National Asset Delivery

Technical Surveys and Testing

Works Information for A52 Priory QMC Dunkirk MDP Surveying

Trial holes survey

CONTENTS AMENDMENT SHEET

Amend. No.	Revision No.	Amendments	Initials	Date
0	0	Original version issued with tender	RAS	15/01/21

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1 DESCRIPTION OF THE WORKS

1.1 Project objectives

1.1.1 The principal objective of this project is to carry out a number of strategic Trial Holes, Slot Trenches and Transverse Trench Excavations with different purposes and methodologies, in preparation of WAC, Asbestos, GPR surveys and provide subsequent report in accordance with the requirements detailed in the specification. The variety of trial hole requirements are spread over several drawings and the due to their different investigatory purposes, The Contractor must carefully understand the difference in detail required for each type of excavation.

1.1.2 The specification that applies to the *works* is included in Section 6

1.2 Scope of works

1.2.1 The *works* to be provided under this contract are:

(i) Provide trial holes where stated on drawings 605159-HE-VSS-A52 PRIORY-QMC-M2-EO-101 to 106 in order to allow the undertaking of WAC Asbestos and GPR surveys and reinstate any holes/voids after works are completed. See table A1 for standard Trial Holes and Slot Trenches. (other trial pits cont. after table)

Table A1

Asset **Including Drawing Location Reference**	**Location**	**Electrical Survey**	**Trial Hole**	**Slot Trench**	**WAC Test**	**Asbestos Test**	**Duct Proving**	**Sign Reflectivity**
Proposed Trench Line Location 1	A52 Eastbound Verge, East of Priory Roundabout			Y	Y	Y		
Proposed Trench Line Location 2	A52 Westbound Verge, West of Priory Roundabout			Y	Y	Y		
Proposed Trench Line Location 5	On Priory Roundabout			Y	Y	Y		
Proposed Trench Line Location 10	A52 Eastbound Verge, East of Priory Roundabout			Y	Y	Y		

Asset Including Drawing Location Reference	Location	Electrical Survey	Trial Hole	Slot Trench	WAC Test	Asbestos Test	Duct Proving	Sign Reflectivity
Existing Road Crossing Location 12	A52 Eastbound Carriageway to Splitter, East of Priory Roundabout		Y			Y	Y	
Proposed Trench Line Location 14	A52 Westbound Verge, East of Priory Roundabout			Y	Y	Y		
Proposed Trench Line Location 19	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 20	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 26	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 27	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 33	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 34	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 37	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 38	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 43	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 44	A52 Westbound Verge			Y	Y	Y		

Asset Including Drawing Location Reference	Location	Electrical Survey	Trial Hole	Slot Trench	WAC Test	Asbestos Test	Duct Proving	Sign Reflectivity
Proposed Trench Line Location 52	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 54	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 55	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 59	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 60	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 62	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 63	A52 Westbound Verge			Y	Y	Y		
Proposed Trench Line Location 70	A52 Eastbound Verge			Y	Y	Y		
Proposed Trench Line Location 71	A52 Westbound Verge			Y	Y	Y		

(II) Undertake 7 Transverse Trench Excavations, of various sizes as specified on drawings HE606450-KIER-VUT-QMC_Z-SK-CH-0100_01 to_03, then reinstate as described in 'Specification for works' section of this document. These have different detail requirements than the previous trial holes due to different design intentions. See 'Specification for works' sections for survey and reporting requirements. See Table A2 for Transverse Trench Excavations.

Table A2 – see drawing for Transverse Trench Excavations (TTE)

TTE reference	Dimensions required
TTE01	7.8 length, 1.0m width, 0.6m depth
TTE02	7.3m length, 1.0m width, 0.6m depth
TTE03	8.7m length, 1.0m width, 0.6m depth
TTE04	9.3m length, 1.0m width, 1.2m depth
TTE05	6.5m length, 1.0m width, 0.6m depth
TTE06	8.7m length, 1.2m width, 0.6m depth
TTE07	3.0m length, 1.0m width, 0.6m depth

1.3 Deliverables

1.3.1 The *Contractor* is required to produce the following deliverables:

(i) An appropriate individual to attend pre-commencement site inspection & client meeting.

(ii) Propose temporary traffic management that may be required. Once agreed *Employer* will provide the temporary traffic management.

(iii) The *Contractor* is to provide plant, materials & labour to carry out all project objectives stated in this document.

(iv) Detailed reports as detailed in final section of this report in 'SPECIFICATION FOR THE WORKS'.

2 EXISTING INFORMATION

2.1.1 The Drawings listed below apply to this contract. Refer to the site information for details of existing site conditions including ground conditions, limitation on access, position of existing structures etc.

Drawing Number	Title	Revision / Date
605159-HE-VSS-A52 PRIORY-QMC-M2-EO-101 to 106	Road Lighting Survey Locations	T0
HE606450-KIER-VUT-QMC_Z-SK-CH-0100_ 01 to_03	Transverse trench excavations and GPR guide (3 sheets)	C01

3 CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS

3.1 General

3.1.1 The *Contractor* Provides the Works in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.

3.1.2 The *Contractor* complies with the constraints and meets with the requirements outlined in Appendix 6.

3.1.3 The *Contractor* submits information detailing how the *Contractor* will provide the Works to the *Employer* prior to the *works* commencing. This information will include any lifting plans, risk assessments, method statements, the *Contractor's* staff training information and any other relevant Health and Safety requirements.

3.2 Working hours & site specific constraints

1.2.2 The *Contractor's* working hours for site works shall be within the provided roadspace (requiring liaison between *Contractor* and Principal Contractor) beginning 22/03/2021 (tbc) at 20:00 and ends on 03/04/2021 (tbc) at 06:00.

1.2.3 Refer to environmental assessment

3.3 Health, Safety and Environment & Risk Management

Health and Safety requirements

3.3.1 In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints relation to health and safety duties.

3.3.2 The *Contractor* shall comply with the requirements of Highways England's safety passport scheme and ensure that all of his employees, and any of his subcontractor's, are registered in accordance with the implementation of the scheme. Details on the scheme can be found here: http://www.highwayssafetyhub.com/safety-passport.html

1.2.4 For details of the CDM duty holders, refer to the pre-construction information which can be found in Appendix 3.

3.3.3 Before commencing the construction phase of the *works*, the *Contractor* confirms to the *Employer* that adequate welfare facilities are in place. Where the facilities detailed in section 5 are not deemed adequate, the *Contractor* provides all necessary facilities to Provide the Works and to comply with the minimum requirements set out in HSE guidance document L153.

Environmental requirements

3.3.4 In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints in relation to environmental duties.

Risk Management

3.3.5 The *Contractor* identifies, manages and mitigates risks in accordance with the principles of ISO31000.

3.3.6 The *Contractor* submits a risk register, which captures all risks associated with the delivery of the *works* including those identified by the *Employer*, with his tender and maintains it for the contract period.

4 REQUIREMENTS FOR THE PROGRAMME

4.1.1 The *Contractor* submits programme to the *Employer* with his tender.

4.1.2 The *Contractor* Provides the Works taking into account the following programme constraints:

(i) the *starting date* (22/03/21 @ 20.00) and latest *completion date* (03/04/2021 @ 6.00) and any post site works, reporting and review period

(ii) The services and other things provided by *Employer* (see Section 5)

4.1.3 The programme should be in the form of an activity and time related bar chart, produced as a result of a critical path analysis.

4.1.4 The programme should preferably be provided in either a PDF or MS Excel format and cover the full contract period including post site activities. Activities should be clearly defined and named and the programme should detail the following:

(i) dates and times associated with the project, including the *starting date*, *completion date* & *Contractor's* planned completion, and any other dates or times that will specifically impact the delivery of the project

(ii) activities associated with delivering the project

(iii) Programme of works

(iv) Working Hours shall be 20:00 – 06:00

(v) Weekend working is allowed for

(vi) All Traffic management is subject to traffic count taken on the night of the works.

(vii) The Principal Contractor is to ensure welfare facilities are to be in place prior to works commencing on site.

(viii) The *Contractor* is to allow for a prestart meeting on a date TBC, to develop the programme.

(ix) Survey results are expected to be returned within two weeks of the survey completing on site

4.1.5 The *Contractor* updates the programme every week. The *Contractor* submits an updated programme to the *Employer* upon request

4.1.6 Given the size of the site it is anticipated that several survey operations can be carried out simultaneously. The principal contractor is to programme the site works accordingly to minimize the programme which requires close liaison between PC and individual surveying contractors.

5 SERVICES AND OTHER THINGS PROVIDED BY THE *EMPLOYER*

5.1.1 The following temporary traffic management will be provided by the *Employer* to allow the *Contractor* to Provide the Works:

(i) Temporary Traffic Management will be provided by others under the CWF by [redacted] The Traffic Management is expected to consist of night-time traffic lights on the A52 at each site location, Contractor to confirm at pre-start meeting of this strategy suitability.

(1) *Contractor* to liaise with *Employer* regarding the Temporary traffic management they require to carry out the works.

(2) *Contractor* is to liaise with the *Employer* regarding access to site. *Contractor* is to communicate any access issues and how these may affect the work.

5.1.2 Road space on Highways England network is to be managed by the Principal Contractor.

5.1.3 The other things that will be provided by the *Employer* are as follows:

(i) Welfare facilities are to be provided by the Principal Contractor (HW Martin), needs are to be identified by the *Contractor* and communicated with the Principal Contractor.

(ii) Desktop search for utility information (Type D) survey. This information will be provided to the contractor at the pricing stage.

6 SPECIFICATION FOR THE WORKS

6.1.1 The *Contractor* shall undertake the works in accordance with:

6.1.2 All relevant Method statements and RAMS to be followed.

6.1.3 TTEs are required in order to locate and verify underground utilities in accordance with PAS 128:2014 Type A. They are to done undertaken in line with BS5930:2015 and as such appropriate safe systems of works will be required, for example buried utilities, ground instability and ground water. Therefore the Contractor must ensure they provide everything they need to comply with safe systems of works including, but not necessarily limited to, Cat and Genny, Proprietary support systems and ground water pumps

6.1.4 An allowance should be made for extra over excavation of hard material with each trail pit.

6.1.5 Volume 5 Section 3 Part 4 of MCHW specification shall be applied to any works undertaken in this scheme, in particular for the TTE component of works:

- Contract title and site location
- Contract's and operator's name
- TTE reference number
- Date and time of excavation
- Photographs of the TTE/trial hole excavation before and after, with reference point to identity location of photograph taken after backfilled, highlighting statutory undertaker services and any other obstructions that may be present
- Photograph of reinstated/completed excavations
- Type/identity of any services or drainage encountered
- Cross-section drawing showing offset, depth and size of any series and/or obstruction measured from the channel (kerbline) with
- Equipment and technique in use
- Depth of each change of stratum (layers) within pavement or footway construction
- Description of each stratum encountered
- Records of groundwater
- Details of backfilling and/or infilling
- Details of times o'clock spent, including details and duration of any periods of standing time
- The dimensions of the exaction in plan and orientation, relative to grid North
- Sketches of the strata and any foundation or other feature encountered on each face of the excavation

- Estimate of the quantity of water, if any, pumped from the pit or trench, the type of pump and the time spent on pumping

6.1.6 Reinstatement of each TTE back to existing condition, including where applicable, suitable footway construction (assumption of 100mm of black and 150mm sub-base or to match site condition). Pavement construction reinstatement should follow MCHW Volume 3 Section 1, Highways Construction Details 'TYPICAL TRENCH REINSTATEMENT DETAILS FOR BITUMINOUS AND CONCRETE PAVEMENTS'.

6.1.7 Pre and post construction photographs are required for each trial hole. Backfilling should be carried out in such a way as to ensure that there is no, or very limited, settlement of the ground and that the backfilled hole does not form a pathway for groundwater or ground gas.

6.1.8 Up to date C2 information used as part of a desk study for the survey area and has been provided in Appendix 1 of works package, including GS6 measurements of present overhead cables.

6.1.9 Due to nature of works (excavations in footways/verges, asbestos is highly unlikely to be encountered and as such, no investigation or testing has been undertaken or specified. It is the contractor's responsibility to adopt a safe system of works in order to manage potential contact with ACMs.

Examples of report items: