Technical note

Project: A428 Cambourne to Cambridge Better Bus Journeys
To: Adrian Shepherd

Subject: Madingley Road Survey
From: Elena Martinez
Date: 23 Jun 2016
cc:

1. **Aim**

The purpose of this technical note is to provide an initial review of the information obtained via the topographical survey of Madingley Road. A 2D design of a bus lane on Madingley Road was carried out as part of the new infrastructure proposed for Options 1C2N and 1N2C. Road levels and the exact position of the highway boundary were unknown at this stage (though some assumptions were made based on OS information).

A topographical survey was carried out to obtain information that would allow the project team to ascertain the amount of land-take which may be required to deliver the bus lane at this location, as this was felt to be a risk to the deliverability of these options.

A full 3D design is yet to be carried out, but this note provides an initial comparison between the assumed highway boundary for the 2D design and the highway boundary as measured on site. This comparison will allow identification of pinch points and other areas of concern.

2. **Highway boundary comparison**

This section should be read in conjunction with drawings 13080-ATK-VTO-XX-M2-L-006 to 017.

2.1. **Dwg 006**
North: highway boundary was assumed further north than measured on site. Does not impact 2D design.

South: highway boundary was assumed further north than measured on site. Does not impact 2D design.

2.2. **Dwg 007**
North: highway boundary was assumed further north than measured on site. Will likely require some landtake to properties either side of Conduit Head Road.

South: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

2.3. **Dwg 008**
North: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

South: highway boundary was assumed further south than measured on site. Does not appear to impact 2D design.

2.4. **Dwg 009**
North: highway boundary was assumed broadly as measured on site. The 2D design already identified vegetation removal and potential for slight landtake at this location.
Technical note

South: highway boundary was assumed further north than measured on site. Potentially less landtake required than identified in the 2D design (although this will need to be confirmed following 3D design).

2.5. Dwg 010
North: highway boundary was assumed further south than measured on site. The 2D design already identified some landtake at this location, but further land than originally assumed will be required.

South: highway boundary was assumed further north than measured on site. Potentially less landtake required than identified in the 2D design (could mitigate some of the landtake required on the north, depending on alignment and 3D design).

2.6. Dwg 011
North: highway boundary was assumed broadly as measured on site. The 2D design identified minimal landtake at this location, but presence of ditch indicates varied levels and this is likely to change once 3D design is carried out.

South: highway boundary was assumed further north than measured on site. Could mitigate some of the landtake required on the north, depending on alignment and 3D design.

2.7. Dwg 012
North: highway boundary was assumed further south than measured on site. The 2D design identified minimal landtake at this location, but presence of ditch indicates varied levels and this is likely to change once 3D design is carried out.

South: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

2.8. Dwg 013
North: highway boundary was assumed further south than measured on site. The 2D design identified minimal landtake at this location, but presence of ditch indicates varied levels and this is likely to change once 3D design is carried out. Ditch will need to be completely covered over for approx 70m on western side of Storey’s Way junction.

South: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

2.9. Dwg 014
North: highway boundary was assumed further north than measured on site. Landtake and/or vegetation removal required.

South: highway boundary was assumed further north than measured on site. Does not appear to impact 2D design. Could mitigate some of the landtake required on the north, depending on alignment and 3D design.

2.10. Dwg 015
North: highway boundary was assumed further north than measured on site. Landtake and/or vegetation removal required.

South: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

2.11. Dwg 016
North: highway boundary was assumed broadly as measured on site. Does not impact 2D design.

South: highway boundary was assumed broadly as measured on site. Does not impact 2D design.