

# LinSig3 Signalled Roundabout Design

## Wednesday 18th July 2012

### JCT Offices, Lincoln

Duration: 1 day  
Price: £275 (exc. VAT)

#### Overview

The course is aimed at all those involved in the geometric design, traffic modelling and signal optimisation of signalled roundabouts. Using a number of specialist techniques, LinSig can streamline the whole design process compared with traditional methods.

#### Pre-requisites

Delegates require a good understanding and hands-on experience of LinSig modelling of stand-alone junctions. This may have been gained by attending a LinSig computer workshop, or from equivalent experience in the work place.

#### Course Content

The geometric design of signalled roundabouts requires a rigorous process of lane flow analysis to identify combinations of lanes and spirals which will work properly from the outset. Traffic modelling is then used to optimise signal timings for coordination and capacity, and to predict overall performance. With the use of LinSig3, both processes are combined within the modelling using iterative methods to give rapid results. Much of the course time is spent working on computers to instil confidence in these methods.

- The rationale for signalling roundabouts with reference to entry capacity, signalling efficiency, background material and current guidance.
- Overall LinSig process with a demonstration template example. Approximate signal capacity from lane flows and retention of give-way entries to maximise efficiency.
- Workshop exercises in the manipulation of numbers of lanes and connectors to achieve satisfactory lane flows for signal control and selected give-way entries.
- Interactive optimisation of signal timings to minimise queues at circulating stop lines and maximise capacity. Use of cyclic profile and uniform queue graphs.
- Workshop exercises using timing dials in a logical sequence to set green splits and offsets to maximise coordination and capacity.
- A design project using the above techniques to develop a signalled roundabout LinSig model and layout as a replacement for a non-roundabout junction.

#### Accreditation

All JCT courses are Approved or are pending Approval by the Institute of Highway Engineers and attendance is therefore recognised by the IHE and many other bodies as evidence of Continual Professional Development (CPD).

Courses are managed under a ISO9001 Quality Management System.

#### Additional Information

The course will be delivered by a combination of a conference call and virtual



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consultancy

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computerlab. Delegates do not need to have LinSig installed as LinSig will be accessed via a browser.

### Dates & Times

This course will run from Wednesday 18th July 2012 and last for 1 day.

The following schedule should apply although all times are provisional and subject to change as required on the day:

Day 1: 09.15 - 17.00.

### Course Venue

Venue: JCT Offices, Lincoln

Location: Lincoln

Venue website: [www.jctconsultancy.co.uk](http://www.jctconsultancy.co.uk)

Address of venue: JCT Consultancy Ltd.

LinSig House  
Deepdale Enterprise Park  
Nettleham  
Lincoln

Venue postcode: LN2 2LL

### How to get there:

Office Directions by Road:

### Description of venue:

New purpose built offices and training facility, just off the A46, 2 miles to the NE of Lincoln.

### Course Tutors

Depending upon scheduling constraints, our course tutors will sometimes split tuition between them or teach a given course in its entirety whilst the other is unavailable. Please contact us directly if you need more specific detail about who will be teaching a specific course.

### Course tutor: Dr Douglas Reid

Douglas joined JCT in 2006, becoming a director of the company in January 2008. This followed 30 years of experience in local government working on Urban Traffic Control, traffic signal design, development planning, major transport schemes and local transport plans. His work has included large numbers of signalled roundabouts and traffic signals as part of major road schemes and developments. He has also had much involvement in area-wide transport studies, including transport network modelling.

Douglas is a leading expert on junctions, and in 1994 gained his PhD at Nottingham University in junction design and tackling urban congestion. He has well recognised presentation skills, having given many papers at conferences and expert evidence at public inquiries. He has long standing experience as a training lecturer, having taught traffic signal design on JCT courses since 1987. Since joining JCT full time Douglas has been a key lecturer and is extensively involved in all aspects of JCT training.

*The information presented here is kept as accurate and up to date as possible, nevertheless, this document is static and cannot be updated if any changes to the course arrangements are made. We make every effort to inform our delegates if we have to make any cancellations and if any changes are made to the venue or schedule. We also advise all delegates to check the website or contact us*



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*directly to confirm course details a few days before the course starts.*



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