

St John's Road Epping

design and development brief consultation 2012

Traffic impact note

This note explains the technical work which has been done to support the design of options for the St John's Road Area. It should be read in conjunction with the main exhibition.

As part of the work on the options for the St John's Road area, Epping Forest District Council has commissioned transport consultants to look at the potential impact of any development on the surrounding road network. We want to be sure that the options which are being considered do not add significantly to the existing traffic in the town centre which is already busy at peak periods.

Our consultants have prepared a computer simulation of the traffic flows around the key junctions including the pedestrian crossings and showing both vehicle and pedestrian movements. The data to build this model was recorded using a combination of video cameras and members of the survey team.

We chose peak days and times for the survey, including Monday market days, weekday afternoon peak periods and a Saturday. All the data was gathered in a normal term-time week to make sure it was typical of the patterns we normally see in the town centre. We also made sure that it didn't take place whilst there were road-works or other abnormal delays. These are the days and times of our survey work:

- Monday 11 July 2011, 7.00am – 11.00am;
- Thursday 14 July 2011, 2.00pm – 10.00pm;
- Friday 15 July 2011, 2.00pm – 10.00pm;
- Saturday 16 July 2011, 10.00am – 4.00pm; and
- Monday 18 July 2011, 6.00am – 12.00pm.

From this work we identified the following periods as the busiest hours of traffic movement to be modelled in our simulation:

- Monday 11 July 2011, 8.15am – 09.15am
- Friday 15 July 2011, 5.30pm – 6.30pm
- Saturday 16 July 2011, 12.15pm – 1.15pm

The potential impact of new development is calculated on the basis of the types and size of the proposed buildings and the quantity of parking associated with them. The traffic characteristics of the new development is set out in standard professional databases used for this work, based on analysis of previous experience. We also factored in the likely traffic growth that Epping could expect even without the development of this site, using 2015 as the date for our simulation of the potential traffic flows.

A number of development options have been proposed for the site. In order to test the potential impact of development in traffic terms we have taken the one with the heaviest traffic load to test a worst-case scenario. This includes the potential for a food store with a new mini-roundabout junction accessing the High Street.

As could be expected with any kind of development, the computer model shows that there is likely to be some increase in journey times as a result of the development. A journey south along the High Street at peak hours might be two to three minutes longer than at present. However, this is considered to be small enough to be acceptable in a town centre location like this and it is important to note the following points:

- This model is designed to test the worst case scenario – the busiest times with the most significant impact. Even in this situation, the likely increase in travel times is within acceptable limits. However, the development options would be unlikely to normally have this much impact;
- One of the reasons for the potential increase in travel times is the increased pedestrian traffic using crossings. This indicates that we could expect a higher footfall to and from the town centre as a result of the development, contributing to the vitality of the town centre – this is good for business;
- The computer model makes no allowance for the fact that many people will choose to vary their journeys if they are finding they are regularly caught up in congestion. This is known as ‘peak-spreading’ and includes people using alternative routes or changing the times of their regular journeys such as shopping trips;
- The access solution we have designed is the best one available for the proposed development at the site. We have considered other options for getting access into and out of the site and they would have a more significant impact (in both safety and capacity terms) on the traffic and could also affect locally listed buildings.