

## Highways England Confirmation of Task Order

Redactions made under FOIA 2000 exemptions sec 40: personal info and sec 43: commercial.

	AECOM	Fee Request for this CTO	£12,938.00		
<b>Project Title:</b>	A11 Fiveways Junction Barton Mills - Signalisation & Related Improvements				
<b>Contract Ref.:</b>	0	<b>CPA No.:</b>	Redacted	<b>BPA No.:</b>	Redacted
<b>PIN Description:</b>	Spatial Planning	<b>Sub Pin:</b>	Redacted	<b>PIN No.:</b>	Redacted
<b>HE Reference:</b>	EE 96 16/17AECOM	<b>Start and End Date :</b>	19/01/2017 - 31/03/2017		
<b>Task Overview and Expected Outcomes</b>					
<p>The A11 Fiveways roundabout has recently been upgraded and consists of a five arm (with a further minor access point to a petrol station) un-signalised roundabout serving two A11 arms, two A1101 arms and the A1065 arm. The junction is currently observed to experience notable levels of congestion on some arms, which has been reflected in ARCADY modelling that has been undertaken of the junction.</p> <p>Highways England has asked AECOM to review the potential of a number of interventions, as follows:</p> <ol style="list-style-type: none"> <li>1.Signalisation of all or some arms of the roundabout.</li> <li>2.40 mph speed limit on circulatory carriageway and all approaches. Continue on A1101 towards Mildenhall to meet existing 30 mph limit.</li> <li>3.40 mph speed limit on A11 departure lane towards Newmarket past junction to Barton Mills (Newmarket Road).</li> <li>4.Camera enforcement of the above limit in item 3.</li> <li>5.Camera enforcement of the existing 50 mph limit on A11 approach from Newmarket.</li> <li>6.50 mph buffer zone on A11 approach from Thetford.</li> <li>7.Changes to signing on the A11approach from Thetford. Relocate existing ADS further away from roundabout. Add lane destination "wicket" signs after ADS. Relocate existing chevron sign on central island or extend existing sign. Add offside countdown marker signs.</li> <li>8.Review existing signing on the A11 approach from Newmarket. Remove "New Road Layout" signs. Consider most effective signing for McDonalds vs. the filling station located before roundabout.</li> <li>9.Relocate sign to Barton Mills / Worlington on A11 central reservation. The existing mounting height restricts visibility of oncoming traffic for some drivers waiting to turn right.</li> <li>10. Review all road markings to clarify lane selection and optimise vehicle paths.</li> <li>11. Mark A1101 approach from Mildenhall to facilitate use of both lanes by traffic turning right to A11 towards Newmarket.</li> </ol> <p>In order to inform our approach to these interventions, we will review and understand the current and future operation of the junction, based on the findings of the Stage 4 Road Safety Audit and of the cumulative impact assessment work carried out during 2016 by AECOM on behalf of Forest Heath District Council. We will undertake a site visit in order to better understand the current situation with respect to queue lengths, driver behaviour and its relationship with the effective capacity and safe operation of the junction.</p> <p>We will then review the relevance and feasibility of the interventions listed above in the light of the findings of the Stage 4 Road Safety Audit and the capacity modelling carried out to date.</p> <p>We will build and run a LINSIG model of the junction in order to investigate potential full or part signalisation of the junction. This will comprise of the following tasks:</p> <ul style="list-style-type: none"> <li>•Preparation of a 2016 LinSig base model (AM and PM peaks), which reflects the current layout of the junction, making use of intercept and slope values from the existing ARCADY model using the 2016 base flows that are already available.</li> </ul>					
<b>Task Objectives and Milestones</b>					
<p>AECOM will produce a report identifying a preferred strategy for the signalisation, setting out the results of the LINSIG modelling, and reporting on the feasibility of the other interventions listed. The preferred strategy will be illustrated on a drawing of the junction. At this stage, this will be an illustrative 'concept' drawing rather than an preliminary design.</p>					
<b>Expected Project Outcomes</b>					
<p>The objective of this task is to determine the potential operation of the existing A11 Fiveways junction layout in 2031, the feasibility of the interventions listed above and the impact of part- or full signalisation on the operation, to establish the extent to which these options are predicted to improve the operation of the junction.</p>					
<b>Project Risk and Management</b>					

AECOM have already been provided with forecast traffic flows for all the scenarios to be tested, base traffic flow data and the ARCADY model runs previously undertaken. There is no formal queue length data, although video footage of the junction has been provided.

There is a risk that calibration of the base model to observed queue lengths may not be possible. If this is the case, absolute values may vary from those observed on site. The assessment will however provide a relative prediction of the changes in operation arising from the revised layout measures considered.

This is primarily an exercised in traffic modelling/ feasibility assessment at concept level. AECOM will not fulfil the role of Principle Designer within this task.

No other risks have been identified with this task at this stage.

<b>HE Project Sponsor</b>	<b>Sign:</b>	<b>Print Name:</b>	<b>Date:</b>
<b>Management Approver:</b>	<b>Sign:</b>	<b>Print Name:</b>	<b>Date:</b>
<b>Contractual Approval:</b>	<b>Sign:</b>	<b>Print Name:</b>	<b>Date:</b>