

PC0548 Lammas Lane, Esher Speed Limit Terminal Signs Relocation

Feasibility Report

30/05/2017



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Prepared By: Print Harry Blake

Sign Harry Blake.....

Authorised By: Print Jamie Daly

Sign Jamie Daly.....

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1. INTRODUCTION:

The Surrey County Council Design Team has received a brief to undertake a feasibility report on the A244 Esher Road / Lammas Lane, Esher to determine whether the speed limit terminals can be moved in order to highlight the limit change more effectively. It has also been discussed with Surrey Police that the existing 30mph speed limit is unsuitable for a section of the dual carriageway.

In turn, Lammas Lane has therefore been assessed under Surrey County Council's policy (2014) for determining speed limits. This is an 8 step approach consisting of:

- Step 1** – Request to change speed limit is received.
- Step 2** – Measure existing speeds and analyse road casualty data.
- Step 3** – Compare the existing speeds with the suggested new speed limit.
- Step 4** – Conduct feasibility of supporting engineering measures.
- Step 5** – Consult with Surrey Police Road Safety and Traffic Management Team.
- Step 6** – Local Committee decision and allocation of funding
- Step 7** – Advertisement of legal speed limit order and implementation.
- Step 8** – Monitoring of success of scheme

There should be no expectation that the police would be able to provide regular enforcement if a speed limit is set too low as this could result in an unreasonable additional demand on police resources. It is also important to set reasonable speed limits to ensure consistency across the country.

2. SITE ANALYSIS:

Lammas Lane is an 'A' Class Trunk road, which has been classified as a Main Distributor Road (SPN 1). Lammas Lane is 0.6 miles long and is part of the route that links Esher and Hersham. Lammas Lane is fronted by a number of properties, which are set back from the road. It has a system of street lighting along its length and is subject to a speed limit of 30mph. See drawing 'PC0548_01 Location Plan' for confirmation of site extents.



Figure 01: Properties set back from road on Lammas Lane.



Figure 02: Lammas Lane eastbound approach to roundabout with West End Lane.



Figure 03: Lammas Lane westbound approach to roundabout with West End Lane.

3. DATA COLLECTION:

3.1 Speed Data

Speed data for this location has been assessed and the results are shown in the following table:

Road	Average mean speed (mph)
Lammas Lane (site 1, eastbound)	41.5
Lammas Lane (site 2, westbound)	40.7
Lammas Lane (site 3, eastbound)	39.0
Lammas Lane (site 4, westbound)	40.7
Lammas Lane (site 5, eastbound)	31.1
Lammas Lane (site 6, westbound)	34.1
Lammas Lane (site 7, eastbound)	29.9
Lammas Lane (site 7, westbound)	31.1
Lammas Lane (site 8, eastbound)	30.2
Lammas Lane (site 8, westbound)	35.5
Lammas Lane (site 9, eastbound)	24.7
Lammas Lane (site 9, westbound)	28.6

Figure 04: Speed data

See drawing 'PC0548_04 Speed Survey Results' for confirmation of the survey locations and results.

Under Step 3 of the policy, the table below compares the existing speed limit against the requested limit and the existing mean speed.

Road	Current limit (mph)	Requested limit (mph)	Existing mean speed (mph)
Lammas Lane (site 1, eastbound)	40	40	41.5
Lammas Lane (site 2, westbound)	40	40	40.7
Lammas Lane (site 3, eastbound)	30	40	39.0
Lammas Lane (site 4, westbound)	30	40	40.7
Lammas Lane (site 5, eastbound)	30	40	31.1
Lammas Lane (site 6, westbound)	30	40	34.1
Lammas Lane (site 7, eastbound)	30	40	29.9
Lammas Lane (site 7, westbound)	30	30	31.1
Lammas Lane (site 8, eastbound)	30	30	30.2
Lammas Lane (site 8, westbound)	30	30	35.5
Lammas Lane (site 9, eastbound)	30	30	24.7
Lammas Lane (site 9, westbound)	30	30	28.6

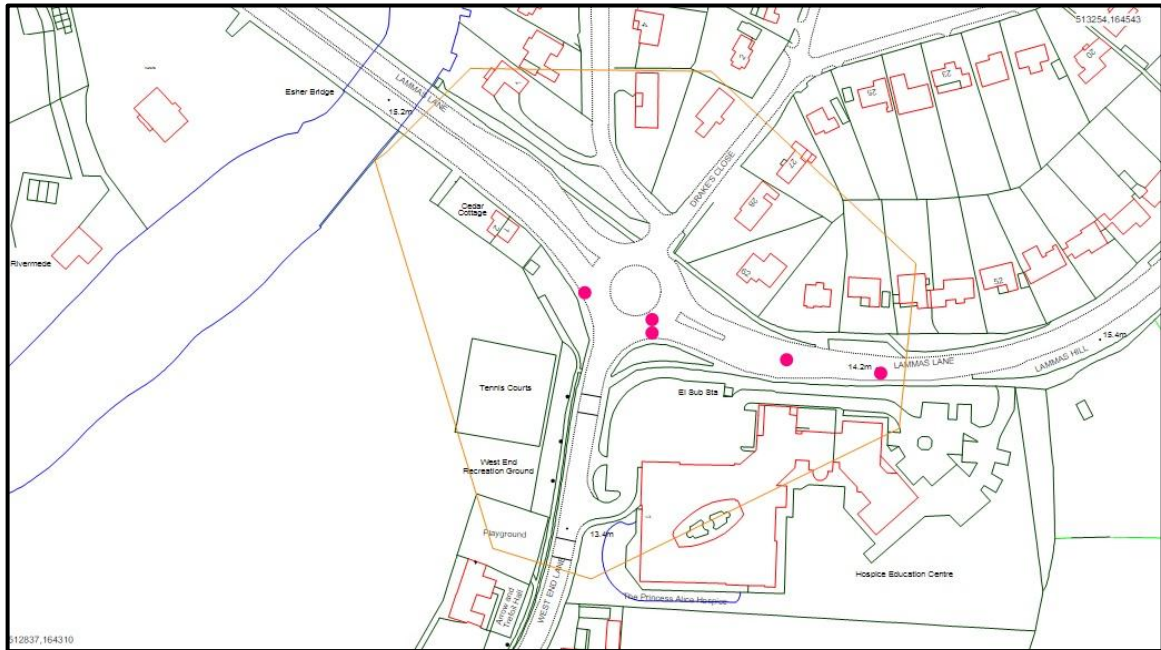
Figure 05: Speed data evaluation

Based on the County Council's speed limit policy, the recorded speeds suggest the following:

- The existing 40mph speed limit at sites 1 and 2 is appropriate.
- The current change in speed limit (approximately 200m to the west of the roundabout is inappropriate. The speeds at this point (sites 3 and 4) are appropriate for a 40mph speed limit.
- The existing 30mph limit at sites 5 and 6 is appropriate. This is to be as expected as it is close to the roundabout. The westbound speeds are marginally below the threshold for a preferred limit of 40mph.
- The existing 30mph limit at sites 7, 8 and 9 is appropriate. The westbound speeds at site 8 are marginally above the threshold for a 30mph limit. Surrey's Road Safety Team and Surrey Police are aware of this for their monitoring and enforcement activities.

3.2 Personal Injury Collisions

An assessment has been made of the personal injury collisions on Lammas Lane roundabout with West End Lane and Drakes Close for the last 5 full years and part of 2016 where data is available, giving the period between 1st January 2011 and 31st November 2016. During this period there are five recorded personal injury collisions, five had a severity of 'slight' and none classed as 'serious' or 'fatal'.



Latest 5 year and year to date collisions (01/01/11 to 31/11/16)			
Year	Slight	Serious	Fatal
2011	1	0	0
2012	1	0	0
2013	0	0	0
2014	0	0	0
2015	2	0	0
2016 (Jan to Nov)	1	0	0
Total	5	0	0

Figure 06: Personal Injury Collision Data

When the police attend personal injury collisions they assess and log the contributory factors that lead to the collision. The table below shows all the factors that led to a collision that have been recorded at this location during this assessment period. Some collisions have a number of factors attributed to them.

Collision contributory factors (01/01/11 to 31/11/16)	
Factor	Number
Failed to look properly	1
Failed to judge other persons path or speed	0
Road layout	1
Poor turn or manoeuvre	1
Loss of control	2
Slippery road (due to weather)	1
Exceeding speed limit	1
Travelling too fast for conditions	1
Impaired by alcohol	0
Distraction in vehicle	1
Following too close	0
Vision affected by rain, sleet, snow or fog	0
No factors given	0
Sudden braking	0
Cyclist entering road from pavement	0
Vision affected by vehicle blind spot	1
Stolen vehicle	0
Junction restart	0
Pedestrian wearing dark clothing at night	0
Vision affected by dazzling sun	0
Inexperience or learner driver	0

Figure 07: Personal Injury Collision Contributory Factor

3.3 Highways Extents

With some of the improvement works taking place in the verge or in the footway, the Highways Information team were contacted to supply a copy of the highways extents for the area, which are shown below. The proposed works would not impact on land outside of existing highway.

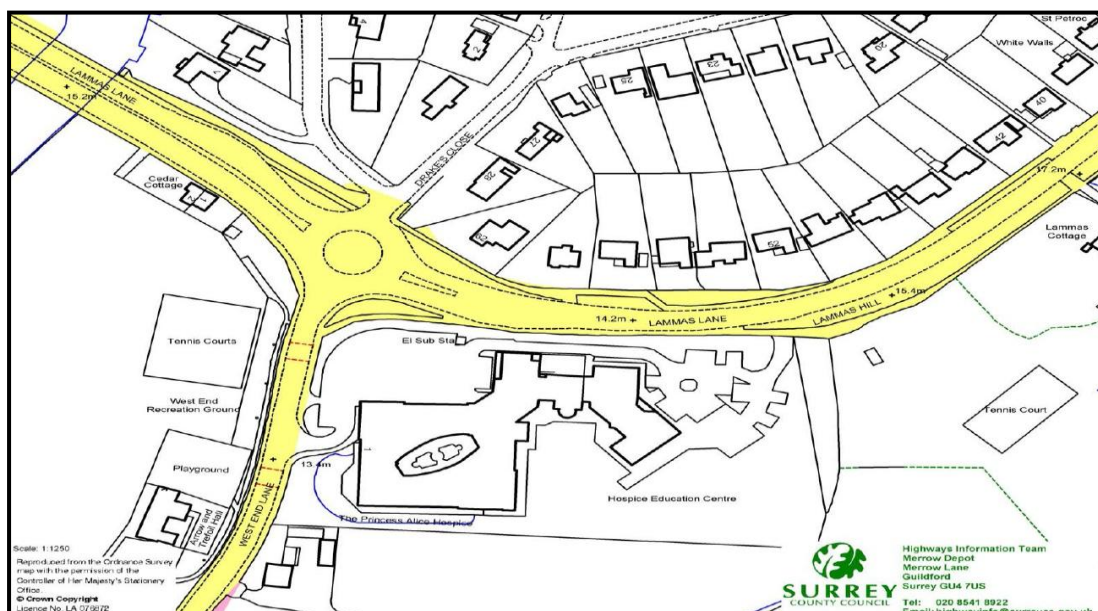


Figure 08: Highways Extent for Lammas Lane

4. DISCUSSION AND OPTIONS:

4.1 Option 1 – Do nothing

The existing layout would remain.

4.2 Option 2 – Move terminal signs east of roundabout

Moving the terminal signs (as shown in drawing 'PC0548_02 General Arrangement Option 2') will involve removal and installations of signs, as well as installation of wide based posts to provide illumination. The terminal sign relocation will involve moving the limit 25m east of the roundabout, 200m from its existing location. The installation of gateways in front of the terminal signs will highlight and make the 30mph speed limit along Lammas Lane more prominent, to increase drivers' awareness of the residential properties along the road. Terminal signs would also be installed in West End Lane near the roundabout to highlight the change in speed limit. Whilst the measured speeds immediately to the west of the roundabout indicate a 30mph limit is appropriate, the nature of the dual carriageway road and the surrounding environment suggest that the continuation of the 40mph section is suitable. The available collision data does not suggest that the proposed option would adversely impact upon safety. The cost of the works has been estimated at £8,000. To complete the works a Traffic Order and statutory advertisement would also be required. **The total cost of the works is estimated at £10,500.**

5. CONSULTATION:

Surrey Police's Road Safety and Traffic Management Team has been consulted and support the proposals in Option 2. As well as highlighting the changes in road environment at a more appropriate location, the proposed option will set more realistic speed limits for the location which aids enforcement duties.

6. RECOMMENDATION:

It is recommended that Option 2 is progressed. The proposed option will set more realistic speed limits for the nature of the roads. It also allows for gateways and signing to highlight to drivers the changes in road environment at appropriate locations on Lammas Lane and West End Lane. The total cost of the works is estimated at £10,500.

7. APPENDICES:

A) Design Brief

Scheme Summary			
Scheme name	Lammas Lane Esher - Speed Management	File Number	Work Order Number 0
Road Name	A244 Lammas Lane	Road Number	A244
Multiple roads?	No	Multiple roads	
Town	Esher	Area - District & Borough	Elmbridge
Start - X coordinate	512969	Start - Y coordinate	164519
End - X coordinate	513057	End - Y coordinate	164454
Scheme objectives	To access the speeds to determine if the 30mph limit commencement point can be moved from the bridge to the roundabout and hence extend the 40mph zone on the Esherbound dual carriageway but hershambound the 40mph will commence after the roundabout.	Scheme type	
Description of works	To access the speeds to determine if the 30mph limit commencement point can be moved from the bridge to the roundabout and hence extend the 40mph zone on the Esherbound dual carriageway but hershambound the 40mph will commence after the roundabout. Statutory consultation and traffic order to enable the speed limit to be changed.		
Responsible			
Scheme designer / engineer	Harry Blake	Assigned To	Blake, Harry
Target Dates			
Target start date		Feasibility report date	
Start Quarter	Q3	Feasibility design date	
Feasibility report required?		Detailed design date	
Feasibility design required?	Yes	Construction date	
Detailed design		Committee date	
Construction required?		Actual date of works order	
Actual design completion date		Estimated Completion date	
Estimated date of works order		Actual Start Date	
Estimated start date		Actual date Stage 2 safety audit received	
Actual Start Date			
Stage 2 safety audit required by			

B) SCC Speed Limit Policy

C) Drawings showing proposed options:

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