

# 3.7A TRANSPORT - TRAFFIC MODELLING

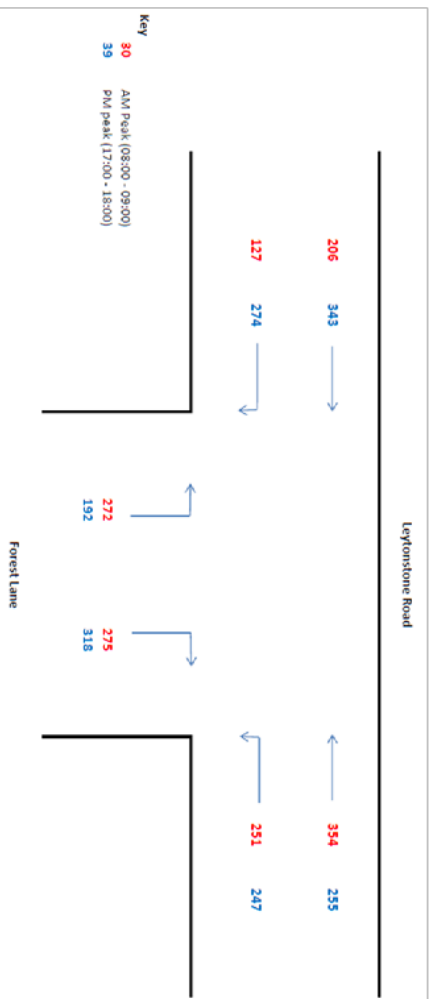
## General Modelling Assumptions

- The following modelling assumptions have been made whilst undertaking the capacity assessment at all stations:
- All saturation flows have been entered as 1800 pcu/hour.
  - Intergreens have been measured off of scaled plans
  - The maximum cycle time used in the assessments was 96 seconds, to account for pedestrian crossing facilities at the junction.
  - The peak hours at all stations were assumed to be 08:00 – 09:00 for the AM peak and 17:00 - 18:00 for the PM peak.
  - All stages are demanded every cycle.

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## Traffic Flow Data

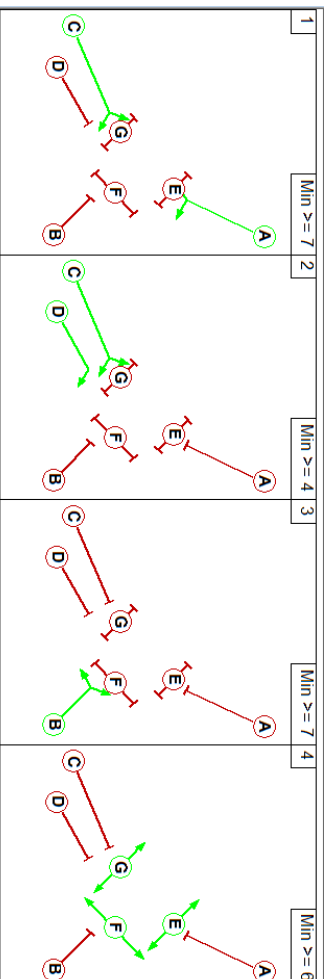
Traffic flow data was provided by Transport for London's Traffic Data team for the Maryland roundabout. This data was collected on Tuesday 27th March 2012. The turning movements have been reassigned to reflect the proposed 3 armed traffic signal controlled junction layout and summarised below.



## Proposed Junction Layout

The proposed layout for the junction of Leytonstone Road / Forest Lane is shown in section 3.6D. The proposed method of control for this junction is shown below.

Leytonstone Road / Forest Lane Proposed Method of Control



## Modelling Results

The results of the LINSIG modelling undertaken to assess the capacity of the proposed highway layout are summarised below.

Link Number	Link Description	AM (08:00 – 09:00)		PM (17:00 – 18:00)	
		Degree of Saturation (%)	Mean Max Queue (pcus)	Degree of Saturation (%)	Mean Max Queue (pcus)
1/1 and 1/2	Leytonstone Road north	82.5	13.0	77.2	8.7
2/1 and 2/2	Forest Lane north	87.4	14.0	89.9	15.1
3/1 and 3/2	Leytonstone Road west	81.3	6.1	89.0	13.7
Cycle Time (s)		96			
Stage Sequence		1,3,4			

It can be seen that all arms of the junction operate within capacity during both AM and PM peak periods.