

# **Area 9 ASC**

## **Technology Scheme T4D**

### **Scheme Brief**

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**AMENDMENT RECORD**

<b>Amend No.</b>	<b>Issue Date</b>	<b>Amendments</b>	<b>Initials</b>	<b>Date</b>
0	June 2013	First Issue	SOS	27/6/13

## 1 Scheme Type

This scheme is a value band D (£1m to £5m) Technology Scheme.

## 2 Scheme Description

The work includes the installation of MIDAS outstations and loops together with signals for Phase 1 of a driver information scheme. The works also include preparatory works for Phase 2 such as construction of foundations for message signs and installation of associated cabinets. Communications between the MIDAS devices and RCC, and the signals and RCC shall be implemented and commissioned as part of scheme activities.

The works will include but are not limited to:

- Provision of temporary accommodation or all necessary facilities to meeting health and safety requirements;
- Provision of temporary automatic speed camera system for the enforcement of mandatory speed limits at roadworks for the duration of the works;
- Provision of information boards;
- General site clearance shall include removal of vegetation from verges, short lengths of boundary fencing, traffic signs including posts and foundations and no more than 1,500m of existing safety barriers including foundations;
- Provision and installation of no more than 100m of timber boundary fence, including 5 timber access gate including all associated foundations and associated works;
- Provision and installation 17 lengths of new single sided safety barrier of total length no more than 1,500m, including posts, foundations, and all necessary transitions, connections to existing and terminals;
- Provision and installation of no more than 80m of pedestrian parapets of varying classes including posts, foundations and all associated works;
- Provision of new paved access footways, of an area no more than 450m<sup>2</sup> in stone paving flags on granular sub-base, including precast concrete edgings with concrete bedding and backing, and all necessary excavation including allowance for soft spots and disposal of arisings;
- Reinstallation of no more than 3 traffic signs including posts removed temporarily as part of the works;
- Provision of not more than 6,400m of trenches and ducts. All trenches for communications cables to be in accordance with MCX 0141, communications ducts to be in accordance with MCX 0810 and 0814, and communications trough in verge to be in accordance with MCX 0153.

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- Installation of communications ducts by trenchless techniques across a 3 lane and hard shoulder carriageway between verge and central reservation in both cutting and on embankment;
  - Installation of not more than 70 chambers (Types A, B and C) including covers, connections to existing and new ducts, and all associated excavation and disposal of arisings.
  - Installation of communications and power cables including cable joints and terminations where required in the design in the following quantities:
    - Not more than 3,100m of quad armoured communications cable, laid in trench not exceeding 1.5m deep;
    - Not more than 13,000m of loop detector feeder armoured communications cable, laid in trench not exceeding 1.5m deep or trough;
    - Not more than 2,550m of 3 core armoured power cable, laid in trench;
    - Not more than 21,000m of 3 core non-armoured power cable of various sizes, laid in duct.
  - Installation of 18 Electricity Interface cabinet type 609 including plinths , skirts and paved area to form a one cabinet site on the motorway fence line;
  - Installation of 19 type 600 and 609 cabinets with plinths, skirts and paved areas, including chambers as required to form a two cabinet site in the motorway verge;
  - Provision and installation of 2 loop detector installations;
  - Installation of 19 MIDAS Oustation equipment (I.P. enabled) to TR 2169 and 1 no MIDAS Transponder to TR 2168;
  - Construction and installation of foundation works for 19 message signs including helical piled foundations, excavation, concrete including reinforcement, formwork and other associated works.
  - Installation of 4 Signal Equipment on post type 75 including paved area.
  - Installation of 4 no Data Link Connection Boxes 9904, 4 no Signal Driver and 4 no Signal Frame 212;
  - Provision and installation of two sets of steps, pathways, landings and handrails in verge for access to infrastructure;
  - The provider shall commission the MIDAS and Signal equipment from the RCC and locally. In addition, commissioning of power protection equipment and cables from EI to final circuits;
  - Engagement with the Highway Agency's National Road Telecommunications Services (NRTS) Contractor to provide the necessary service category and service type for connecting MIDAS and Signal devices to the longitudinal motorway communications network

- 'Bulk Purchase Equipment' shall be ordered by the Overseeing Organisation. This generally comprises cabinet plinths, cabinet housings and frames, non-armoured power cables, and power and communications cables.

### **3 Road category on which the work is to be carried out**

The works will take place on a dual three lane motorway.

### **4 Traffic Management**

The provision of traffic management is outside the scope of this scheme.

### **5 Period within which the work is to be carried out**

The works are to be carried out within Time Band 10.

### **6 Site Restrictions and Constraints**

There are no identified site constraints or restrictions at the works location.

### **7 Indicative Programme**

The works are to be completed within 10 weeks.