/23	Starvecrow Lane	1106	321	41		
		Winter average	Starvecrow Lane to Tanhouse Lane	749			3
		Summer Average	Tanhouse Lane to Starvecrow Lane	1058	309	41	
	Winter average	Tanhouse Lane to Starvecrow Lane	745			3	
	Summer Average	Starvecrow Lane to Tanhouse Lane	1088	343	46		
Starvecrow Lane	09/03/23 to 15/03/23	Towards Dew Lane	712				
	16/08/23 to 22/08/23		1154	405	57		
	09/03/23 to 15/03/23	From Dew Lane	547				
	16/08/23 to 22/08/23		1051	504	92		
Dew Lane (bridleway)	17/03/23 to 23/03/23	Towards Starvecrow Lane	741				
	24/08/23 to 30/08/23		1372	631	85	5	
	17/03/23 to 23/03/23	Away from Starvecrow Lane	742				
	24/08/23 to 30/08/23		1362	620	83	5	
Mackerel Hill	25/03/23 to 31/03/23	Away from A268	2399				
	01/09/23 to 07/09/23		2691	292	12	6/7	
	25/03/23 to 31/03/23	Towards the A268	2328				
	01/09/23 to 07/09/23		2618	290	12	6/7	
Top of School Lane	29/06/22 to 05/07/22	Towards A268	441			1	
		Towards Tanhouse Lane	452			1	
Old Post Office A286	08/11/21 to 14/11/21	Towards Rye	17579			4	
	05/08/21 to 11/08/21		20369	2790	16		
	08/11/21 to 14/11/21	Towards Beckley	17814				

	05/08/21 to 11/08/21		21280	3466	19	
Two Hoots A268	07/01/22 to 13/01/22	Towards Beckley	15469			4
	08/08/22 to 14/08/22		22871	7402	48	
	07/01/22 to 13/01/22	Towards Rye	15562			
	08/08/22 to 14/08/22		21653	6091	39	

Table 2 Variation in traffic volume between winter and summer

Notes	Description
1	Recording taken in the summer but outside of school holidays
2	Recordings taken at the junction of Dew Lane with Church Lane over two consecutive weeks
3	Average values for traffic volume for the two consecutive weeks of recordings at the junction of Dew Lane with Church Lane
4	Sets of recordings taken over consecutive years
5	Includes August Bank Holiday
6	Recordings taken partially or wholly outside of school holiday
7	Recording stopped at 13:00 on the last day

Table 3 Note details referenced from Table 2

An assumption being made here is that the pattern of traffic and its volume at each location is broadly the same from one week to the next at each location over the period, in the winter and summer, when monitoring activity is taking place. The junction of Dew Lane with Church Lane is a triangular junction and the traffic volume along each arm of the junction needs to be monitored. However, the sign post for the junction, the monitoring point, is not in the middle of the junction but to one side of it.

This junction can be visualised as an equilateral triangle with the monitoring point just below the middle of the base. From this position it is possible to either monitor the traffic along the base and one of the sides or along the base and the other side. In order to collect the necessary data monitoring here must be carried out of two weeks. This will result in the traffic volume along the base being recorded over the two one-week periods and each arm over a period of a week. One arm one week the other the following week.

As the base is monitored over two consecutive weeks it's possible to validate the assumption being made that the traffic volume at a specific point is largely the same over the two weeks. The results of which is shown in Table 4 below.

Location	First Week	Volume	Second Week	Volume	Variance
Starvecrow Lane to Tanhouse Lane	21/02/23 to 27/02/23	774	01/03/23 to 07/03/23	724	50
	31/07/23 to 06/08/23	1332	08/08/23 to 14/08/23	784	548
Tanhouse Lane to Starvecrow Lane	21/02/23 to 27/02/23	785	01/03/23 to 07/03/23	704	80
	31/07/23 to 06/08/23	1070	08/08/23 to 14/08/23	1106	36

Table 4 Variance of traffic volume along Dew Lane at its junction with Church Lane over two consecutive weeks

From Table 4 the assumption of similar traffic volume from one week to the next is not entirely true as shown in the variance column.

Table 5 below, gives a breakdown of the traffic volume flow at each of the monitoring locations in each direction of travel for Winter and Summer periods for each day of the week.

Figures 1 to 3 below show the total volume of traffic at each monitoring point as schematic map of the lanes for winter, summer and the percentage change between these two periods.

Additional Monitoring

There was insufficient time to complete all the monitoring, additional monitoring will be required at the top of School Lane in both winter and summer. The monitoring for Tanhouse Lane was not strictly carried out during the winter or summer holiday periods, hence the minimal variation between these two sessions.

When conducting the monitoring at the junction of Dew Lane and Church Lane the device is not being used in the way it was intended such that the monitoring of traffic moving between Tanhouse Lane to Church Lane is right on the limit of the device's capability. The summer monitoring session here will need repeating.

The monitoring data available for traffic along the A268 was conducted when there was still a partial lockdown due to Covid, these need repeating.

Location	Church Lane				Mill Lane				Tanhouse Lane			
Direction	Towards A268		Away from A268		Towards A268		Away from A268		Towards Jempson's		Away from Jempson's	
Period	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer
Mon	95	133	106	134	27	42	28	34	158	189	152	156
Tue	105	129	110	135	36	47	39	51	128	171	140	168
Wed	115	131	128	139	39	51	36	46	154	169	142	161
Thu	113	129	108	139	46	40	39	39	157	164	136	149
Fri	160	158	165	159	49	56	63	50	201	178	169	152
Sat	148	211	165	247	42	46	50	49	147	165	142	142
Sun	126	268	131	296	34	82	27	66	185	101	185	89

Location	Junction of Dew Lane with Church Lane (triangular junction)											
Direction	Stravecrow to Church		Church to Stravecrow		Stravecrow to Tanhouse		Tanhouse to Stravecrow		Church to Tanhouse		Tanhouse to Church	
Period	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer
Mon	39	28	39	30	109	146	103	145	9	2	24	11
Tue	19	33	31	37	65	170	74	150	9	1	15	5
Wed	40	41	29	45	90	172	108	140	7	1	30	2
Thu	39	48	19	56	109	212	125	163	8	0	25	2
Fri	46	55	47	60	113	276	136	194	6	2	25	6
Sat	52	62	38	51	115	189	95	167	8	3	22	3
Sun	40	45	32	57	73	167	63	111	4	1	13	4

Location	Stravecrow Lane				Dew Lane (Bridleway)				Mackerel Hill			
Direction	Towards Dew Lane		Away from Dew Lane		Towards Stravecrow		Away from Stravecrow		Away from A268		Towards A268	
Period	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer
Mon	102	155	70	139	90	206	79	203	370	450	347	416
Tue	109	169	79	168	55	161	57	160	355	433	351	421
Wed	99	175	63	164	80	182	90	180	398	466	391	439
Thu	101	190	77	155	101	147	101	142	435	185	406	186
Fri	111	199	93	176	127	199	134	203	384	445	354	413
Sat	106	159	91	146	145	259	149	260	304	392	316	402
Sun	84	107	74	103	143	218	132	214	153	320	163	341

Table 5 Traffic volume by day of the week winter and summer

Traffic Volumes Recordings During the Period 09/09/22 and 31/03/23

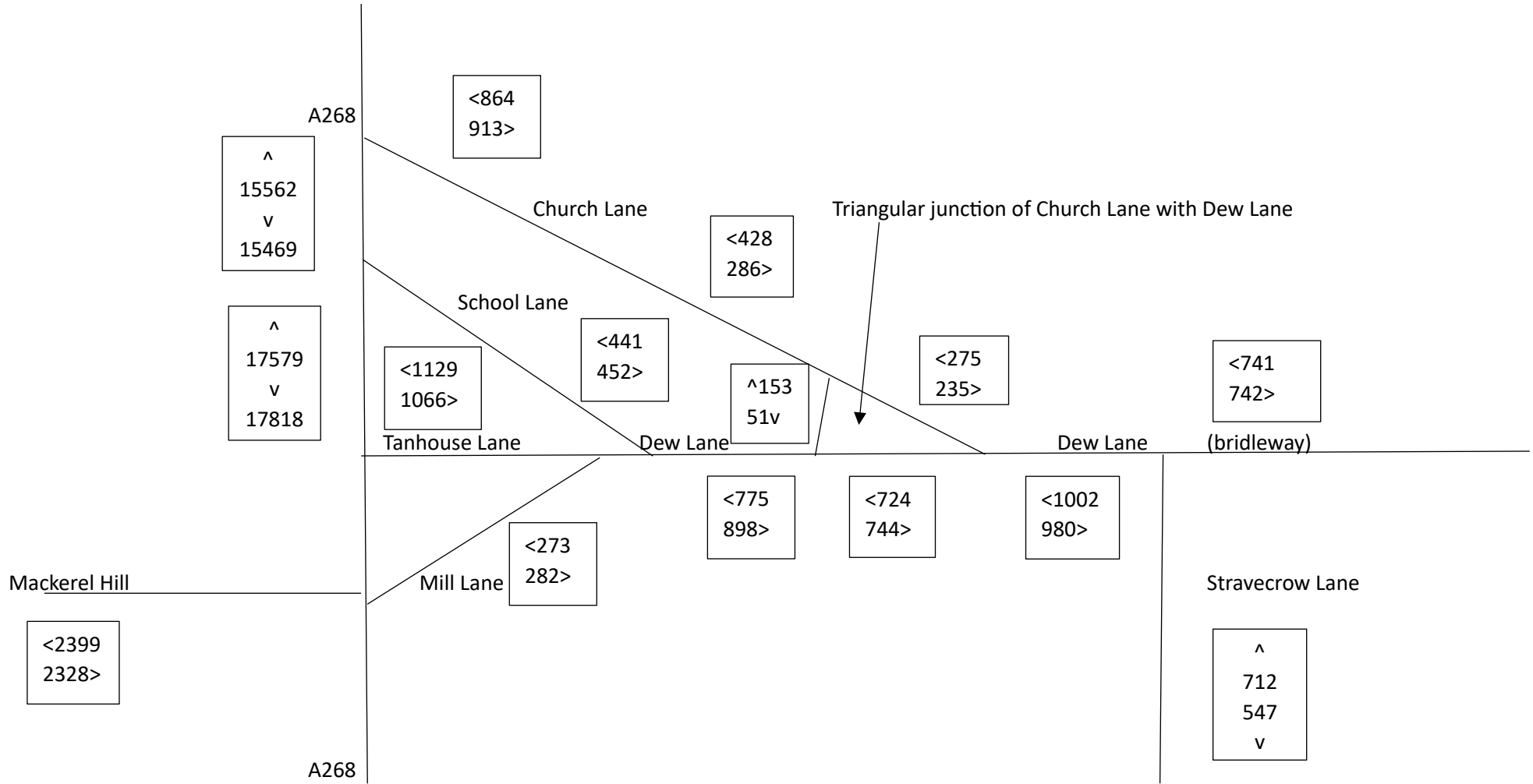


Figure 1 Schematic map of the lanes around Peasmarsh in relation to the A268 showing traffic volumes during the winter

Traffic Volumes Recordings During the Period 25/06/23 and 07/09/23

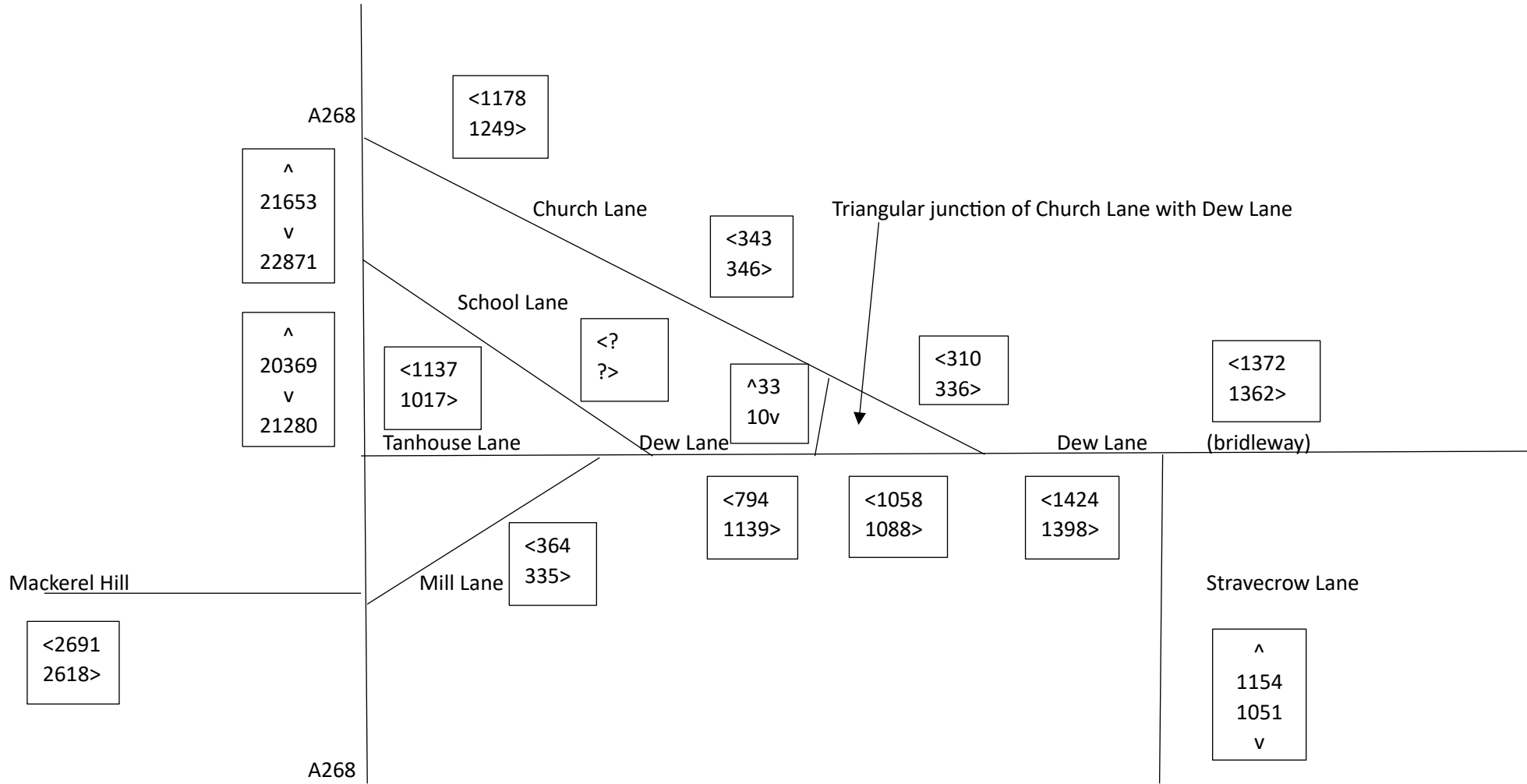


Figure 2 Schematic map of the lanes around Peasmarsh in relation to the A268 showing traffic volumes during the summer

Percentage Change in Traffic Volumes Recordings During the Period 09/09/22 to 31/03/23 and 25/06/23 to 07/09/23

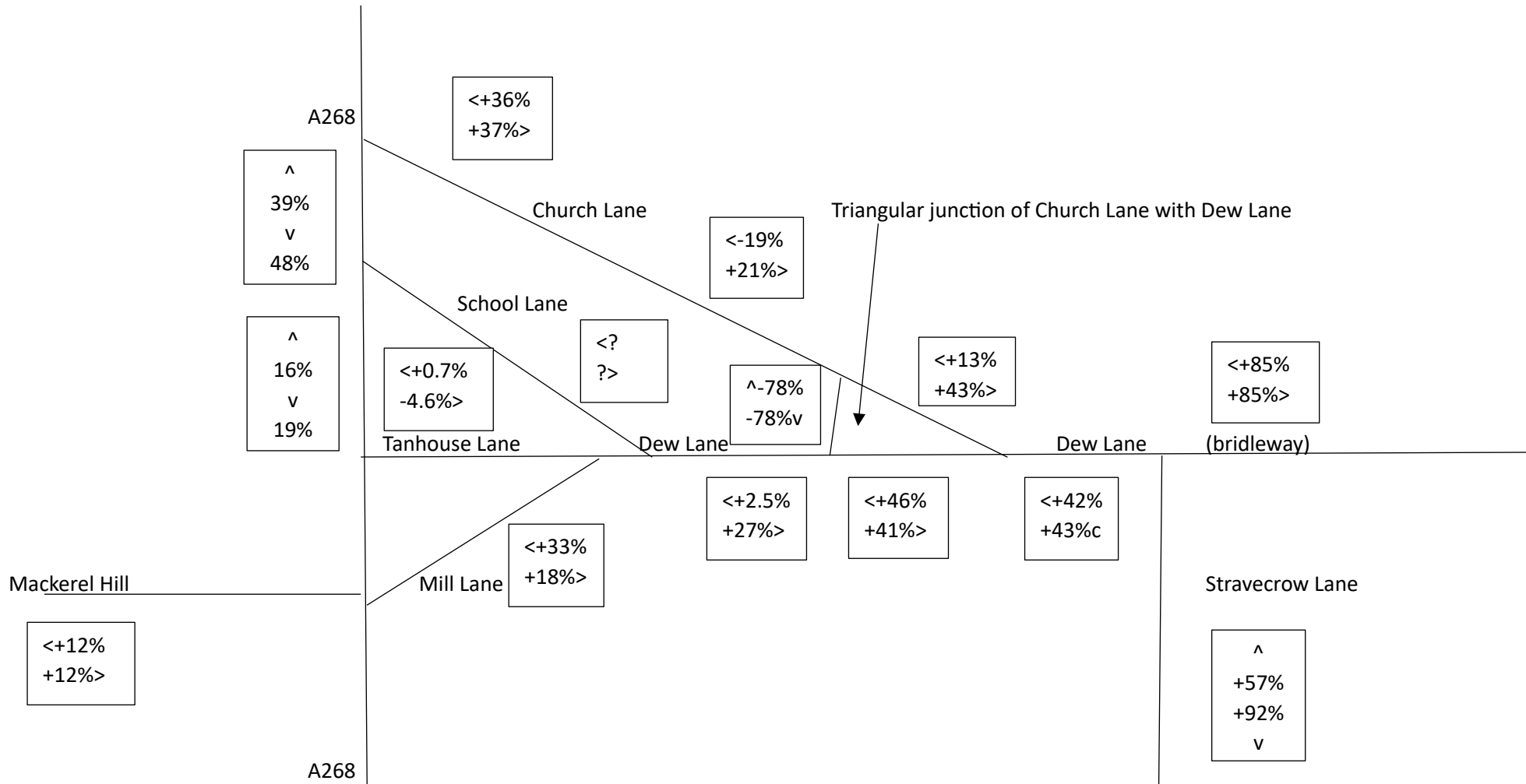


Figure 3 Schematic map of the lanes around Peasmarsh in relation to the A268 showing the percentage change in traffic volumes between winter and summer